

# **Wyoming Department of Environmental Quality**

**John Corra, Director**

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Web Address: [deq.state.wy.us](http://deq.state.wy.us)

Other Locations: Casper, Lander, Sheridan and Pinedale

Statutory References: Environmental Quality Act

Clients Served: The people of Wyoming, Wyoming businesses, other state agencies, federal land management agencies operating in the state and outside entities requesting support

Budget Information: In FY2008 DEQ expended a total of \$84.3M.

# Wyoming Department of Environmental Quality

## Strategic Plan Annual Report

### 2008

#### **Quality of Life Result**

Wyoming natural resources are managed to maximize the economic, environmental and social prosperity of current and future generations.

#### **Department**

Wyoming Department of Environmental Quality

#### **Contribution to Wyoming Quality of Life**

This agency contributes to Wyoming's quality of life through a combination of monitoring, permitting, enforcement and restoration/remediation activities which protect, conserve and enhance the environment while supporting responsible stewardship of our state's resources.

#### **Basic Facts**

This agency has 260 employees and operates with a FY 07/08 budget of \$122.3M of which \$32.6M are in general funds.

The four most important programs in our Department are:

*Monitoring* – of both air and water

*Permitting* – setting standards to limit environmental impacts

*Compliance* – actions taken in cases where permitted standards are not met

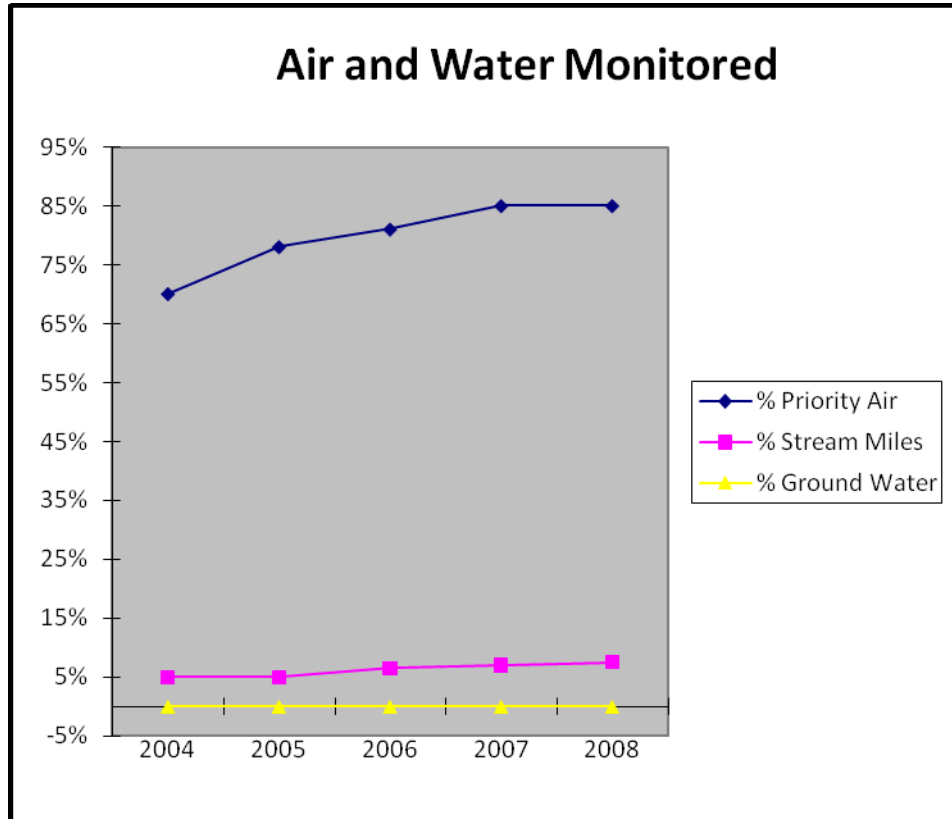
*Restoration/Remediation* – fixing problems from the past

Together, these programs serve over 5,000 businesses annually operating over 28,000 individual facilities throughout the state. The Department monitors, regulates and encourages minimization of environmental pollution to protect the environment in the state. In this process, the department enables responsible economic development while facilitating good stewardship of the state's resources. Through a variety of restoration and remediation actions, the department also restores previously disturbed and polluted sites to benefit the entire population of Wyoming as well as all visitors to the state who benefit from the quality of life we share here.

#### **Performance Measures**

Updated performance measures to reflect our work of the previous year follow.

## MONITORING TRENDS IN OUR ENVIRONMENT



### Story behind the last year of performance:

Statewide air quality monitoring is currently conducted for pollutants which have been shown to affect health. These pollutants include particulate matter, ozone, carbon monoxide, nitrogen dioxide, and sulfur dioxide. Historic monitoring data shows that the air quality in Wyoming consistently meets federal standards for these pollutants. Based on a review of the ambient monitoring network in 2004, the Air Quality Division identified 37 priority areas where ambient monitoring should be conducted. Currently, monitoring takes place at 30 of these sites. The chart above reflects our performance on this measure from 2004 through 2008.

Statewide assessment of surface waters is tabulated on a two year cycle. Only a small percentage of the surface waters in Wyoming can be monitored and assessed due to the time and financial constraints of monitoring over 100,000 miles of streams and hundreds of lakes in the state. As of 2008, ~7.5% of the total stream miles had been monitored and assessed.

Groundwater is emerging as an important resource in terms of its capacity to provide additional water supplies as well as for other reasons. DEQ has identified groundwater monitoring as an important part of groundwater protection and restoration strategies. While there is no historical data in this area to report, the department's Water Quality Monitoring Strategy includes a plan to monitor priority groundwater areas.

### **What has been accomplished:**

For both air and water, the department is focusing its monitoring efforts in areas of greatest concern, especially in relation to ongoing energy development. This initiative will provide early identification of localized problem areas in which permit requirements may have to be tightened or other mitigation measures put in place to protect our air and water resources. The goal is to increase the percentage of air and water monitored while ensuring the most critical areas receive first priority in that process.

For ambient air monitoring, we have historically reviewed whether monitoring occurred in the 37 priority areas identified in 2004 as a measure of performance. We anticipate adapting this measure to be more strategic and flexible given the dynamic nature of industrial development in the state. Our new measures will assess both the process to determine where ambient air monitoring is needed, and whether that monitoring produces the quantity and quality of data needed to adequately assess the quality of Wyoming's air.

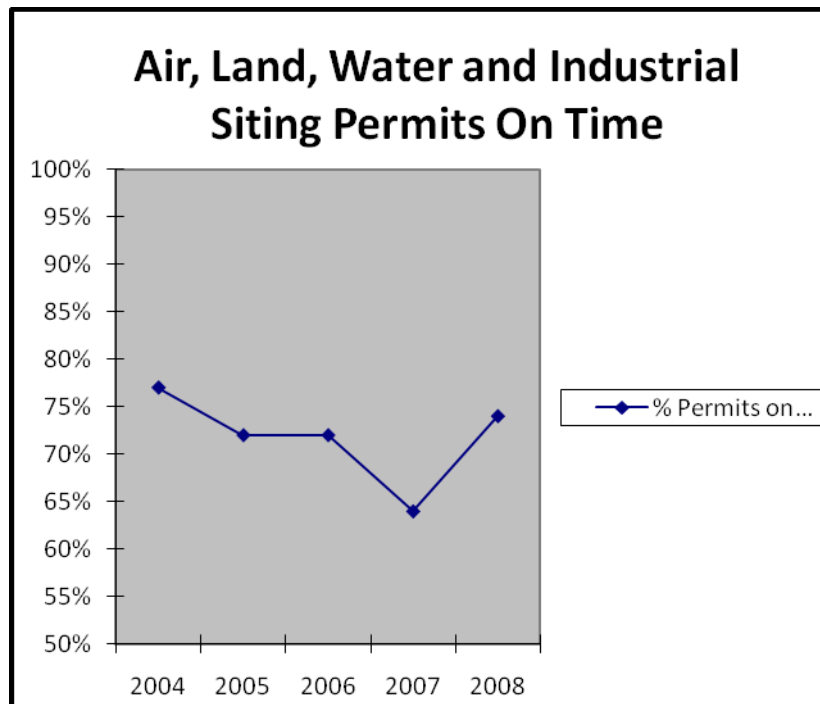
Until recently, most surface water monitoring in Wyoming has been targeted at sites on the ends of the water quality spectrum – either those with suspected water quality problems or those in which water quality conditions were expected to be good. Therefore, an estimate of statewide water quality conditions cannot be based on the resultant targeted site data. Water quality condition estimates representative of all the waters of the state need to be determined by probability surveys using a statistical approach to provide a scientifically defensible estimation of state wide water quality conditions. To accomplish this, a subset of waters is randomly selected on an annual basis and sampled to ensure the “representativeness” or objective nature of the samples. WQD began implementing such a probability survey in 2004, and will select and sample a minimum of 15 to 20 sites per year using this approach for the foreseeable future.

Based on statistical analyses, WQD has determined that a minimum of 60 sites must be selected through a probability survey and be sampled and analyzed before estimates of water quality conditions can be made on a statewide basis with an acceptable degree of certainty. Through this process, the WQD expects to have an estimate of water quality condition for all the streams in the state in 2009 and subsequent years, along with a statement about the uncertainty surrounding the estimate.

The first two objectives in development of a groundwater monitoring plan have been completed: 1) mapping 30 ‘critical’ areas to monitor groundwater (2003), and 2) designing the monitoring program in terms of the number and distribution of wells to monitor (2005). During FY08, a contractor was hired to develop a groundwater monitoring Quality Assurance Project Plan (QAPP) and a Sampling and Analysis Plan (SAP), both being prerequisites to initiating the groundwater sampling program envisioned in the Water Quality Monitoring Strategy. Upon their completion, all elements necessary to begin monitoring groundwater within the first critical area(s) in FY09 will be in place. In addition, DEQ will begin a process to identify sites or facilities that have impacted groundwater in the first critical area(s) and evaluate the effectiveness of groundwater remedies in restoring groundwater quality. DEQ plans to allocate a percentage of its water monitoring funds to begin implementation of the groundwater monitoring in the first critical area(s) in FY09. DEQ will then develop a strategy to evaluate the effectiveness of existing groundwater remedies for use in the state.

## TIMELINESS OF PERMIT ISSUANCE

Five divisions within DEQ issue permits. Because a majority (~90%) of permits are issued by the WQD and the AQD, the results reflected below are heavily influenced by the performance of those divisions.



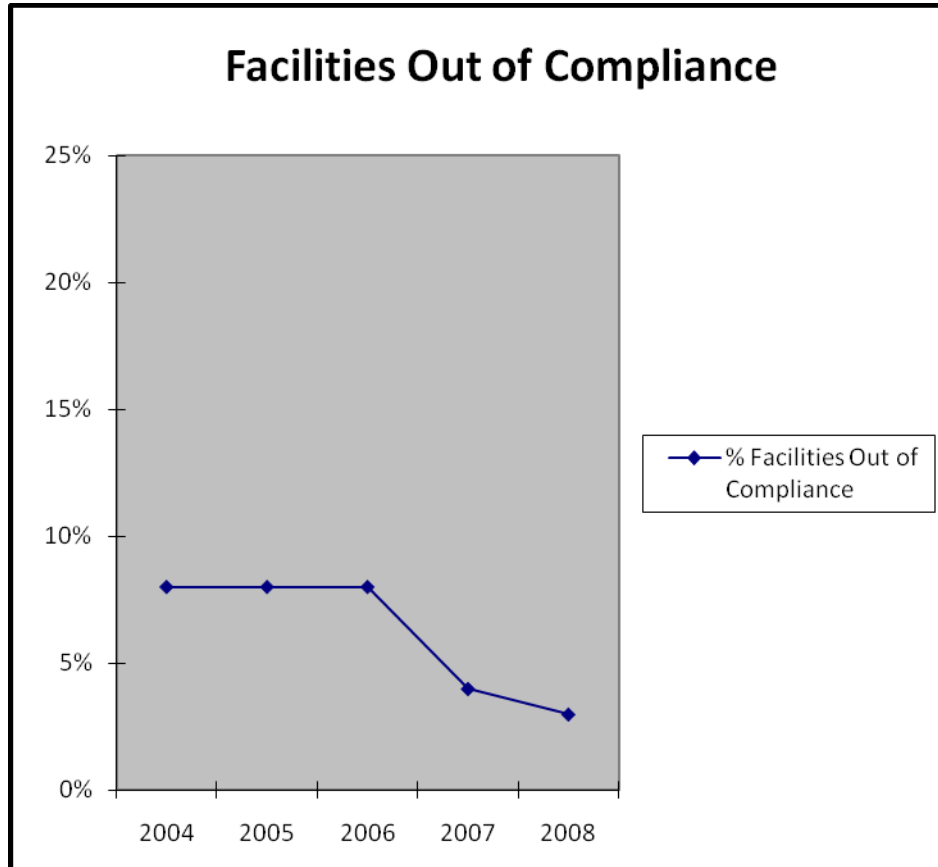
### Story behind the last year of performance:

The timeliness of permit issuance is dependent upon a number of factors. They include the number of new applications, renewals and revisions submitted to the Department, the complexity and quality of those packages, the efficiency of the DEQ staff, the internal procedures used to process them, the promptness of responses by submitters to DEQ questions/comments and third party interests (objections by neighbors, requests for public meetings, etc.). In recent years, the permitting workload has increased significantly because of the energy development activities in the state. To deal with this increased workload, DEQ was authorized an increase in personnel and undertook a number of internal efficiency improvements.

### What has been accomplished:

Actions taken to reallocate staff internally to cope with this workload, additional training, process improvement initiatives and additional staff hires have led to the positive movement in the trend line for 2008. It is anticipated that as the expanded staff gains experience and we continue to improve our internal processes, performance on this measure will continue to improve.

## COMPLIANCE



### Story behind the last year of performance:

This performance measure addresses how well operators are complying with the Environmental Quality Act and the rules and regulations of the department. This measure reflects both the efforts of the regulated community to stay in compliance and the effectiveness of the department's efforts to inspect facility operations, review reports required to be submitted by permittees, provide educational materials and training opportunities to the regulated community.

DEQ identifies noncompliance through a combination of physical, on site compliance inspections, and through review of self-monitoring reports filed by permittees. Five of the divisions have authority to take enforcement action. While the options for enforcement actions are similar among the divisions, the applications of the options vary between divisions. The Water Quality Division makes extensive use of Letters of Violations while other divisions use them on a limited scale and the Land Quality Division not at all.

The favorable trend reflected on this graph is primarily due to the new Electronic Discharge Monitoring Reporting System which came on line in 2007 and has led to reductions in late and incomplete Discharge Monitoring Reports. A concurrent policy change to encourage the use of phone calls rather than letters to resolve minor Discharge Monitoring Reporting issues further helped improve compliance in this area.

### **What has been accomplished:**

The department regularly provides ongoing information and assistance to the regulated community. Recent efforts toward that end include training offered by the Water Quality Division to discharge permit applicants. This assistance included help in improving the quality of permit applications and describing the process of issuing a WYPDES permit. The department also engages in a continuous program to improve its public web site where information is posted to help companies comply with federal and state environmental requirements.

The agency has also contracted for an independent survey to evaluate, among other things, the perceived effectiveness of DEQ's compliance assistance and outreach work, and the clarity of its communications with the regulated industry about permit requirements. The survey also asks the regulated community and others what it believes DEQ can do to improve compliance. DEQ intends to continue on a process to continually improve compliance and will use the survey results to help identify measures that have a potential to assist in these efforts.

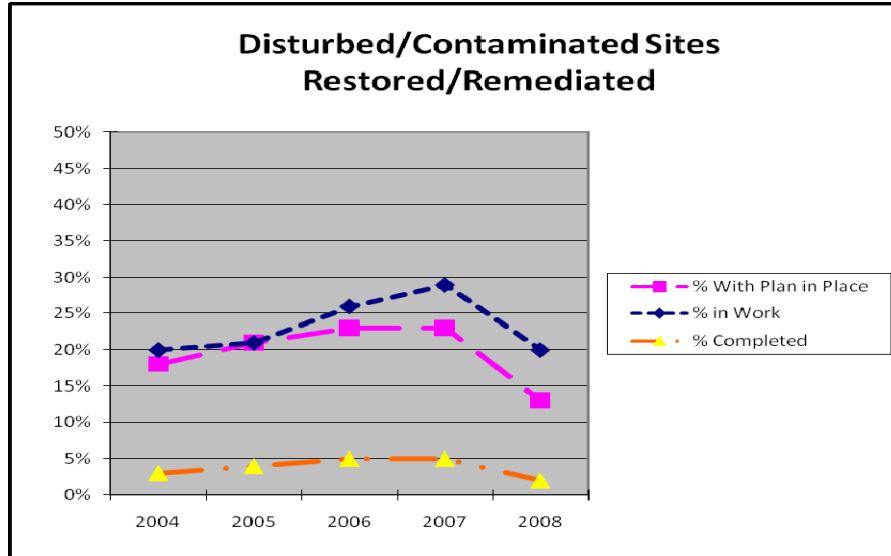
In addition, several programs within the agency participated in an assessment process to look in depth at how day-to-day business is conducted. Meetings were held with business/trade associations to explain permitting and compliance issues. Electronic inspection reports were developed for increased efficiency and improved data retrieval. Staffing was adjusted in a number of areas and additional training conducted to optimize coverage of high priority tasks. These steps led to improved workflow procedures for the programs which in turn resulted in increased productivity and efficiency. There are plans to expand this assessment process to other programs within the agency.

Many of the water and wastewater projects necessary to protect the environment and allow development of the Wyoming economy are multi-million dollar efforts. The Water Quality Division, in cooperation with the Wyoming Water Development Commission and the Office of State Lands, administers revolving fund loan programs. During FY08, 21 loans with a total value in excess of \$32M were made. These 2.5% loans are repaid from the revenues of the projects financed creating a self-sustaining loan fund for future water and wastewater improvement needs.

The agency has also embarked on a significant initiative to upgrade its information management technology and its ability to conduct business through electronic means. A large part of this initiative should allow for the electronic submission of compliance-related reports from the regulated community, which will in turn allow DEQ to more efficiently collect and report information on its compliance activities. Additionally, the information technology project will help DEQ streamline and strengthen its compliance monitoring activities to allow further improvements in the compliance rate reported in future strategic reports.

Finally, DEQ is taking action to support the Governor's initiative to cross-train field inspectors from different agencies, and from different divisions within DEQ, to allow inspectors to spot potential noncompliance problems in areas other than their primary responsibility. This effort is intended to maximize the effective use of state resources by, for example, training an air quality inspector to be able to spot a potentially illegal water discharge.

## SITES RESTORED/REMEDIATED



### Story behind the last year of performance:

Four DEQ divisions aggressively pursue the identification and restoration, reclamation, or remediation of impacted sites across the State with the goal of returning the site to an appropriate level of post-impact beneficial use. The Abandoned Mine Land Division reclaims hazardous mine sites which were disturbed before 1977. The Land Quality Division manages the reclamation of mine sites with forfeited bonds. The Solid and Hazardous Waste Division reclaims and remediates petroleum storage tank sites, monitors landfills, manages solid waste and hazardous waste cleanup, the Voluntary Remediation Program, Brownfields program and orphan sites program. The Water Quality Division restores impacted watersheds and manages groundwater cleanup not involving hazardous waste. While progress continues in this area, the downward trend lines above reflect an increase in the number of known sites in need of restoration and remediation.

### What has been accomplished:

The Agency has provided training and new process tools to improve employee performance for all staff involved in these activities. Retention of professional staff and recruitment of qualified new employees will enhance the Agency's ability to identify, prioritize, and reclaim disturbed sites.

All DEQ divisions continue to research new techniques for site reclamation. Innovations in technical and administrative approaches such as the Voluntary Remediation Program will expand Agency resources and achieve improved efficiencies in reclamation.

The Department continues to develop and enhance partnerships with other state and federal agencies involved in reclamation activities to optimize efficiency and gain synergy from shared tasks.

**Department of Environmental Quality**  
**8/2008**

