



Montana Department of Environmental Quality

Information Technology Strategic Plan 2016

Table of Contents

1. EXECUTIVE SUMMARY.....	3
2. ENVIRONMENT, SUCCESS, AND CAPABILITIES.....	4
3. IT CONTRIBUTIONS AND STRATEGIES.....	7
4. IT PRINCIPLES.....	7
5. IT GOVERNANCE.....	8
6. IT FINANCIAL MANAGEMENT.....	11
7. IT SERVICES AND PROCESSES.....	11
8. IT INFRASTRUCTURE, STAFFING AND RESOURCES.....	11
9. RISKS AND ISSUES.....	12
10. IT GOALS AND OBJECTIVES.....	13
11. IT PROJECTS.....	18
12. SECURITY AND BUSINESS CONTINUITY PROGRAMS.....	20
13. PLANNED IT EXPENDITURES.....	24
14. ADMINISTRATIVE INFORMATION.....	26

1. Executive Summary

The Department of Environmental Quality (DEQ) administers most of Montana's environmental regulatory, remediation, pollution prevention, and energy conservation laws through the application of statutory and rulemaking authority, permit responsibilities, information collection and management, training and certification, technical and financial assistance, and enforcement. The mission of DEQ is to protect, sustain, and improve a clean and healthful environment to benefit present and future generations.

To accomplish this mission, the Director has adopted three primary goals:

- 1) *Increase the efficiency of internal and external Department processes to enhance quality, timeliness, and/or volume of work produced.*
- 2) *Improve relations with Department customers, including the general public and the regulated community.*
- 3) *Enhance recruitment and retention of Department staff.*

The full description of these goals and their associated objectives are viewable at:

<http://deq.mt.gov/DEQAdmin/dir/goals>

The department's strategic IT focus has been to provide efficient and effective services within our budget constraints to all our customers. The Information Technology Bureau provides resources, tools, and services directly supporting the agency's mission and the department's goals through the use of effective information technology to the procedures and practices of the department.

This IT Strategic Plan represents an effort to thoroughly review DEQ's strategic direction from the point of view of the various programs within the department. Our management team spent a significant amount of time working to develop goals and objectives that directly reflect our business-driven direction in relation to information technology services for customers inside and outside of DEQ.

The department's IT Strategic goals listed in section 11 are:

- Continue to Provide a Stable IT Environment
- Improve Customer Service/Partnership
- Effectively Manage Resources
- Use IT to Enhance DEQ Operational Efficiency
- Make Informed Decisions

2. Environment, Success, and Capabilities

The Department of Environmental Quality's mission is to protect, sustain, and improve a clean and healthful environment to benefit present and future generations.

The department is responsible for regulating air quality, water quality, underground storage tanks, automobile wrecking facilities, hazardous waste facilities, solid waste management systems, and mining operations and for the siting and needs analyses of large-scale energy facilities. In addition, the department is the lead agency for reclamation and cleanup activities related to the federal and state superfund programs; leaking underground storage tanks; and regulation and permitting of mining conducted on private, state, and federal lands.

The department works in partnership with the federal Environmental Protection Agency (EPA). Congress gave the EPA the initial responsibility for development and implementation of environmental protection, but many federal statutes contain preference for delegation of the program to the states when the state can demonstrate capacity to carry it out. This arrangement establishes state-federal environmental goals and priorities with the funding and flexibility to achieve desired results. These joint activities become the basis of future agreements and long-term strategic planning. Given this unique relationship, the federal government dictates many of the department's activities.

The department has roughly 435 employees and a \$104 million biennial budget. There are five divisions and the Director's Office. In addition, DEQ works administratively with the Petroleum Tank Release Compensation Board.

WATER QUALITY DIVISION

The Water Quality Division develops integrated energy and water quality plans to protect Montana's environmental resources. The division encourages businesses, local governments and citizens to adopt new products, technologies and practices that avoid environmental damage to the public's resources. We provide financial and technical assistance to overcome market and institutional barriers hindering the implementation of cleaner business, energy utilization and public works practices and the installation of better equipment.

AIR, ENERGY, & MINING DIVISION (AEM)

The AEM Division includes:

- **The Air Quality Bureau.**

The bureau regulates air emissions, through permitting and compliance activities and is responsible for:

- Issuing air quality pre-construction and operating permits;

- Inspecting and providing compliance assistance for air emission sources;
- Issuing permits for open burning activities;
- Coordinating operation of the Montana Smoke Management Program with the major open burning entities.

- **The Energy Bureau.**

The bureau promotes energy efficiency and conservation and includes:

- Energy Efficiency & Compliance Program
- Energy Planning & Renewables Program

- Mining consists of two bureaus: **Industrial and Energy Minerals Bureau (IEMB)**, and **Hard Rock Mining Bureau.**

- **IEMB** includes both Coal and Opencut Programs. The Coal Program issues timely and complete permit and permit modification decisions for mining and reclamation of coal and uranium minerals to ensure that mineral development which occurs does so with adequate protection of environmental resources. The Opencut Program issues timely and complete permit and permit modification decisions for mining and reclamation of Opencut minerals (bentonite, clay, scoria, soil materials, peat, sand or gravel) to ensure that mineral development which occurs does so with adequate protection of environmental resources.
- **The Hard Rock Mining Bureau** regulates the mining of all ore, rock, or substances except oil, gas, bentonite, clay, coal, sand, gravel, peat, soil materials, and uranium.
 - Issue timely and complete permit modification decisions for mining and reclamation of hard rock minerals which ensure that mineral development which occurs does so with adequate protection of environmental resources.
 - Ensure appropriate public involvement through compliance with MEPA and other public notice and public participation statutes. Conduct compliance inspections to assess compliance with applicable mining and reclamation requirements and to offer compliance assistance to the regulated community.

WASTE MANAGEMENT & REMEDIATION DIVISION

The **Waste Management & Remediation Division** is responsible for:

- Overseeing investigation and cleanup activities at state and federal Superfund sites
- Reclaiming abandoned mine lands

- Implementing corrective actions at sites with leaking underground storage tanks (LUSTs)
- Overseeing groundwater remediation at sites where agricultural and industrial chemical spills have caused groundwater contamination

ENFORCEMENT DIVISION

The Enforcement Division manages the Department's enforcement activities including processing enforcement cases, monitoring compliance, and investigating spills and citizen complaints that allege impacts to human health or the environment.

CENTRALIZED SERVICES DIVISION

The Centralized Services Division (CSD) includes Fiscal Services, Information Technology, Human Resources, Records Management, and Regulatory Affairs. CSD serves the department as a cohesive unit to efficiently provide those functions that benefit from a centralized organizational structure and touch every program in DEQ.

DIRECTOR'S OFFICE

The Director's Office carries out the department's mission and statutory responsibilities by administering, managing, planning, and evaluating total agency performance.

Housed in the Director's Office are the:

- Legal Unit
- Montana Environmental Policy Act Staff
- Communication and Public Information Office

Petroleum Tank Release Compensation Board

The Board and the Petroleum Tank Release Cleanup Fund (Fund) were established by the 1989 Montana Legislature to provide adequate financial resources and effective procedures through which tank owners and operators may undertake, and be reimbursed for, cleanup of petroleum contamination and payment to third parties for damages caused by releases from petroleum storage tanks; to assist tank owners and operators in meeting financial assurance requirements under state and federal law governing operation of petroleum storage tanks; to assist in protecting public health and safety and the environment by providing cleanup of petroleum tank releases; and to provide tank owners with incentives to improve petroleum storage tank facilities in order to minimize the likelihood of accidental releases. The primary intent was to establish a structure that would provide adequate remedies for the protection of the environmental life support system from degradation and provide adequate remedies to prevent unreasonable depletion and degradation of natural resources. The Board administers the Fund in accordance with the provisions of the law, including the payment of reimbursement to owners and operators.

3. Strategies

Technology resources in DEQ are a significantly important aspect of how our department delivers value to our customers.

We are focused on our IT goals of:

- 1) Providing a Stable IT Environment.
- 2) Improving Customer Service/Partnerships.
- 3) Effective Resource Management.
- 4) Utilize IT to enhance DEQ operational efficiency.
- 5) Informed decision making.

These goals inform our subsequent IT objectives as well as our decisions regarding IT resource allocation in DEQ. Our IT goals and objectives were formulated by working with our internal customers to understand the how our efforts in IT can and should complement their efforts toward meeting DEQ's mission and goals.

One key to our organizational success is our mix of centralized and decentralized functionality. We have allocated resources in a centralized model where it makes sense and allocated resources closer to the functional areas of individual programs where needed. The central functions in the Information Technology Bureau pool technological expertise where it is not efficient for individual programs to each provide for themselves. We also have System Analysts working in many programs that provide a high level of knowledge and expertise to those programs. This organizational model is dependent upon a commitment to ensure good communication between OIT staff and program IT staff.

4. IT Principles

The DEQ Information Technology Bureau has adopted the mission of providing quality, cost-effective support for our customers in achieving the DEQ mission of protecting, sustaining and improving a clean and healthful environment to benefit present and future generations.

Our vision is to exceed our customers' expectations through the timely delivery of high quality, cost beneficial tools and services that facilitate each customer's success.

The State IT Strategic Plan provides principles that are a framework for DEQ's IT principles. These statewide principles are rooted in the Montana Information Technology Act (MITA) originally passed and signed into law in 2001.

They are as follows:

- Resources and funding will be allocated to the IT projects that contribute the greatest net value and benefit to Montana stakeholders.
- Unwarranted duplication will be minimized by sharing data, IT infrastructure, systems, applications and IT services.

- Montana will use shared inter-state systems to minimize IT expenditures, improve service delivery and accelerate service implementation.
- IT will be used to provide educational opportunities, create quality jobs, a favorable business climate, improve government, protect individual privacy and protect the privacy of IT information.
- IT resources will be used in an organized, deliberative and cost-effective manner.
- IT systems will provide delivery channels that allow citizens to determine when, where, and how they interact with state agencies.
- Mitigation of risks is a priority for protecting individual privacy and the privacy of IT systems information.

DEQ's IT principles are:

- Establish clear, achievable objectives that positively contribute to the organization's strategic business plan.
- Facilitate an open, honest and constructive environment for communicating ideas, opinions and alternatives that support our customer's business goals.
- Assume appropriate risks and make informed decisions, accepting responsibility for decisions, actions and results.
- Cooperate with others as part of a team by employing collaborative work efforts and producing mutually acceptable outcomes.
- Develop quality, cost-effective solutions that are appropriate to the customer's business need.

5. IT Governance

DEQ's Information Technology Governance Board's (ITGB) guiding principle is to achieve successful information technology services within DEQ. The ITGB meets as needed for project and operations decisions. Decisions are based on consensus and members include:

- DEQ Director
- DEQ Deputy Director
- Division Administrators
 - Enforcement
 - Air, Energy, & Mining
 - Water Quality
 - Waste Management & Remediation
 - Centralized Services

ITGB has the following IT governance responsibilities:

- Develops and ensures strategic IT focus;
- Develops and promotes the Department IT goals;
- Initiates and prioritizes major DEQ IT projects;
- Recommends funding priorities for DEQ IT projects;
- Approves DEQ IT policies, procedures and standards;
- Participates in the development of and approves the DEQ IT Strategic Plan;
- Resolves IT-related disputes; and

- Creates, directs and terminates Work Group where necessary.

ITGB tools include ITGB New Project Prioritization Process (figure 1) and Prioritization Ranking System (figure 2).

Figure 1. ITGB New Project Prioritization Process

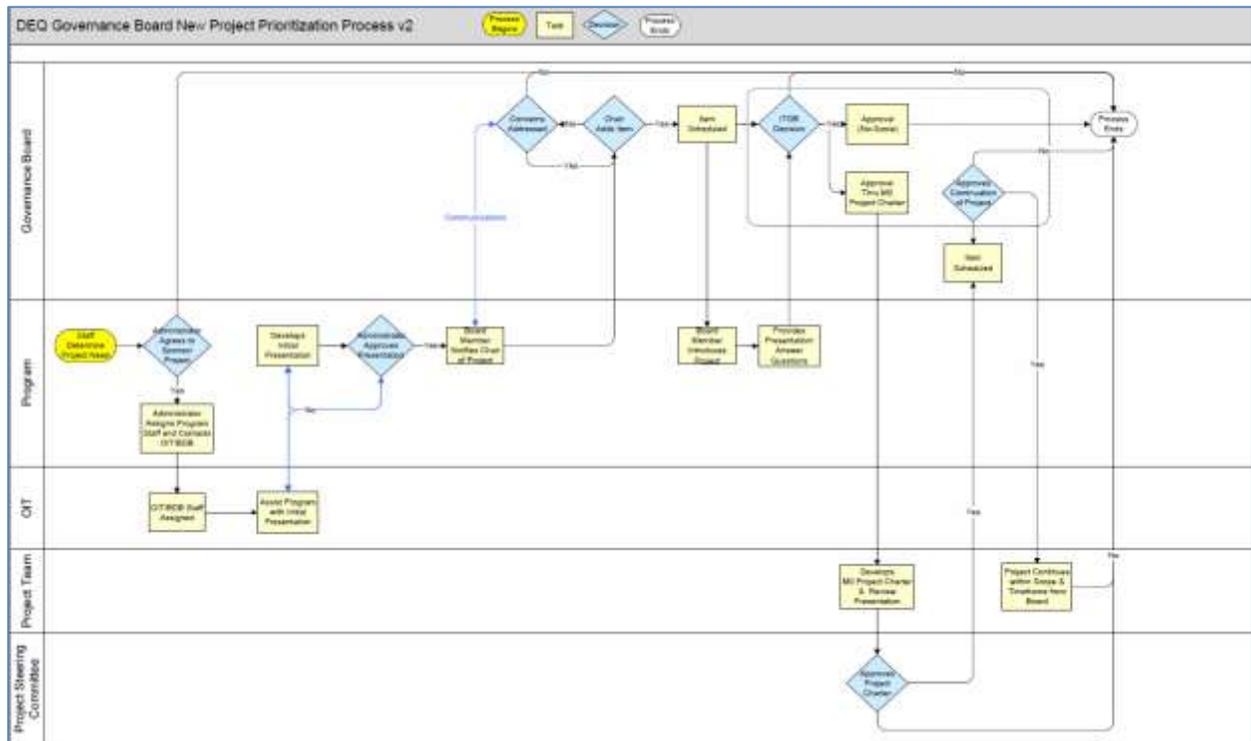


Figure 2. Prioritization Ranking System

IT Prioritization List & Ranking System													
Project	Evaluation or Grant Submission Date	1. Mandated	2. External People & Actions	3. Benefit Employee Work	4. Low Resource Cost	5. Similar Application	6. Business Processes Defined	7. Agency Strategic Direction	8. Other Considerations	TOTAL	Approved	Project Status or Completion Date	
DE Public Interest (Nursing & Streambank Public Interest Info) • Project Charter • Presentation • Project Site	4/17/12	2	5	3	5	5	2	5	4	31	Yes	On Hold	
CWAC Clean Water Act Information Center • Project Charter • CWAC Presentation • Project Site	5/01/12	4	5	4	3	4	3	3	3	31	Yes	Active	
FCD Coal (Capstone/Refracting/MyCoal) • Project Charter • Coal Capstone Presentation • Project Site	5/15/12	2	8	8	2	2	3	5	5	27	Yes	Active Schedule	
OIT Microsoft Office 2009 Upgrade (Not Scored) • Project Charter • Microsoft Office Upgrade Project Site	6/20/12	-	-	-	-	-	-	-	-	-	Yes	11/20/13	
OIT Bamboo Sharepoint Tools (Not Scored) • Not Scored	6/28/12	-	-	-	-	-	-	-	-	-	Yes	On Hold	
END011 Grant Solicitation (Not Scored) • Grant Proposal Summary • Project Site	10/20/12	-	-	-	-	-	-	-	-	-	Yes	On Hold Grant Award	
FCD/PWS & OFS Invoicing Enhancements (PE) • Project Charter • PE Presentation • Project Site	8/27/13	5	5	5	3	3	5	5	4	35	Yes	Active	
DEQ Microsoft Access 2009 Upgrades (Not Scored) • MS Access 2009 Upgrade Site	8/27/13	-	-	-	-	-	-	-	-	-	Yes	Active	
FCD/END Operational Business Process Re-engineering (BPR) • Project Charter • Operational BPR Presentation • Project Site	9/17/13	5	4	3	3	3	4	5	5	32	Yes	Active	
END014 Grant • TDD	TDD												
* Ready for Scoring:													
	Project Status Color Code	Good	Caution	Risk									

6. IT Financial Management

Most technology funding is included in the Central Management Program (Program 10) of DEQ and includes the Director's Office and Centralized Services Division.

A majority of the functions in the Central Management Program are funded with non-budgeted proprietary funds that are not appropriated through HB 2. The proprietary funding is based upon a negotiated indirect rate with the Environmental Protection Agency (EPA). The proprietary fund revenue comes from the indirect rate assessed against actual expenditures for personal services and operating expenses funded in HB 2. This funding currently supports 55.00 FTE of which 23.5 FTE are in IT.

The IT Bureau is the centralized portion of IT support for the department. We also have IT staff (8 FTE) that are part of other programs in the department that serve the specific needs of that program. Program based IT staff work closely with the IT Bureau or are managed IT Bureau staff to ensure efficiency and communication.

The IT Bureau does not charge back any costs associated with provided services under this funding model. All IT operations and staff are paid from the proprietary funds collected via our indirect rate described above. Also, most costs associated with services provided by SITSD are funded by our proprietary fund. Only services that are directly associated with specific program activity or are easily allocated via FTE count are paid directly by program operations.

7. IT Services and Processes

DEQ's Information Technology Bureau provides centralized service and support for most technology related functions which include:

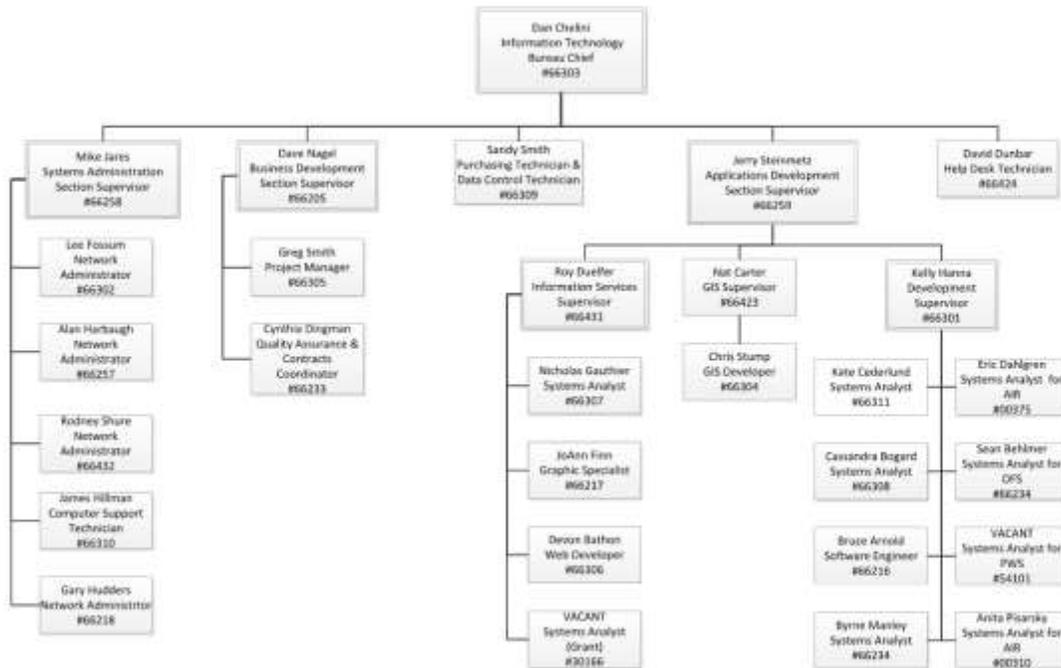
- Network services and support
- Desktop/Laptop Services and support
- Helpdesk services
- Application development, maintenance, and support
- Web site and web application development, maintenance, and support
- IT Contract Management
- Data quality and control
- Project management
- GIS system development and support
- IT Purchasing
- Graphics Design

8. IT Infrastructure, Staffing and Resources

The services described in the previous section are provided by the staff represented in the organizational chart below.

Information Technology Bureau
Organizational Chart

Revised: 04/01/2016



There are 23.5 FTE in the IT Bureau and a technical staff of eight (8) FTE that work directly in programs to more closely meet the needs of our customers.

9. Risks and Issues

Primary Risk	Probability	Impact	Mitigation Strategy
Staff retirements	High	Medium	DEQ developed a workforce plan, which includes a succession-planning component. The succession planning component identifies staff either eligible and/or actively planning retirement. In addition to forecasting retirements, the plan identifies mission critical positions and employees with potential to compete for those positions at risk for retirement and those that are critical to DEQ's mission. Action plans are created were skill gaps are identified. DEQ reviews the action plans, forecasts, and mission critical positions every 6 months. The workforce planning effort allows DEQ to plan for and mitigate the impact of retirements.

Security breach	Medium	Medium	Our agency developing a security program including, but not limited to, staff training and awareness, data encryption, and security policies.
Difficulty of hiring qualified technical staff	High	High	DEQ is in the process of reviewing its compensation system to ensure it meets our needs and supports our ability to recruit and retain highly qualified staff. In addition, DEQ implemented a Flex-Work policy that provides flexibility to staff in determining when they work and provides DEQ with a motivated productive workforce. DEQ also believes this additional flexibility will provide an additional tool for recruiting qualified talent. DEQ provides internship opportunities and several interns have received permanent positions with DEQ. DEQ provides specialized training opportunities for applicants with the right foundation but who may lack specific skill(s). The combination of approaches allows DEQ to reduce the risk associated with leaving positions vacant because qualified talent cannot be found.
Reduction in Funding	High	High	This risk is from both federal and state sources that provide funding for DEQ operations. The department has been analyzing costs and staffing levels working to plan in the longer term to enable us to lessen the impact should funding reductions occur.

10. IT Goals and Objectives

IT Goal 1 Stable IT Environment

Description: DEQ will work to maintain a stable and reliable IT environment for the benefit of our staff and customers.

Benefits: Helping promote efficiency and innovation in day-to-day work activities

Objective 1-1 99% uptime for Server environment (excluding maintenance) supported by DEQ staff.

Description: Reliable IT infrastructure is an important part of providing good service to our customers inside and outside DEQ. We will develop a process and method to provide our customers information regarding server availability (up-time) on each physical and virtual server that we directly manage.

Objective 1-2 Security Planning

Description: Development of a comprehensive Security Plan reflecting the needs and requirements of MCA and State policy.

Objective 1-3 Implement a schedule for maintenance of DEQ supported network hardware and software.

Description: Regularly scheduled maintenance to allow customers more notice of when maintenance is expected.

Objective 1-4 Hardware and Software Inventory Management

Description: The department is required to maintain an inventory of hardware for purposes of replacement, surplus and disposal practices. Software license management requires OIT to inventory software purchased and used.

IT Goal 2 Improve Customer Service/Partnerships

Description: Improve customer service through partnership development between all programs in the department.

Benefits: Improve communications, customer outcomes, and productivity.

Objective 2-1 Explore use of new technology where appropriate

Description: Optimize technologies that will assist business(s) better serve customers within and external to DEQ

Objective 2-2 Expand availability of Help Desk information.

Description: Provide transparency and communications with customer/partners

Benefits: Improve transparency and communications with customer/partners

Objective 2-3 Implement new Help Desk system/added features

Description: Improve usefulness of data within the Help Desk system

Benefits:

- Real-time data entry via web-based entry (technicians are not limited to data entry at their desk.)
- Improved inventory control

IT Goal 3 Effective Resource Management

Description: Effective management optimizes resources (people, hardware, software, funding, etc.,) within all divisions of the agency.

Benefits:

- Proper alignment of resources in relation to agency's priorities
- Improve relationship(s) with customers/partners

Objective 3-1

Description: Optimizing the information technology resources within the agency

Benefits:

- Focus on agency's common goals and objectives.
- Agency IT products and services are business driven.

Objective 3-2 Supporting Existing Systems

Description:

- Supporting legacy systems requires resources within all divisions of the agency
- Businesses are not always able to update or implement new systems

Benefits:

- Institutional knowledge of current systems decreases the amount of support time
- Existing systems continue to function as defined per businesses processes/requirements

Objective 3-3 Staff Development and Retention

Description:

- Provide a career which allows staff to be successful in their chosen profession
- Skill development, career path, and a quality work environment

Benefits:

- Staff continues to meet support expectations from customers/partners
- Staff remains challenged and continue to feel essential

Objective 3-4 Record Information Management (RIM)

Description: Meet requirements for managing records in accordance with Title 2, Chapter 6, Part 2, MCA

Benefits:

- Ability to have quick access to needed documentation
- Maintain the integrity, access, and privacy of records

Objective 3-5 Geospatial Information Systems education and outreach

Description: Inform staff of the availability and effective use of GIS tools

Benefits:

- Continue to foster opportunities as interest and awareness of GIS solutions are recognized by DEQ programs.
- Solutions typically result in greater efficiency, improve communications, and better decision making.

Objective 3-6 Upgrade/Convert Legacy Systems

Description:

- Systems unable to meet changes in business processes

- Tools no-longer supported by manufacture

Benefits:

- IT solutions continue to meet business requirements
- New features typically increase security while increasing businesses ability to analyze data.

IT Goal 4 Utilize IT to enhance DEQ operational efficiency

Description:

- Continue to adapt IT solutions to assist business partners' requests to collaborate, analyze, automate and improve operational efficiencies.

Benefits:

- Efficient and effective use of DEQ resources
- Increased DEQ customer/partner satisfaction

Objective 4-1 Continue to adapt to changes in the EPA's electronic Data Exchange standard

Description:

- The ability to continue reporting quality data using efficient tools

Benefits:

- Remain in compliance with the EPA's Data Exchange standards
- Improve data quality
- Reduces overall reporting burden

Objective 4-2 Promote eGovernment Solutions

Description:

- Increasing demand of external customers to interact electronically with DEQ

Benefits:

- Improving customer services to stakeholders (i.e. public, local government and other State agencies).

Use Document Management System (DMS)

Objective 4-3

Description: Increasing demand from DEQ customers to have public documents readily available

Benefits:

- Faster and more flexible document retrieval
- Reduce physical storage

Objective 4-4 eReporting

Description: Increasing demand to report electronically to internal and external customer/partner

Benefits: Conserves time, money and storage necessary vs. traditional paper based filing systems

Objective 4-5 eSignature/Notary/P.E. standards

Description: Meet legal requirements (State & Federal) statutes and policies related to document submittals

Benefits: Reliable and quicker processing, automatically detect records that have been tampered and reduction in errors.

IT Goal 5 Informed Decision Making

Description: A decision based on relevant information about the advantages, disadvantages, and other possible courses of action.

Benefits: Better decision(s) making that is not based on assumptions or reaction.

Objective 5-1 Data Quality

Description: Timely, accurate, and usable information within IT systems.

Benefits:

- More informed decision making
- Improved customer service
- More effective operations

Objective 5-2 Data Control (possibly merge with Data Quality)

Description: Ability to collect and control the flow of data in IT systems

Benefit: Create rules and standards allowing for data quality

Objective 5-3 Data Stewardship

Description: Reestablish a recognized group responsible for maintaining data standards

Benefits:

- Consistent use of data management resources
- Easy mapping of data between computer systems and exchange documents
- Removes duplication/overlapping data

Objective 5-4 Data Standards

Description: Included in Data Stewardship function. Establish and improve standards for Data in Department systems.

Benefits:

- Improved data quality, consistency and efficiency of data collection
- Increased data compatibility and reduced data redundancy

Item	Description
	<ul style="list-style-type: none"> • Author all required project life-cycle and security documentation • Convert the MT-DEQ E-permitting system for use by the Tennessee federal program • Design and code the CoalApp application to address the needs of MT-DEQ and OSM •
Estimated start date	May 2, 2016
Estimated cost	\$1,398,500
Funding source - 1	Federal Funds-Office of Surface Mining Grant Application
Funding source - 2	
Funding source - 3	
Annual Costs upon completion	Hosting cost with SITSD
Project Name	Electronic ePermitting System –Phase II (Bond Calculation)
Project/program purpose and objectives	<p>The U.S. Department of Interior, Office of Surface Mining Reclamation and Enforcement (OSMRE) and the Montana Department of Environmental Quality (DEQ) entered into a Memorandum of Understanding (MOU) in July 2015 that established a framework for the pursuit of software development and other activities as they relate to management of the Montana’s Coal Program. Under that MOU, DEQ and OSMRE further established a Cooperative Agreement that coordinates their efforts to complete the development and functional implementation of a web-based electronic permitting system.</p> <p>This phase will include transition of the Reclamation Bonding Cost System (I&E Bonding) to a web-based structure for integration with the ePermit application. Through Montana’s assistance, these new applications are intended to become the national-wide standard for states involved in surface mining reclamation.</p> <p><i>Mission and Objectives:</i></p> <p>The mission of the team is to redesign and, where possible, combine and integrate current line-of-business applications into modern, n-tiered web applications.</p>

Item	Description
	<ul style="list-style-type: none"> • Author all required project life-cycle and security documentation • Design and code a bonding calculation application
Estimated start date	May 2, 2019
Estimated cost	\$932,250.00
Funding source - 1	Federal Funds-Office of Surface Mining Grant Application
Funding source - 2	
Funding source - 3	
Annual Costs upon completion	Hosting cost with SITSD
Project Name	Electronic ePermitting System –Phase III (National Photo Archive)
Project/program purpose and objectives	<p>The U.S. Department of Interior, Office of Surface Mining Reclamation and Enforcement (OSMRE) and the Montana Department of Environmental Quality (DEQ) entered into a Memorandum of Understanding (MOU) in July 2015 that established a framework for the pursuit of software development and other activities as they relate to management of the Montana’s Coal Program. Under that MOU, DEQ and OSMRE further established a Cooperative Agreement that coordinates their efforts to complete the development and functional implementation of a web-based electronic permitting system.</p> <p>This phase will include the development and design of a National Photo Archive system. This has been a nationwide problem of how to store photos from inspections. This will integrate into the Inspection module of the Coal Application.</p> <p><i>Mission and Objectives:</i></p>

Item	Description
	<p>The mission of the team is to redesign and, where possible, combine and integrate current line-of-business applications into modern, n-tiered web applications.</p> <ul style="list-style-type: none"> • Author all required project life-cycle and security documentation • Design and code a national phone archive application
Estimated start date	May 2, 2021
Estimated cost	\$300,000
Funding source - 1	Federal Funds-Office of Surface Mining Grant Application
Funding source - 2	
Funding source - 3	
Annual Costs upon completion	Hosting cost with SITSD
Project Name	Electronic ePermitting System –Phase IV (Mobile Devices)
Project/program purpose and objectives	<p>The U.S. Department of Interior, Office of Surface Mining Reclamation and Enforcement (OSMRE) and the Montana Department of Environmental Quality (DEQ) entered into a Memorandum of Understanding (MOU) in July 2015 that established a framework for the pursuit of software development and other activities as they relate to management of the Montana’s Coal Program. Under that MOU, DEQ and OSMRE further established a Cooperative Agreement that coordinates their efforts to complete the development and functional implementation of a web-based electronic permitting system.</p> <p>This phase will include the development and design of a Mobile device of the ePermitting system application. This will allow inspectors to be able to take the application in the field to create inspection reports or look up information for more efficient work.</p>

Item	Description
	<p><i>Mission and Objectives:</i></p> <p>The mission of the team is to redesign and, where possible, combine and integrate current line-of-business applications into modern, n-tiered web applications.</p> <ul style="list-style-type: none"> • Author all required project life-cycle and security documentation • Design and code a mobile device application of the ePermitting system • Create and code mobile applications to facilitate query and entry of data for OSM field personnel
Estimated start date	May 2, 2022
Estimated cost	\$325,000
Funding source - 1	Federal Funds-Office of Surface Mining Grant Application
Funding source - 2	
Funding source - 3	
Annual Costs upon completion	Hosting cost with SITSD
Project Name	Electronic ePermitting System –Phase V (Public Facing Site)
Project/program purpose and objectives	<p>The U.S. Department of Interior, Office of Surface Mining Reclamation and Enforcement (OSMRE) and the Montana Department of Environmental Quality (DEQ) entered into a Memorandum of Understanding (MOU) in July 2015 that established a framework for the pursuit of software development and other activities as they relate to management of the Montana’s Coal Program. Under that MOU, DEQ and OSMRE further established a Cooperative Agreement that coordinates their efforts to complete the</p>

Item	Description
	<p>development and functional implementation of a web-based electronic permitting system.</p> <p>This phase will include the development and design of a public portal facing site. This will allow access to the public to see the documents and any other pertinent information regarding coal mining activities.</p> <p><i>Mission and Objectives:</i></p> <p>The mission of the team is to redesign and, where possible, combine and integrate current line-of-business applications into modern, n-tiered web applications.</p> <ul style="list-style-type: none"> • Author all required project life-cycle and security documentation <p>Design and code a public facing site portal of the ePermitting system</p>
Estimated start date	January 1, 2023
Estimated cost	\$100,000
Funding source - 1	Federal Funds-Office of Surface Mining Grant Application
Funding source - 2	
Funding source - 3	
Annual Costs upon completion	Hosting cost with ISTD

12. Security and Business Continuity Programs

Security Program Description:

Montana Department of Environmental Quality (DEQ) continues to cultivate a department-wide (agency) information security program that is compliant with §2-15-114, MCA and State Information Technology Systems Division *Information Security Programs* policy. The National Institute of Standards and Technology (NIST) Special Publication 800 series provides valuable guidance for enhancing security measures.

Alignment with the State Information Technology Service’s (SITSD) enterprise approach to protect sensitive and critical information has allowed DEQ the opportunity to begin forward movement with its security program. In recent years, DEQ had determined it was unable to come into

compliance with the Statewide Information Security Policy as an individual entity due to limited resources; particularly time, staff and budget. The adoption of an enterprise security framework has provided some liberation from these obstacles. Security policies and procedures maintained and published by the SITSD for use within the enterprise are used daily in DEQ's business.

DEQ's current challenge is getting the Information Security Program appropriately documented and published to provide a ready reference for staff. A presence on the DEQ Intranet is being developed. The site will provide an at-hand resource for all DEQ staff by providing access to DEQ specific security resources as well as those resources maintained by SITSD and what other departments throughout the enterprise have shared.

DEQ currently has over 350 staff participating in the Security Awareness Training exercise sponsored by the Enterprise. There is a strong commitment to continued participation in this type of activity moving forward. Left alone, without the benefit of an enterprise approach to security training, DEQ would struggle to provide a suitable alternative for training.

Continuity of Operations (COOP) Capability Program Description:

On August 11th, 2009 the Department of Environmental Quality joined with the Department of Administration *Continuity Services* for the development of our agency's Continuity of Operations Capabilities, which will provide the plans and structure to facilitate response and recovery capabilities to ensure the continued performance of the State Essential Functions of Government. This program involves two Blocks of focus; the first is to complete the Business Continuity Plans (BCP) involving two phases, the second Block works on the specific business processes or activity plans such as Emergency Action Plans (EAP), Information System Contingency Plan (ISCP), Communications Plans, Incident Management Plans, and more. We are in the process of completing step 5c of phase 2 of 2 BCP phases and expect full completion of both Blocks by December 31st, 2014. This program is not a standalone process in that information which is identified and recorded under this structure can and often exists in the Records Management Program and associates with Information Security Management Program requirements.

Integration of these three programs is critical to the confidentiality, integrity, and availability of information, which is associated with each program.

13. Planned IT Expenditures

	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
PERSONAL SERVICES	3,530,861	3,534,970	3,587,996	3,641,816	3,696,443	3,751,889
OPERATING EXPENSES	1,925,274	2,106,132	2,232,455	2,246,463	2,294,549	2,308,980
INITIATIVES (DPs)	247,807	362,931	0	0	0	0
OTHER EXPENDITURES (EQUIPMENT)	110,000	120,000	120,000	120,000	120,000	120,000
TOTALS	5,813,942	6,124,033	5,940,451	6,008,279	6,110,992	6,180,869

Personal Services and Operating Expenses were inflated 1.5% per year for 2016, 2017, 2018, 2019, 2020, and 2021.

These expenses include IT Personal Services and IT Operating Expenses from other programs outside the Central Management Program.

14. Administrative Information

IT strategy and plan owner:

Name: Tom Livers
Telephone Number: 444-2544
Email Address: tlivers@mt.gov

IT contact:

Name: George Mathieus
Telephone Number: 444-7423
Email Address: gmathieus@mt.gov

Alternate IT contact:

Name: Dan Chelini
Telephone Number: 444-4201
Email Address: dachelini@mt.gov

Information Security Manager:

Name: Mike Jares
Telephone Number: 444-7994
Email Address: mjares@mt.gov