MDEQ

FIVE YEAR STRATEGIC PLAN

FISCAL YEARS 2027-2031

470-00

Table of Contents

1. Comprehensive Mission Statement

Our mission is to safeguard the health, safety, and welfare of present and future generations of Mississippians by conserving and improving our environment and fostering wise economic growth through focused research and responsible regulation.

2. Philosophy

The philosophy of the Mississippi Department of Environmental Quality (MDEQ) is captured in the Core Values listed below:

- Truth is the foundation of everything we do.
- We vigilantly resist bias and prejudice.
- We respond promptly, courteously, and as completely as possible to every question, complaint, or request for assistance.
- Inside the agency, we respect the capabilities, responsibilities, and contributions of every member of the MDEQ family. Outside the agency, we respect everyone, regardless of who they are or why we are brought together.
- We strive for a secure, stimulating, rewarding work environment in which all members of the MDEQ family are empowered and encouraged to reach their full potential.
- We are committed to the highest standards of performance in every aspect of our jobs.
- We are accountable, individually and collectively, for effective, efficient management and use of the resources provided to accomplish our mission.

3. Relevant Statewide Goals and Benchmarks

(Source: Building a Better Mississippi: The Statewide Strategic Plan for Performance and Budgetary Success, July 2014)

Statewide Goal #1 - Natural Resources – To ensure that current and future generations have access to the state's abundant natural resources through restoration, protection, conservation, and wise development of those resources.

Statewide Goal #2 – Infrastructure – To ensure that construction and maintenance of infrastructure are adequate to meet the needs of citizens and the business community and to foster economic growth.

Statewide Goal #3 – Health – To protect Mississippians from risks to public health and to provide them with the health-related information and access to quality healthcare necessary to increase the length and quality of their lives.

Statewide Goal #4 – Economic Development – To develop a robust state economy that provides the opportunity for productive employment for all Mississippians.

Statewide Goal #5 – Public Safety and Order – To protect the public's safety, including providing timely and appropriate responses to emergencies and disasters and to administer a fair and effective system of justice.

Statewide Goal #6 – Government and Citizens – To create an efficient government and an informed citizenry that helps to address social problems.

4. Overview of the Agency Five-Year Strategic Plan

I am pleased to present the MDEQ strategic plan outlining the agency's goals, objectives, and strategies for fiscal years 2027-2031. The plan provides a concise blueprint for how the agency will protect human health and the environment over the next several years, and how we will measure our performance. MDEQ has faced ever increasing and changing legal mandates, varying fiscal restraints, and evolving workplace issues which lead to operating challenges, but I am confident that MDEQ staff has the determination and resolve to overcome these obstacles.

Chris Wells

MDEQ continues to focus on the following:

- Protecting public health, safety, welfare, and the environment;
- Managing air quality to ensure the safety and protection of ambient air;
- Protecting soil and water from hazardous and solid waste petroleum products and other pollutants;
- Managing, mitigating, remediating, reclaiming, and restoring our land and water resources;
- Maintaining sustainable quantities of groundwater and surface water;
- Maintaining and improving groundwater and surface water quality;
- Preventing, preparing for, and responding to environmental emergencies;
- Encouraging and educating Mississippi citizens, businesses, and communities to engage in environmentally responsible behaviors; and,
- Being a good steward of the human, financial, and physical resources entrusted to the agency by the citizens of the state.

The programs and initiatives administered by the agency further our mission to protect human health and the environment. The staff at MDEQ is committed to conserving and improving our state's abundant natural resources and will continue to work together to achieve our mission. We are proud to be the steward of the state's air, land, and water, and we appreciate the support of our citizens and elected officials.

5. Agency's Internal/External Assessment & Internal Management Systems

MDEQ has identified several internal and external factors that will influence the agency's ability to achieve its targeted performance goals. The agency has been strategically planning for these possibilities and will, as it has in the past, strive to meet these challenges proactively.

Before discussing specific influential factors, it is important to note that, while MDEQ has been able to meet the required performance goals in the past, the sustainability to continue to meet the goals has become increasingly difficult. Financial challenges coupled with high staff turnover rates over the last several years have resulted in the agency operating on very lean staffing levels. As it relates to the factors below, any additional fiscal or workforce setback could greatly affect our ability to meet the targeted performance goals, and more importantly, jeopardize our ability to meet the agency's core mission.

A. Internal Factors

i. Recruitment and Retention of Professional Staff

The primary factor, whether internal or external, that poses a substantial threat to MDEQ's success in attaining its performance objectives is the agency's capacity to attract and retain proficient engineers, scientists, information technology experts, and other specialized professionals. At the end of FY2025, 139 of the 353 MDEQ employees had less than five years of service (39% of agency employees). By comparison, in FY2014, 79 (20% of agency employees) had less than five years of service. Additionally, only 9% of our current staff have 10 to 15 years of experience. Historically, the Agency maintained approximately 20% in the 10 to 15 year-range. To effectively adapt to the dynamic demands of today's regulatory and business landscapes, MDEQ staff must be on the cutting edge of environmental science and engineering, as well as information technology, which supports the fundamental operations of the agency. Staff members are expected to possess the ability to understand and promptly respond to evolving federal regulations, advancements in environmental science, and emerging technologies when they write permits, ensure compliance, and explore opportunities to benefit Mississippi. Hence, it is imperative that MDEQ have technically proficient staff in place, appropriate for the expanding opportunities in the state's economy.

Over the past few years, significant private sector job growth and salary increases have posed difficulties for the agency in attracting and retaining technical personnel. Recent modest increases in appropriated funds coupled with the implementation of the new state employee compensation plan have allowed MDEQ to increase starting salaries for entry level technical positions. However, MDEQ continues to struggle to be competitive in regard to compensation, which continues to affect its efforts to successfully recruit amongst, and retain staff versus, private industry and other governmental organizations who are offering higher salaries. For example, since January 2022 MDEQ has lost 45 employees for annual salary increases ranging from $10,000 to $75,000. MDEQ is aggressively recruiting statewide holding on-campus interviews and attending career fairs, but it is growing more difficult to hire and retain people who are willing to make the commitment to public service, particularly in specialized fields such as engineering, science, and information technology.

New Employees: MDEQ has long served as a training platform for college graduates who leave for better

opportunities in the private sector, many times within the first two years of employment. This continual turnover, commonly referred to as a "revolving door," has cost the agency monetarily and jeopardizes the continuity of valuable expertise. Additionally, management has become increasingly challenged by a developing pattern of expending significant agency resources in training new personnel to witness their departure just as they reach peak productivity levels.

More importantly, staffing turnover adversely affects the regulated community. Industry leaders remind MDEQ leadership regularly that they need MDEQ to have trained staff who can quickly address the highly technical issues they face regarding ever-changing federal regulations.

Retirement-eligible Employees: Retirements in recent years have spiked due to more staff retiring as soon as they reach eligibility. Relative to past trends, fewer senior staff remain employed at the agency beyond 25 years, with many transitioning to a second career in the private sector. Consequently, retaining institutional knowledge is a significant challenge. Over the last several years, the agency sustained major losses in upper and mid-level management personnel due to retirements.

MDEQ had a workforce of 347 at the outset of FY 2026. Between 2017 and 2024, MDEQ lost 228 employees to resignations and 124 employees to retirement (352 total employees). This equates to a 101% turnover rate of MDEQ's 347 employee workforce. In addition, over 18% of our current workforce is retirement eligible, and 30% of our current workforce can retire within the next five years. These trends are not sustainable for training and retaining highly technical staff.

ii. Loss of Institutional Knowledge

Historically, MDEQ has seen turnover from both ends of the workforce: retirees and entry-level employees. Over the last several years, MDEQ experienced heavy losses in both upper and mid-level management to retirements and resignations. This depletion of institutional knowledge held by individuals retiring from their respective areas, the challenges of replacing them with less tenured middle managers, and the struggle to hire and retain qualified staff are impacting our ability to meet the performance goals and obligations to the Environmental Protection Agency (EPA), not to mention the expectations of the Mississippi public and elected officials. We continue to lose programmatic expertise faster than we can replace it.   Recent increases to state fund appropriations may improve MDEQ's retention rate and preserve institutional knowledge but more work is needed.

iii. Managing Limited Resources to Meet Expectations

Over the past decade or so, there has been an unprecedented convergence of new environmental regulations and programs, emerging science, and growing public awareness and participation. MDEQ is committed to public transparency and open communication, and staff are required to be responsive to public questions and input. For example, the permitting process includes a period for public comments, and public meetings are often held. With the growing access to information, people, both individually and in organized groups, are more involved than ever. As a public agency, MDEQ expects and welcomes public participation. However, managing the agency's limited resources to meet the public's expectations for more, and more detailed, information is a growing challenge. MDEQ staff are spending more time

preparing for the possibility of challenges and correcting misinformation that spreads through rumors, social media, news media and the internet. Furthermore, MDEQ is still required to meet federal and state regulations with fewer employees. In 2013, MDEQ had some level of regulatory oversight for over 55,600 facilities and that work was performed with an average of 403 MDEQ employees. In 2024, nearly 65,000 facilities were overseen by an average of only MDEQ 346 employees.

B. External Factors

i. Regulatory Workload

When new federal regulations are proposed or existing federal regulations change, the demands on MDEQ staff increase significantly. As EPA proposes a new rule, or changes an existing rule, MDEQ staff must carefully research and determine the potential impact(s) on Mississippi, engage with the people and industries that might be impacted, provide education and compliance assistance to affected industries, and be prepared to revise or completely rewrite portions of the Mississippi regulations. MDEQ staff must be experts in environmental science and engineering and be highly competent communicators to adequately safeguard Mississippi's interests.

MDEQ administers ever-expanding and changing regulatory programs including tightening of National Air Ambient Quality Standards (NAAQS) under the Clean Air Act; the re-defining of Waters of the U.S. (WOTUS) under the Clean Water Act; the increasing regulation of per-fluorinated compounds; the Stream Protection Rule under the Surface Mining and Reclamation Program; the unprecedented influx of federal grants (e.g. American Rescue Plan Act, Inflation Reduction Act) or pass-through funding to our communities; and new electronic documentation and data management requirements. Managing such mandates at the state level requires a great deal of work by MDEQ staff, and the cost of maintaining competent staff continues to increase. While the agency actively prepares for potential impacts of new or changing federal regulations, their scope and timing is uncertain. MDEQ is committed to being a leader in new technologies, technical assistance, outreach, transparency, sound engineering, and applied science, but federal regulations and environmental issues are continually evolving. MDEQ needs the resources to be prepared to address these complex issues.

ii. Manmade and Natural Disasters

MDEQ has specific Emergency Support Functions in the Mississippi Comprehensive Emergency Management Plan, including being the Primary Agency for Oil and Hazardous Materials. MDEQ also plays a major role as a Support Agency for nine other functions in the Plan such as Public Works and Engineering, which include dam safety, debris management, and wastewater. While statewide media attention is directed at the agency when there is a large event like a hurricane or the *Deepwater Horizon* incident, MDEQ's role in manmade and natural disasters is an ongoing job. MDEQ maintains 24-hour on-call response capabilities throughout the state for a variety of events that include: highway/byway incidents, railway incidents, airway incidents, waterway incidents, pipeline incidents, oil incidents, chemical incidents, wastewater incidents, dam failures, and fish kills. MDEQ's role in the response to disasters and in the recovery afterwards continues to grow. It is difficult to predict how and when these events will occur and what MDEQ resources and expertise will be needed. During large-scale events, response

capacity of MDEQ's Emergency Response staff may be exceeded and staff from a variety of departmental roles may be called away from their primary responsibilities to assist. This, in turn, affects the agency's ability to timely and efficiently deal with day-to-day operations.

In addition, MDEQ staff members respond when unprecedented severe weather events create widespread flooding, tornados, and ice storms. These events further demonstrate the importance of the dam safety and debris disposal programs. Severe weather events create an increased waste-disposal need throughout the state, which leads to landfills being filled with debris that was not anticipated. Meanwhile, the state's inventory of High Hazard dams has increased because of the growth in downstream development throughout the state. The failure of these dams would threaten lives and property. Finally, as local economies are more and more connected to communities throughout the world, Mississippi must be prepared to respond to pandemics while being able to continue core government functions.

MDEQ is uniquely qualified to provide the technical expertise needed to protect health and welfare and the environment in the time of manmade and natural disasters but must also be able to provide necessary staffing in such situations. Predicting the unprecedented is nearly impossible, but MDEQ is committed to living up to its reputation of responding to disasters of all different kinds while minimizing disruption of its core responsibilities.

C. Internal Management Systems

While doing more with less, MDEQ utilizes a number of information technologies to ensure effective, efficient and ethical administration, both internally and externally, of environmental programs. We have established a centralized resource to track current AI tools in use, begun participating in AI training programs, and will actively seek opportunities to apply AI across the agency – while also acknowledging its limitations.

MDEQ manages and oversees various federally delegated programs, many of which are either fully or partially funded with federal grants. Through these grant agreements, MDEQ is held to a high standard of performance and accountability through federal oversight. EPA initiates a process every four years by which MDEQ's environmental programs are compared to other state-administered programs across the nation. More often than not, MDEQ meets or exceeds national averages and other performance measures. Given the high degree of work responsibility, strict oversight, and limited staff, MDEQ must utilize information technology as a project management tool whereby assigned work can readily and continuously be tracked. These systems provide not only accountability, but also the data required to make informed management decisions on staffing and business processes/operations, thus maximizing the agency's resources. Managers can evaluate a group or an individual's cycle times, productivity, commitments, schedules, and other pertinent information. In addition to IT tools, numerous Standard Operating Procedures (SOPs) and checklists have been developed to ensure that state and federal requirements are met in the most efficient and effective manner.

MDEQ is actively moving towards paperless operations. Over forty years' worth of paper files are maintained at MDEQ offices. As the State's environmental agency, MDEQ recognizes the need for operations to be digital where appropriate and desires to lead by example. Several million pages of paper have been digitally scanned and an electronic document management system is under construction.

MDEQ focuses on ensuring accountability and transparency, but we recognize the challenges posed with having mostly paper files. The electronic document system will enhance transparency by making records readily available to the public via the internet. Building such a system is a monumental task, but it will bring efficiency to MDEQ operations and convenience to our regulated community and the general public at large.

As a scientific agency, MDEQ also generates and maintains enormous amounts of data. The data's safety and security are paramount as it is used in several decision-making processes to fulfill our mission of protecting human health and the environment. Electronic data is backed up to an offsite location regularly in the event recovery is needed. MDEQ's Office of Information Technology has updated MDEQ's Continuity of Operations Plan and conducts staff training to further ensure our data is safe and protected in the event of emergencies or cyber-attacks.

MDEQ's Office of Administrative Services oversees the department's finances, financial reporting, risk management, and internal auditing, subject to strict accounting principles, as well as specific contracting and procurement rules and procedures. These financial programs undergo periodic reviews for program compliance. Reviews/audits are conducted by federal entities, the Office of the State Auditor, and/or independent audit firms, and MDEQ maintains a stellar record of compliance. MDEQ expects this standard of excellence to continue.

6. Agency Goals, Objectives, Strategies and Measures by Program

<div>

A. Air Quality: Ensure that Mississippi's air quality is protective of the health and welfare of its citizens.

</div>

National Ambient Air Quality Standards (NAAQS) are federal standards established by the U.S. Environmental Protection Agency (EPA) for the protection of human health and public welfare that states are required to meet. Standards have been established for six pollutants (known as criteria pollutants): nitrogen dioxide, carbon monoxide, ozone, sulfur dioxide, lead, and two sizes of particulate matter (PM_{10} – particulate matter less than 10 microns in diameter; $PM_{2.5}$ - particulate matter less than 2.5 microns in diameter).   EPA also establishes National Emission Standards for Hazardous Air Pollutants designed to protect the public from toxic air pollutants by limiting their emissions from certain industrial source categories.

As expressed in the External Factors section of this Strategic Plan, EPA may change the national standards without MDEQ's approval or consent, thus affecting our ability to meet our Performance Measures.

The NAAQS establish both health and welfare-based thresholds below which MDEQ strives to maintain air quality throughout Mississippi. MDEQ maintains and operates a statewide air quality monitoring network to track compliance with the NAAQS and report on the effectiveness of various actions taken to control air pollution and protect public health and welfare.

The overriding agency goal for air quality is to meet and maintain compliance with the NAAQS. For geographic areas meeting the NAAQS, MDEQ must develop plans demonstrating the state's ability to adequately protect air quality to ensure continued compliance with the NAAQS. If the NAAQS are violated in a geographic area, EPA designates these geographic areas as "nonattainment areas," and MDEQ is responsible for developing plans for controlling pollution to restore air quality in the area to comply with NAAQS. If an area is designated as "nonattainment," economic development or expansion may be significantly hindered. MDEQ is committed to working with local communities to meet these standards and to developing the best state and local solutions for controlling pollution and protecting air quality. To meet this goal, there are five strategies.

Objective A.1	Maintain Compliance with Federal Air Quality Standards
Outcome	Percentage of Counties that Meet National Ambient Air Quality Standards

Strategy (A.1.1). Operate and maintain the statewide ambient air monitoring network to meet federal

and state requirements.

- **Output:** Number of days with air advisories.
- **Efficiency:** Percentage of days with air advisories.
- **Output:** Number of counties meeting the NAAQS.
- **Efficiency:** Percentage of counties meeting the NAAQS.

Monitoring for ambient air quality conditions and modeling to predict air quality impacts are required under the federal Clean Air Act. These tools, in conjunction with emissions inventory information, give MDEQ the ability to assess compliance with the NAAQS, to forecast future compliance, and to assess the effectiveness of specific measures to control emissions, reduce levels of pollution, or both.

MDEQ provides daily forecasts of air quality conditions in selected cities throughout Mississippi for pollutants of concern (i.e., ozone and particulate matter). The forecasts consider monitoring data, the health-based NAAQSs, local emission sources, and meteorological conditions and are provided to the public in the form of an Air Quality Index (AQI). The AQI is reported on a scale of "good," "moderate," "unhealthy for sensitive groups," "unhealthy," "very unhealthy," and "hazardous." The index provides the public with a tool to gauge the severity of pollution and potential health effects. MDEQ also provides advice on precautionary measures to minimize exposure and reduce air pollution.

- **Task (A.1.1.1):** Maintain a statewide network of meteorological monitoring stations and provide staff access to real-time pollutant and meteorological data for modeling, air quality forecasting, and other air quality management decisions.
- **Task (A.1.1.2):** Evaluate air quality annually for compliance with the NAAQS and submit recommendations to EPA for re-designation and re-classification.
- **Task (A.1.1.3):** Report air quality information to the public daily and communicate actions they can take to help reduce air pollution and protect public health.

Strategy (A.1.2). Issue, reissue, and modify air pollution control permits and coverages to ensure NAAQS and federal requirements for air pollutants are met in Mississippi.

- **Output**: Number of air permits Issued.
- **Efficiency:** Percentage of air permits modified/issued in a timely manner.

   MDEQ issues air quality permits that can be facility-specific or for categories of industrial activities. Facility-specific permits are issued to control the emissions of air pollutants into the atmosphere from the construction, modification, and operation of stationary air pollution sources. Permit limits, monitoring and recordkeeping requirements, and operational requirements are specified in these permits to ensure increases in emissions will not cause or contribute to violations of air quality standards. In some instances, MDEQ issues general permit coverages for specific categories of industrial activity such as asphalt plants.

   - **Task (A.1.2.1):** Issue, reissue, and modify air pollution control permits and coverages allowing the construction and operation of air pollution sources in compliance with the

NAAQS and in a manner consistent with federal and state regulations.

- **Task (A.1.2.2):** Perform stationary source modeling as required by state and federal regulations to ensure permits and coverages contain limits necessary for controlling pollution to meet the NAAQS.

Strategy (A.1.3). Ensure air pollution sources are in compliance with permit conditions and regulatory requirements.

- **Output:** Number of air facilities inspected.
- **Efficiency:** Percentage of air facilities inspected.
- **Efficiency:** Percentage of air facilities inspected in compliance with regulatory requirements.

Once permits are issued, it is important to make sure facilities comply with their provisions. MDEQ conducts several types of compliance assurance activities to ensure regulatory requirements and permit conditions are met. Routine on-site compliance inspections, sampling/monitoring technical reviews, compliance certification reviews and citizen complaint investigations are all performed to promote compliance with applicable requirements.

- **Task (A.1.3.1):** Provide outreach and technical assistance to help facilities comply with permits and regulatory requirements.
- **Task (A.1.3.2):** Inspect air pollution sources to verify compliance with permits and regulations.
- **Task (A.1.3.3):** Take enforcement actions in a consistent and timely manner to return facilities to compliance and deter future noncompliance.

Strategy (A.1.4). Conduct the necessary planning to implement programs and adopt regulations to comply with federal requirements.

- **Output:** Number of annual air emissions inventory updates.

  - **Task (A.1.4.1):** Collect information from companies and develop the air emissions inventory of pollutants from the various sources in the state.
  - **Task (A.1.4.2):** Work with county officials and surrounding states to develop maintenance plans in applicable areas. Continue with voluntary efforts to reduce precursor emissions in maintenance areas.
  - **Task (A.1.4.3):** Maintain awareness of new federal regulations and provide timely updates to the federally approved State Implementation Plan.

Strategy (A.1.5). Minimize the risk of exposure to asbestos and lead-based paint.

- **Output**: Number of asbestos or lead-based paint project reviews.

  MDEQ implements regulations that specify work practices and procedures for the safe handling of asbestos and lead-based paint during demolition and/or renovation activity. The regulations

also require notification of projects to allow review of planned activities for conformity with requirements before operations commence. Also, the potential hazards and specialization of asbestos abatement and lead-based paint activity require the use of properly trained individuals, which MDEQ assures through certification programs.

- **Task (A.1.5.1):** Perform outreach and assistance to communicate requirements of the regulations to project owners and operators and assist homeowners and other stakeholders for safe handling practices.
- **Task (A.1.5.2):** Perform asbestos and lead-based paint project inspections, assess regulation compliance, and address any non-compliance with the appropriate action (compliance assistance and/or enforcement).
- **Task (A.1.5.3):** Review asbestos and lead-based paint project notifications against requirements of the regulations and respond with a request for any needed corrections.

B. Waste Management Goal: Protect Mississippi's soil and water resources through proper management of nonhazardous and hazardous solid wastes through the promotion of waste reduction, recycling, and beneficial use of materials.

MDEQ is responsible for monitoring and controlling the generation, treatment, storage, and disposal of solid and hazardous wastes in Mississippi. MDEQ also regulates the underground, deepwell injection of bulk liquid wastes in the state. If not handled correctly, these kinds of wastes and facilities that MDEQ regulates have the potential to threaten human health and the environment. MDEQ is also responsible for coordinating and promoting recycling, waste reduction, pollution prevention, and beneficial uses of waste materials in the state.

Solid waste is a broad term that includes garbage, refuse, sludges, or other discarded materials. MDEQ's solid waste program regulates the management of municipal, commercial, institutional, and industrial solid wastes at transfer stations, processing and composting operations, land application sites, rubbish sites, and landfills.

Hazardous wastes are those solid wastes that have properties that make the waste potentially dangerous or harmful to human health or the environment if not managed properly. In regulatory terms, a hazardous waste is either a "listed" waste (a waste that appears on one of four federal hazardous waste lists due to its potential inherent dangers) or a waste that exhibits at least one of four hazardous characteristics: ignitability, corrosivity, reactivity, or toxicity.

Pollution Prevention (P2) is any activity—including the use of materials, processes, or practices—that reduces or eliminates the creation of pollutants or waste at the source. Instead of trying to manage the wastes or pollutants through treatment or disposal methods, P2 aims to prevent the initial generation

or reduce the toxicity of wastes and pollutants such as hazardous waste, air pollutants, solid waste, and wastewater.

Recycling – means the use, reuse, or reclamation of waste. Recycling does not include the burning of waste as a fuel for the recovery of energy or the use of waste treatment technologies.

Underground Injection Control (UIC) wells – are those well locations in the state permitted by the Mississippi Environmental Quality Permit Board for the deep well injections of nonhazardous and some hazardous bulk liquid wastes. Deep well injection of wastes is used only as a last case scenario disposal method and permit applicants must show that other disposal methods are not economically or environmentally feasible.

Objective B.1	Ensure statewide waste management activities focus on reduction, recycling, beneficial use, proper handling, transportation, and disposal to prevent release of contaminants to the environment.
Outcomes	Number of Tons of Solid Waste Material Properly Disposed Each Year Number of Tons of Material Recycled Per Year

Strategy (B.1.1). Minimize the threat of environmental pollution from the management of hazardous and solid wastes.

MDEQ issues permits, operator certifications, and other approvals, and provides guidance and training to facilities that generate, dispose of, treat, or store wastes to ensure that those wastes do not adversely impact the environment or pose a public health risk. MDEQ also coordinates with each county, regional solid waste authority, or municipality as the case may be on the development and implementation of a local solid waste management plan to ensure solid waste management needs are met.

- **Output**: Number of waste permits issued.
- **Efficiency**: Percentage of waste permits issued in a timely manner.

  - **Task (B.1.1):** Update state waste management regulations as necessary to ensure consistency and compliance with state and federal laws and to address directives from the Mississippi Commission on Environmental Quality.
  - **Task (B.1.1.2):** Issue, modify, and renew solid waste management, hazardous waste management, and UIC permits to ensure proper management of hazardous and nonhazardous solid waste.
  - **Task (B.1.1.3):** Ensure that solid waste and hazardous waste facilities meet applicable financial assurance requirements.
  - **Task (B.1.1.4):** Ensure that solid waste management facilities and UIC wells are

designed and constructed properly through onsite inspections and review of quality assurance reports.

- **Task (B.1.1.5):** Ensure that each local government has developed and is implementing an approved local solid waste management plan that describes how the local government intends to manage solid wastes for a twenty (20) year period.

Strategy (B.1.2). Minimize or prevent releases from solid and hazardous waste management facilities and UIC wells into the environment through necessary inspections, compliance, and enforcement actions.

- **Output:** Number of waste management facilities.
- **Output:** Number of UIC wells.
- **Efficiency**: Percentage of waste facilities inspected.
- **Efficiency**: Percentage of inspected waste facilities in compliance with regulatory requirements.
- **Efficiency**: Percentage of hazardous waste facility inspections completed in accordance with the approved EPA Work Plan.
- **Efficiency**: Percentage of UIC wells in compliance with regulatory requirements.

  - **Task (B.1.2.1):** Inspect facilities that manage solid or hazardous waste.
  - **Task (B.1.2.2):** Issue inspection reports and, when necessary, initiate enforcement actions in a consistent and timely manner.
  - **Task (B.1.2.3):** Respond appropriately to citizen inquiries and complaints.
  - **Task (B.1.2.4):** Maximize voluntary compliance with environmental laws and regulations by providing educational outreach to businesses and units of local governments.

Strategy (B.1.3). Conduct various waste management assistance programs by awarding grants, promoting and providing for waste reduction, recycling, and beneficial use, and proper management of solid wastes.

- **Output**: Number of Solid Waste Assistance Grant and Waste Tire Grants applications received.
- **Output**: Number of Household Hazardous Waste (HHW) Days.
- **Output**: Number of communities offering curbside or drop off recycling programs.
- **Efficiency**: Percentage of citizens who have access to recycling programs.
- **Efficiency**: Percentage of eligible applicants awarded Solid Waste Assistance Grants and Waste Tire Grants.

  - **Task (B.1.3.1):** Plan, develop, and implement programs that provide industries, businesses institutions, and governments with effective tools to prevent pollution, minimize waste, and conserve energy and resources.
  - **Task (B.1.3.2):** Enhance environmental performance, pollution prevention, recycling and innovative programs through technical assistance, public education, and innovative programs implementation.

- **Task (B.1.3.3):** Assist industries in adopting pollution prevention methods as part of their everyday operations through onsite technical visits through the Economy, Energy, and the Environment (E3) sustainable manufacturing program.
- **Task (B.1.3.4):** Provide recognition to environmental leaders in the regulated community through the *en*Hance environmental stewardship program.
- **Task (B.1.3.5):** Provide various grant assistance programs for the proper management of solid wastes for community projects involving recycling, illegal dump cleanup and enforcement, household hazardous waste collection, bulky waste collection, and waste tire collection and abatement.
- **Task (B.1.3.6)** Continue to develop partnerships with pharmacies and communities for the collection of household medical sharps as a safer disposal alternative to normal trash disposal.
- **Task (B.1.3.7)** Continue to promote, coordinate and support recycling activities in the state with government agencies, industries, businesses and various other organizations.

C. Remediation Goal: Protect human health and the environment through proper mitigation, remediation, reclamation, and restoration of natural resources.

MDEQ learns about contaminated land or water from facility inspections, site investigations, complaints, or emergency response activities. Contamination can result from a variety of activities such as improper practices at existing facilities, accidental spills, or leaks from Underground Storage Tanks (UST) systems. MDEQ also gathers information about suspected contamination due to abandoned facilities called "uncontrolled sites". MDEQ oversees the investigation and remediation of sites that have been or are suspected to be contaminated by toxic metals, chemicals, petroleum, or other pollutants. MDEQ also maintains a database inventory of contaminated sites. MDEQ regulates coal and non-coal surface mining activities to minimize injurious effects and requiring proper reclamation of surface-mined lands, while balancing the economic necessities of utilizing our natural resources and protecting the natural environment.

Objective C.1	Ensure contaminated sites are properly assessed, remediated, and redeveloped in a manner protective of human health and the environment.
Outcome	Number of Acres "Ready for Reuse"

Strategy (C.1.1). Assess and remediate contaminated sites.

When environmental contamination is discovered, the site must be assessed to determine what contaminants are present, the concentrations, and the pathways that exist for contaminants to

affect human health or the surrounding environment. Once assessed, the risk to the public and the environment is determined, and appropriate cleanup activities are initiated. The time needed for cleanup varies due to site conditions, economic factors, and potential for human exposure. MDEQ must focus on initiating cleanup activities to protect human health and the environment while promoting redevelopment and re-use. In many cases, redevelopment and re-use may occur during the remedial process. MDEQ works with existing and new owners to promote use of the property as remedial efforts continue.

Also, studies have shown that there are significant economic benefits associated with brownfield redevelopment. A brownfield is defined as, under certain legal exclusions, real property, the expansion, redevelopment, or reuse of which may be complicated by the presence of a hazardous substance, pollutant, or contaminant. For instance, $1 of public investment in brownfields leverages $20 in total investment, and $10,000 to $13,000 in public investments creates or retains one job. Cleanup and redevelopment of brownfield properties lead to property value increases on the order of 5% to 15% for properties that are up to ¾ mile from the site. Public investment in brownfields is generally recouped from local taxes generated by the project within about three years.

MDEQ also manages the state's UST Program, which is aimed at preventing and detecting leaks of petroleum products and hazardous substances. The UST program is responsible for conducting operator training, inspections, and compliance assistance at Mississippi's 2,916 petroleum storage facilities.

- **Efficiency**: Percentage of contaminated sites that have completed assessment.
- **Efficiency**: Percentage of contaminated sites that have completed remediation.
- **Efficiency**: Percentage of Underground Storage Tanks inspected in a timely manner.
- **Efficiency**: Percent of Underground Storage Tanks in compliance with regulatory requirements.
- **Efficiency:** Percentage of Underground Storage Tank System enforcement actions resolved and returning the UST system to compliance.

    - **Task (C.1.1.1):** Assess contaminated sites and determine the threat to human health and the environment using risk-based targets to establish site cleanup goals.
    - **Task (C.1.1.2):** Provide ongoing oversight for long-term cleanup sites, such as Superfund sites, voluntary cleanups, brownfields, uncontrolled sites, RCRA, federal facilities, and leaking underground storage tank sites.
    - **Task (C.1.1.3):** Assist eligible entities in applying for federal grants to assess and clean up contaminated brownfield sites.
    - **Task (C.1.1.4):** Work with willing responsible parties to manage or abate risks from contamination through MDEQ's Voluntary Cleanup Programs (i.e., Voluntary Evaluation Program and Brownfield Program). As an alternative to enforcement action, a party may enter into a voluntary agreement with MDEQ to clean up contaminated property to MDEQ standards. Once the property is cleaned up, MDEQ may provide the party a "no further action" letter so that property can be redeveloped.

- **Task (C.1.1.5):** Initiate enforcement action, when necessary, by issuing the responsible party a notice of violation and/or ex parte order.
- **Task (C.1.1.6):** Inspect facilities that manage solid or hazardous waste or store petroleum products in Underground Storage Tanks (USTs).
- **Task (C.1.1.7):** Issue inspection reports and, when necessary, initiate enforcement actions in a consistent and timely manner.
- **Task (C.1.1.8):** Initiate assessment and/or cleanup of releases from leaking underground storage tanks using the Mississippi Groundwater Protection fund.
- **Task (C.1.1.9):** Provide environmental expertise and support to local communities, businesses, and citizens as it relates to environmental contamination.
- **Task (C.1.1.10):** Provide oversight in perpetuity for operation and management at CERCLA Superfund sites as required by federal law.
- **Task (C.1.1.11)**: Advance economic and sustainable redevelopment of contaminated sites.
- **Task (C.1.1.12)**: Provide oversight of brownfield redevelopment projects through the Mississippi Brownfields Program.

Objective C.2	Ensure lands impacted by mining activities are restored to reclamation standards that are protective of human health and the environment.
Outcomes	Percentage of Inspected Mining Facilities in Compliance with Regulatory Requirements.

Strategy (C.2.1). Ensure that permitted coal and non-coal mining activities are conducted in an environmentally responsible manner, and that lands impacted by mining activities are restored to state reclamation standards.

- **Output**: Annual number of coal and non-coal permits and modifications issued.
- **Output**: Annual number of inspections conducted.
- **Efficiency**: Percentage of mining facilities inspected.
- **Output**: Annual number of reclaimed acres with final bond release.
- **Output**: Annual number of reclaimed abandoned mine lands (AML) sites.

  - **Task (C.2.1.1):** Timely process mine permit applications and modifications.
  - **Task (C.2.1.2):** Timely and thoroughly conduct inspections for initial applications, annual inspections, bond release requests, and complaints.
  - **Task (C.2.1.3):** Timely process bond release applications.
  - **Task (C.2.1.4):** Identify and evaluate abandoned mine lands (AML).

D. Water Quantity Goal: Maintain sustainable quantities of surface and ground water in Mississippi.

The Office of Land and Water Resources (OLWR) is responsible for the management of water resources in Mississippi. Section 51-3-1 of the Mississippi Code requires that "…the water resources of the state be put to beneficial use to the fullest extent of which they are capable, that the waste or unreasonable use, or unreasonable method of use, of water be prevented, that conservation of such water be exercised…" To achieve this requirement, OLWR is pursuing a conjunctive water management approach that coordinates the use of groundwater and surface water resources of the state to satisfy desired water needs.

Objective D.1	Quantify the availability of groundwater and surface water resources throughout the state.
Outcome	Number of Annually Prioritized Water Resource Areas Adequately Characterized.

Strategy (D.1.1). Monitor and assess the availability of water associated with freshwater aquifers and major freshwater streams to determine the impact of water use in Mississippi.

- **Output:** Number of wells measured.
- **Output:** Number of stream flows recorded.
- **Output**: Number of annually prioritized water resource areas adequately characterized.

  - **Task (D.1.1.1):** Develop standardized monitoring plan for groundwater and surface water monitoring activities.
  - **Task (D.1.1.2):** Develop prioritized listings of areas of concern for groundwater and surface water monitoring activities with projected timelines.
  - **Task (D.1.1.3):** Perform monitoring activities; analyze data; produce outputs including maps, graphs, charts and reports.

Objective D.2	Manage water withdrawals to provide for beneficial use demands statewide.
Outcome	Number of Water Withdrawal Permits Analyzed, Processed, or Verified.

Strategy (D.2.1). Process, issue and modify water withdrawal permits to manage and conserve groundwater and surface water in Mississippi.

- **Output**: Number of groundwater permits processed and modified.
- **Efficiency**: Percent of groundwater permits processed within twelve months of receipt.
- **Output**: Number of surface water permits processed and modified.
- **Efficiency**: Percent of surface water permits processed within twelve months of receipt.
- **Output**: Number of water use reports requested
- **Efficiency**: Percentage of water use reported.

MDEQ issues water withdrawal permits for all water wells constructed with a surface casing of six inches in diameter or greater. All surface water withdrawals/diversions are permitted. Permit limits, special terms and conditions, construction criteria, operational requirements and reporting are reviewed for management decisions related to water use.

- **Task (D.2.1.1):** Issue and modify water withdrawal permits to ensure protection of water resources for highest beneficial uses, influenced entities, and resource management.
- **Task (D.2.1.2):** Perform annual water use survey to collect and analyze water pumpage data to ensure compliance and reporting standards.
- **Task (D.2.1.3):** Work to further develop and integrate groundwater and surface water modeling capabilities.
- **Task (D.2.1.4):** Conduct field inspections to determine compliance of permit terms and conditions.

Objective D.3	Increase the efficiency of water use to improve sustainability of groundwater and surface water in Mississippi.
Outcome	Number of Water Conservation Practices Implemented.

- **Strategy (D.3.1)**. Promote and require implementation of water conservation actions as needed to maintain quantities of groundwater and surface water in Mississippi.

- **Output**: Number of water conservation measures implemented for permitted agricultural water wells.
- **Efficiency:** Percentage of water withdrawal permits with water conservation measures implemented.

MDEQ is working to develop and refine a suite of conservation practices to promote improved water balances while increasing public awareness of Mississippi's aquifers, rivers and streams that are under stress.

- **Task (D.3.1.1):** Develop and refine suite of acceptable agricultural water efficiency practices necessary to improving Mississippi's water balance.

- **Task (D.3.1.2):** Use of conjunctive water management strategies to limit stress where possible on single sources.

- **Task (D.3.1.3**): Continue to increase metered water wells statewide through permit

actions and promotion of the Voluntary Metering Program in the Mississippi Delta to sustain 10 percent installation and reporting of metered agricultural wells.

- **Task (D.3.1.4):** Use education and outreach opportunities to engage the public and regulated community on the need to conserve waters of the state through conferences, reports, and education activities.

E. Water Quality Goal: Protect and restore surface and groundwater quality in Mississippi.

MDEQ implements multiple programs that focus on all facets of water quality. Through these program areas, work is done to develop water quality standards and protect designated uses; establish monitoring priorities and programs to address those priorities; address impaired waters through the development of total maximum daily load(s) (TMDLs) for pollutants causing the impairments; provide grants targeted to address water quality needs in local watersheds; conduct education and outreach to the public; and collect water quality data and information in the streams, rivers, lakes, reservoirs, and estuaries in the state. As part of these programs, MDEQ evaluates activities and drinking water sources to ensure their protection through monitoring of groundwater resources within the state.

MDEQ has programs dedicated for both point and nonpoint pollution sources in the state. Point sources are mitigated through the issuance of water permits as part of the National Pollutant Discharge Elimination System (NPDES) program. MDEQ has delegated authority under Section 402 of the Clean Water Act (CWA) to issue these NPDES permits. This program ensures permitted point sources protect the waters of the state by placing limits on pollutants that are discharged. In some instances, MDEQ issues general permit coverages for specific categories such as industrial and construction related stormwater. MDEQ is also responsible, under Section 401 of the CWA, for issuing water quality certifications associated with permitting actions by the United States Army Corps of Engineers under Section 404 of the CWA. These certifications include provisions that must be met to ensure water quality protection related to wetlands and streams.

Nonpoint Source pollution management is conducted through the voluntary cooperation of stakeholders and is supported financially through federal assistance programs and available state resources. The approach for addressing NPS pollution on a statewide level includes education and outreach; monitoring and assessment; planning; consensus building; and working with resource agency partners to achieve environmental improvements. At the watershed level, nonpoint source pollution contributions are addressed through implementation of watershed-based plans, demonstrations of practices to control NPS pollution, inspection of NPS pollution control practices, and education and outreach, as well as local consensus building and partnering. The majority of these activities are coordinated through MDEQ's Basin Management Approach (BMA). MDEQ has over eighty (80) active partners working within the BMA to address nonpoint source pollution. The core principle of the BMA is to foster stewardship of Mississippi's water resources through place-based, collaborative water

resources planning, education, protection, and restoration initiatives. The BMA provides a vehicle for bringing people together through collaboration to identify and address water resources concerns.

To meet the goal of protecting and improving the quality of surface and ground water in Mississippi, MDEQ has the following objectives.

Objective E.1	Maintain Compliance with Federal Water Quality Standards and Requirements.
Outcome	Percentage of Waters that have acceptable quality for their designated water use (%).

Strategy (E.1.1). Monitor and assess water quality conditions to determine compliance with standards and complete reviews, research, guidance, monitoring, and plans for improving and maintaining surface water and groundwater quality.

In cooperation with other state and federal agencies, MDEQ conducts monitoring for surface water and ground water status and trends, special project support monitoring, and data collection in priority areas to assess conditions, prepare reports, and update standards. Surface water monitoring is a core MDEQ responsibility and key to understanding water quality conditions in the state. MDEQ also completes several types of statewide and local water quality plans designed to improve and protect water quality.

- **Output**: Number of final TMDLs or TMDL alternatives completed.
- **Output**: Number of Waste Load Allocations completed.
- **Output:** Number of Mississippi Clean Water Act Section 305(b) assessments completed.
- **Output:** Number of water samples taken for agricultural chemical monitoring program.

  - **Task (E.1.1.1):** Work with other state and federal partners to update the NPS Management Plan to protect water quality from the impacts of nonpoint source activities.
  - **Task (E.1.1.2):** Establish and update water quality standards and criteria.
  - **Task (E.1.1.3):** Develop Total Maximum Daily Loads (TMDLs), TMDL alternatives and Waste-Load Allocations.
  - **Task (E.1.1.4):** Develop a list of priority watersheds for protection and restoration within each basin.
  - **Task (E.1.1.5):** Develop comprehensive Watershed Based Plans under the Basin Management Approach.
  - **Task (E.1.1.6):** Conduct appropriate follow-up monitoring when chemicals are detected at levels of concern through the Mississippi Agricultural Chemical Ground Water Quality Monitoring Program, MDEQ Field Services Division monitoring, or other monitoring programs.
  - **Task (E.1.1.7)**: Collect and evaluate information from contractors and sub-grantees in

implementing nonpoint source projects to determine progress in reducing water quality impacts from agriculture, forest practices, mining, urban development, and other activities.

- **Task (E.1.1.8):** Collect surface water quality data (biological, chemical, and physical) as part of routine ambient monitoring, TMDL assessments, or specific surface water quality investigations to determine compliance with state surface water quality standards.
- **Task (E.1.1.9):** Collect groundwater samples statewide from multiple aquifers to help determine if agricultural use of pesticides, herbicides and fertilizers are migrating or having a negative impact on the drinking water aquifers of the state through the OLWR AgChem Program.

Strategy (E.1.2). Issue, reissue, and modify water pollution control permits and coverages to ensure water quality standards are met in Mississippi.

MDEQ issues water discharge permits that can be facility-specific or for categories of industrial activities. Facility-specific permits are issued to control the discharges of pollutants into the environment from the construction, modification, and operation of water pollution sources. Permit limits, monitoring and recordkeeping requirements, and operational requirements are specified in these permits to ensure discharges will not cause or contribute to violations of water quality standards or impair any beneficial uses of waters of the state. Also, MDEQ issues water quality certifications. These certifications include provisions that must be met to ensure water quality protection related to wetlands and streams. These water quality certifications are required for projects involving dredge and fill activities covered under the Clean Water Act Section 404.

- **Output**: Number of NPDES Permits issued/modified**.**
- **Efficiency**: Percentage of NPDES Permits issued/modified in a timely manner.
- **Output**: Number of coverages issued under NPDES General Permits.

  - **Task (E.1.2.1):** Issue NPDES permits and coverages that are protective of water quality in a manner consistent with state and federal regulations.
  - **Task (E.1.2.2):** Issue water quality certifications associated with U.S. Army Corps of Engineers dredge and fill permits (Clean Water Act Section 404).

Strategy (E.1.3). Ensure water pollution sources are in compliance with permit conditions and regulatory requirements.

Once permits are issued, it is important to ensure facilities comply with their requirements. MDEQ conducts several types of compliance assurance activities to ensure regulatory requirements and permit conditions are met. Routine on-site compliance inspections, sampling/monitoring, technical reviews and citizen complaint investigations are all performed to promote compliance with applicable requirements.

- **Efficiency**: Percentage of NPDES Majors inspected.
- **Efficiency**: Percentage of Inspected NPDES Majors in compliance with regulatory requirements.

  - **Task (E.1.3.1):** Provide outreach and technical assistance to help facilities comply with permits and regulatory requirements.
  - **Task (E.1.3.2)**: Inspect facilities with NPDES permits and review monthly discharge monitoring reports to determine compliance with permit requirements.
  - **Task (E.1.3.3):** Take enforcement actions in a consistent and timely manner to return facilities to compliance and deter future noncompliance.

Strategy (E.1.4). Ensure the protection of drinking water resources.

Protecting sources of drinking water is essential for maintaining and improving the quality of human health and the environment. Source water assessments characterize the susceptibility of a drinking water source to contamination by summarizing information about the activities and land uses within recharge areas. Potential sources of contamination are identified for each individual city or town in each water supply protection area to use as support for planning decisions. Information gathering in the assessment process is incorporated into recommendations for actions that can be taken at the local level to protect drinking water sources.

The assessments help to focus protection efforts to minimize risks of individuals drinking contaminated water. These efforts may include developing source water protection plans, encouraging the use of Best Management Practices, establishing local protection teams, and using other source protection measures.

- **Output**: Number of local governments that incorporate source water assessment and protection information into community planning to protect drinking water sources.

  - **Task (E.1.4.1):** Provide technical and regulatory assistance to local governments to help them protect surface and ground water quality in accordance with their statutory responsibilities.
  - **Task (E.1.4.2):** Provide federal grant funding and technical oversight for projects that reduce nonpoint source pollutants.
  - **Task (E.1.4.3)**: Maintain source water assessment reports to the public through web-based applications.
  - **Task (E.1.4.4):** Complete source water assessments on new drinking water sources and update existing sources with new information. Assist communities in using the information to develop and implement drinking water source protection strategies.

Objective E.2	Ensure the improvements funded through the Water Pollution Control Revolving Loan Fund (WPCRLF) Program (Clean Water SRF) are adequate to meet the needs of citizens, the business community, and to foster

	economic growth.
Outcome	Percentage of Available Money Obligated

Strategy (E.2.1). Provide assistance to public wastewater systems for facility improvements and source water protection.

MDEQ provides financial assistance to communities through the Clean Water SRF program for water pollution control projects, particularly wastewater projects. Long term goals include: 1) maintaining a financially sound Clean Water SRF in perpetuity; 2) meeting a substantial portion of the wastewater needs in the state within a reasonable period of time; and 3) funding fiscally sound projects in order of environmental importance as established by the Commission, while continuing to maintain a competitive low interest rate program that is attractive to the communities in the state.

- **Efficiency**: Percentage of SRF Loan recipients in compliance with loan agreements.

  - **Task (E.2.1)**: Provide reviews of facilities plans, loan applications and engineering plans and specifications to ensure designs meet rule requirements, protect public health, and protect surface and ground waters from contamination.
  - **Task (E.2.2)**: Provide SRF loan assistance to eligible communities.

F. Emergency Preparedness and Response Goal: Prevent, prepare for, and respond to public health, safety, and environmental emergencies.

MDEQ maintains the resources and readiness to quickly and effectively support local emergency response personnel and communities when an environmental or public health emergency occurs. This readiness is accomplished by training alongside regional response teams, state agencies such as the Mississippi Emergency Management Agency (MEMA), the Mississippi Department of Health (MDOH), Mississippi Department of Public Safety (MDPS), and federal agencies such as EPA, Department of Defense (DOD), Homeland Security, and the Federal Emergency Management Agency (FEMA). Additionally, MDEQ maintains expertise in handling hazardous, radioactive materials and biohazard emergencies by participating in advanced-level courses and exercises. In addition, MDEQ strives to prevent dam incidents and failures through a proactive system of inspections and assessments by the Dam Safety Division to identify and address deficiencies in dam design and construction. The department also requires that High Hazard dams have an emergency action plan in place to better protect the downstream public should a dam failure occur. To meet the emergency preparedness and response goal, MDEQ has the following objectives.

Objective F.1	Maintain staff that is adequately trained and equipped to conduct an environmental emergency response.
Outcome	Adequate Percentage of Staff with Expertise in the National Incident Management System.

Strategy (F.1.1) Provide training and technical expertise for emergency planning and preparedness.

MDEQ works with MEMA, local law enforcement, the State Fire Academy, and other partners to provide training and expertise to local responders, communities, and industry.

- **Output**: Number of Staff with expertise in the National Incident Management System and ready for an emergency.

  - **Task (F.1.1.1):** Maintain rotational staff that is "on-call" to respond anywhere in the state to emergency events such as train wrecks, truck wrecks, chemical fires, and terrorism events.
  - **Task (F.1.1.2):** MDEQ will participate in emergency preparedness meetings and emergency exercises and drills conducted by regional and local entities.
  - **Task (F.1.1.3):** Provide specific training and technical support to cities, counties, hospitals, tribes, and other state agencies in responding to hazardous and radiological emergencies, natural disasters, and terrorist acts.
  - **Task (F.1.1.4):** Maintain expertise with the National Incident Management System and Incident Command System by participating in exercises and advanced training.
  - **Task (F.1.1.5):** Review the agency's Emergency Response Plan annually to ensure necessary resources and expertise can be deployed effectively and efficiently in the event of an emergency or natural disaster.

Strategy (F.1.2) Respond to public health, safety, and environmental emergencies.

MDEQ is one of many agencies that participate in the State Emergency Management Program operated under the leadership of the (MEMA). When an emergency occurs, MDEQ coordinates with various state agencies through MEMA for both planning and coordinating incident responses. MDEQ provides on-scene personnel support to assess environmental and human health risks, suggest approaches for minimizing impacts, coordinate environmental investigations, and characterize and oversee cleanup.

In the event of a state or federally declared disaster, MDEQ provides personnel to work in the State Emergency Operations Center at MEMA headquarters, in support offices, or both. In the event of an environmental response emergency, MDEQ, working with local responders and

contractors, may implement a series of increasingly stringent pollution control measures while keeping the public informed of efforts that are underway to safeguard health.

- **Output**: Dollars expended for emergency cleanups.

  - **Task (F.1.2.1):** Provide technical advice to on-scene incident commanders for responding to chemical and dam safety emergencies.
  - **Task (F.1.2.2):** Provide or help identify resources needed for emergency response actions.
  - **Task (F.1.2.3):** Provide pertinent emergency information to the public.

Objective F.2	Protect downstream lives and property by ensuring that dams are properly classified, inspected, and maintained and include a current Emergency Action Plan (EAP) as required.
Outcome	Percentage of High and Significant Hazard Dams in compliance with the Regulatory Requirements.

Strategy (F.2.1)   Ensure dams are properly inspected and maintained.

MDEQ requires that dam owners perform annual inspections of their High and Significant Hazard dams and also have periodic inspections performed by a registered professional engineer. Dam owners are required to address any deficiencies noted during inspections resulting in applications for dam modifications/rehabilitation. MDEQ performs random inspections to verify that the conditions of the dams are being accurately reported in the submitted inspection reports.

- **Output:** Number of dams inspected.
- **Output:** Number of applications for dam modification/rehab.

  - **Task (F.2.1.1):** Each quarter MDEQ will send notices to pertinent dam owners requiring either an owner's or engineer's inspection be submitted.
  - **Task (F.2.1.2):** MDEQ will randomly inspect dams to ensure proper inspections and reporting.
  - **Task (F.2.1.3):** MDEQ will require dam owners to provide a schedule for addressing any deficiencies noted during dam inspections.
  - **Task (F.2.1.4):** MDEQ will perform compliance and enforcement as needed to help ensure objectives are met.

Strategy (F.2.2). Review plans and specifications for the modification of existing dams or construction of new dams to ensure they are designed according to regulations.

- **Output:** Number of dam applications received.
- **Output:** Number of permits issued.

- **Task (F.2.2.1):** MDEQ will review plans and specifications for the construction of new dams to ensure they are designed in accordance with the regulations.
- **Task (F.2.2.2):** After the review is complete, MDEQ will issue a permit.
- **Task (F.2.2.3):** MDEQ will perform periodic construction inspections to ensure that dams are being built in accordance with the approved plans.
- **Task (F.2.2.4):** MDEQ will perform compliance and enforcement as needed to ensure this objective is met.

Strategy (F.2.3). Ensure High Hazard dams have an up-to-date Emergency Action Plan (EAP).

MDEQ will require that all High Hazard dam owners have an Emergency Action Plan for warning and evacuation in the event of a dam incident or failure.

- **Output:** Percentage of High Hazard Dams with an EAP.

  - **Task (F.2.3.1):** MDEQ will require all High Hazard dam owners to develop an EAP for their dam that includes a breach analysis.
  - **Task (F.2.3.2):** MDEQ will require that the EAP be transmitted to all local officials who are responsible for implementing the plan.
  - **Task (F.2.3.3):** MDEQ will require the EAP be updated periodically to include any changes in downstream development, contact information, changes in roads, bridges and other infrastructure.
  - **Task (F.2.3.4):** MDEQ will perform compliance and enforcement activities as needed to ensure objectives are met.

G. Outreach Goal: Provide Outreach to the citizens of Mississippi.

MDEQ is responsible for providing information to the public to enable citizens, businesses, and communities to safeguard public health and to preserve Mississippi's environment. MDEQ aims to foster a culture of environmental stewardship by increasing public awareness through educational campaigns, workshops, community events, and providing digital publications. By engaging with communities, MDEQ strives to empower citizens with the knowledge and tools necessary to make sustainable choices. Furthermore, MDEQ prioritizes transparency and accessibility in communications, ensuring that all stakeholders have the resources needed to contribute effectively to environmental preservation efforts. To meet the outreach goal, MDEQ has set the following objectives.

Objective G.1	Maintain an adequate level of outreach so that citizens, businesses, and communities engage in behaviors that protect health and preserve Mississippi's environment.

Outcome	*Track and increase digital engagement across all MDEQ-managed online platforms, including:* *• Website visits (e.g., main MDEQ website, Beaches Monitoring site, and program-specific microsites)* *• Social media reach, engagement, and follower growth (e.g., Facebook, X, Instagram, YouTube, LinkedIn)*

Strategy (G.1.1). Provide public outreach, training, and/or certification to increase awareness and understanding of environmental and related health and safety issues and laws impacting Mississippi citizens, schools, businesses, and communities.

Environmental laws, rules, and programs can be complex and difficult to understand. MDEQ's public outreach efforts are aimed at helping citizens, schools, businesses, and communities learn about required and recommended actions to protect the environment and public health and encouraging them to make healthy, sustainable choices. In order to conduct certain environmentally related occupations, such as licensed water well drilling, asbestos abatement, wastewater operation, UST abatement, or brownfield redevelopment, individuals or firms must be trained and certified/licensed.

- **Output**: Number of Occupational Certifications issued.

  - **Task (G.1.1.1):** Integrate outreach, education, and compliance assistance into agency regulatory activities.
  - **Task (G.1.1.2):** Develop high-quality, accurate, and understandable publications, web content, displays, and other outreach materials designed to inform stakeholders about key environmental issues and agency initiatives.
  - **Task (G.1.1.3):** Provide timely public access to information on environmental issues and agency activities via the news media, MDEQ's website, workshops, and events sponsored by MDEQ and stakeholders.
  - **Task (G.1.1.4):** Participate in community events to interact with citizens and share information on environmental issues and best practices.
  - **Task (G.1.1.5):** Establish and maintain occupational certification programs (i.e., UST Certification of Persons who install, alter, and remove underground storage tanks; individuals performing asbestos abatement; individuals and firms performing lead-based paint activities; brownfield consulting firms; licensed water well drillers; wastewater treatment facility operators to ensure compliance with statutes and regulations that protect public health and the environment.
  - **Task (G.1.1.6):** Review asbestos abatement and lead-based paint certification applications and process a certificate for each individual who meets the qualification requirements of the regulations.

Strategy (G.1.2). Enhance access to and use of information to improve agency programs and to assist citizens, businesses, and communities with identifying opportunities to conserve and improve public health and the environment.

To effectively fulfill MDEQ's mission, the agency must consistently and effectively engage local communities and their stakeholders in the decision-making processes. MDEQ must also empower communities by providing them access to environmental information used in decision making so that they may have the ability to provide meaningful involvement in these same decision-making processes.

- **Output**: Number of Community Engagement events.

  - **Task (G.1.2.1):** Assist local governments and the public by maintaining and providing access to the public record of agency interests, regulations, guidance, and research publications.
  - **Task (G.1.2.2):** Engage with the community by supporting existing partnerships and by building new partnerships that provide opportunities for a better quality of life for present and future generations of Mississippians.
  - **Task (G.1.2.3):** Present information in ways that will enable community stakeholders to better understand environmental issues and participate in an informed way during the decision-making process.
  - **Task (G.1.2.4):** Produce outcomes that are responsive to stakeholder concerns and help meet community needs and long-term goals to the extent practicable.
  - **Task (G.1.2.5):** Assist small businesses in meeting the federal and state requirements (e.g., the Clean Air Act) by disseminating environmental technical information and providing on-site, free, non-regulatory, confidential technical assistance about regulations, permitting, compliance, and pollution prevention.

Strategy (G.1.3). Increase knowledge of Mississippi's surface and subsurface geology, paleontology, and mineral resources through focused research.

Research into the surface and subsurface geology, paleontology, and mineral resources of Mississippi is applied directly to the benefit of the people and economy of the state through the publication and distribution of maps and reports to a wide range of users. Geology is the basis of the environment, and geologic maps are used for locating mineral resources and geologic hazards, aquifer recharge areas, and areas suitable for waste disposal facilities. MDEQ also compiles reports on oil and gas related geology and coastal geology. The results of the investigations and mapping are disseminated through publications, professional presentations, and online databases.

- **Output:** Number of 7.5-minute geologic quadrangles published annually.
- **Output**: Number of test holes drilled in support of MDEQ programs annually.
- **Output**: Number of wireline logs and total footage collected annually.

- **Output**: Number of publications issued annually.
- **Output**: Number of test hole sample sets catalogued annually.

  - **Task (G.1.3.1):** Prepare detailed surface geologic maps.
  - **Task (G.1.3.2):** Drill test holes to facilitate surface geologic mapping and assessment of groundwater aquifers.
  - **Task (G.1.3.3)**: Collect wireline logs in test holes and water wells.
  - **Task (G.1.3.4)**: Make geologic information available to any user through sales of maps and publications, free downloads, and professional presentations.
  - **Task (G.1.3.5)**: Collect and maintain cores, drill samples, and mineral and paleontological samples in the Core and Sample Library.

Strategy (G.1.4). Build the Mississippi Digital Earth Model (MDEM) and update Digital Flood Insurance Rate Maps (DFIRM) and the FEMA Risk Mapping, Assessment and Planning (Risk MAP) studies and products.

MDEQ collects data for the Mississippi Digital Earth Model (MDEM), supports the Mississippi Coordinating Council for Remote Sensing and Geographic Information Systems in its coordination of GIS activities in the state, and manages the development of new Digital Flood Insurance Rate Maps (DFIRM) and the FEMA Risk Mapping, Assessment and Planning (Risk MAP) Program.

- **Output:** Number of data sets developed annually for inclusion in the statewide collection of high-resolution digital GIS data and the digital map of Mississippi comprised of the key framework data layers.
- **Output**: Number of basin studies with up-to-date digital flood insurance rate maps and flood risk assessment data completed annually.
  - **Task (G.1.4.1):** Develop and collect high resolution and highly accurate digital GIS data sets that comprise the key framework data layers for the digital map of the state (MDEM).
  - **Task (G.1.4.2)**: Complete flood and Risk MAP studies on a HUC_8 basin basis across the state, working in close coordination with FEMA, MEMA, other state and federal agencies, and local governments located in those basins.
  - **Task (G.1.4.3):** Make up-to-date digital flood insurance rate maps and flood risk assessment data available to state, federal, and local governments to support flood plain management, flood risk mitigation, and hazard planning activities across the state.

H. Efficient and Effective Public Service Goal: Maintain efficient and effective government services related to human, financial, and physical resources provided to the agency by the citizens of the state.

MDEQ's control environment is shaped by management's philosophy, integrity and ethical values, its organizational structure, the assignment of authority and responsibility, commitment to competence, and human resource development. MDEQ has policies and procedures and control activities in place to address each of these areas. To achieve the agency's objectives and goals, risks must be assessed continually, but especially when conditions change. MDEQ's senior management assesses risk through management meetings and daily activities. During the assessment, management considers how risk factors affect the organization's ability to meet operational, financial, and compliance goals. MDEQ's internal controls are evaluated not only internally by the managers, senior management, and the Executive Director but also by external auditors and by an annual Assessment of Internal Control conducted by MDEQ as prescribed by the Department of Finance and Administration. In connection with the annual internal control assessment, MDEQ maintains an internal control plan, documentation of activities conducted in connection with the risk assessment, internal control reviews, follow-up actions and corrective action plans.

Objective H.1	Maintain an adequate level of outreach so that citizens, businesses, and communities engage in behaviors that protect health and preserve Mississippi's environment.
Outcome	Administration as a Percentage of Total Budget

Strategy (H.1.1). Provide continual oversight and review of human, financial, and physical resources to ensure accountability and program effectiveness.

- **Efficiency:** Percentage of vacant positions filled during the current fiscal year.
- **Efficiency**: Percentage of financial transactions processed accurately and timely by MDEQ.

  - **Task (H.1.1.1):** Provide the necessary administrative and management functions of (a) Accounting, (b) Payroll, (c) Purchasing, (d) Data Processing, (e) Motor Pool and Vehicle, (f) Maintenance, (g) Printing and Records, (h) Public Relations, (i) Human Resources, and (j) Legal support to achieve the goals and objectives of MDEQ.
  - **Task (H.1.1.2):** Recruit and maintain a quality workforce.
  - **Task (H.1.1.3):** Maintain internal controls and review annually.

Strategy (H.1.2). Streamline business processes that strengthen alignment with agency goals and objectives.

MDEQ has Information Technology support staff that manages enterprise computer operations, network operations, and provides support to both internal and external stakeholders. All programs depend on, collaborate with and/or interact with the systems that are developed, maintained or supported internally. Additionally, the IT support staff plays a significant role administering the transfer of environmental data that is required for regulatory reporting and tracking for federal programs delegated to MDEQ by EPA.

- **Efficiency**: Percentage of network availability during work hours.
- **Efficiency**: Percentage of core application(s) available during work hours (ABG20, TEALS, Microsoft Office365 Suite, KACE, EnSite, MSWIS).
  - **Task (H.1.2.1)**: Maintain and expand the information available to the public that is available on enSearch Online.
  - **Task (H.1.2.2)**: Enhance the customer experience by monitoring overall web presence and providing access to needed information via MDEQ web applications.
  - **Task (H.1.2.3)**: Identify and address internal and external information technology opportunities or challenges using Helpdesk ticketing and report logging.
  - **Task (H.1.2.4)**: Implement and maintain security measures to protect data, computers, servers, network hardware, and software from intrusions and attacks.
  - **Task (H.1.2.5):** Perform Personal Computer (PC) refresh for 20% of MDEQ personnel during each state fiscal year (for an overall goal of 100% over 5 years).
  - **Task (H.1.2.6):** Perform project management duties to marshal resources necessary to design, develop, and deliver new and/or updated I.T. functionality to MDEQ user community.
  - **Task (H.1.2.7):** Review MDEQ IT policies and procedures keeping the agency up-to-date with the latest regulations and technology, as well as consistent with the industry's best practices.
- **Efficiency**: Develop and deploy a GIS (Geographic Information System) Technology strategy
  - **Task (H.1.2.8):** Establish an agency GIS Advisory Committee.
  - **Task (H.1.2.9):** Identify resources to support MDEQ's GIS data and service requirements.
  - **Task (H.1.2.10):** Promote use of GIS resources to improve insight and decision making.
  - **Task (H.1.2.11):** Ensure GIS applications data are current, accurate, open, interoperable and easy to access.
  - **Task (H.1.2.12):** Establish agency policy that recognizes the roles and responsibilities of the GIS Specialist Supervisor and the GIS Advisory Committee.
- **Efficiency**: Utilize Artificial Intelligence (AI) technologies to improve efficiency, decision-making, and deliver better public services.
  - **Task (H.1.2.13):** Comply with the guidelines provided by Information Technology Services (ITS) regarding best practices, uses, and strategies relating to AI.
  - **Task (H.1.2.14):** Build an inventory list of all AI uses within the agency.
  - **Task (H.1.2.15):** Define business objectives and goals.
  - **Task (H.1.2.16):** Create an AI policy to govern the development, deployment, and use of AI technologies within the agency.
  - **Task (H.1.2.16):** Develop a data strategy.