

Agency Information Technology Plan

Agency
Department of Natural Resources and Conservation

Mission
Our mission: To help ensure that Montana's land and water resources provide benefits for present and future generations.

	Agency Goal/Objective	State Strategic Plan Goal/Objective Reference
Goal One:	Creating a culture of excellence through professionalism, partnership, and visionary service	Goal 5 – Service First (Business Smart) Integrate business relationship management, guiding principles, and user feedback to improve communication, promote services, and share information widely
Objective One:	1. Improve Ticketing System Services to the Department: Objective 1a: Achieve a more robust and intuitive ticketing system with the ability to leverage ticket workflows Objective 1b: Explore expansion of a ticketing system for all of the Directors Office to provide a consistent and intuitive tool that customers would utilize when requesting services from the Director's office.	Goal 4 - Objective One: Modernization Utilize new processes and technologies to create an IT environment that enables business, improves services, and facilitates innovation.
Objective Two:	2. Improve Technology Training Program Objective 2a: Develop a program for regular delivery of technology training to department staff. Objective 2b: Develop basic IT onboarding training for new employees.	Goal 5 - Objective One: BRM Establish guiding principles for employees and promote positive business relationships. Objective Two: Communication Provide a single location to find information on our products, services, trainings, contacts, etc.; and provide clear and understandable communication to all.
Objective Three:	3. Enhanced Collaboration and Communication Objective 3a: Identify and integrate optimal collaboration tool(s) according to program needs Objective 3b: Assist the organization in disseminating public information through effective communication platforms	Goal 5 - Objective One: BRM Establish guiding principles for employees and promote positive business relationships. Objective Two: Communication Provide a single location to find information on our products, services, trainings, contacts, etc.; and provide clear and understandable communication to all.
Objective Four:		
Objective Five:		

Add Goal

	Agency Goal/Objective	State Strategic Plan Goal/Objective Reference
Goal Two:	Applications and Business Management: Improving the impact of IT in promoting program success	Goal 5 – Service First (Business Smart) Integrate business relationship management, guiding principles, and user feedback to improve communication, promote services, and share information widely
Objective One:	1. Facilitate a business analysis for major DNRC programs to guide the development of IT solutions and optimized workflows	Goal 5 - Objective One: BRM Establish guiding principles for employees and promote positive business relationships.
Objective Two:	2. Implement a stronger governance framework and associated practices for the department	Goal 5 - Objective One: BRM Establish guiding principles for employees and promote positive business relationships.
Objective Three:	3. Develop a capability for data-driven business intelligence & analysis	Goal 4 - Objective One: Modernization Utilize new processes and technologies to create an IT environment that enables business, improves services, and facilitates innovation.
Objective Four:	4. Enhance, develop, or procure key business applications	Goal 2 - Objective Five: Agile Thinking Deliver solutions and ideas that can quickly respond to deliver business value and outcomes.
Objective Five:	5. Enable electronic payment processing for key programs	Goal 2 - Objective Five: Agile Thinking Deliver solutions and ideas that can quickly respond to deliver business value and outcomes.

Add Goal

	Agency Goal/Objective	State Strategic Plan Goal/Objective Reference
Goal Three:	Geospatial Integration - Leveraging spatial data and remotely sensed information to drive intelligent business operations	Goal 2 – Optimization of shared services and support (Collaborate Smart); Optimize systems and infrastructure to deliver responsive solutions in a cost-effective manner Goal 4 - Objective One: Modernization Utilize new processes and technologies to create an IT environment that enables business, improves services, and facilitates innovation.
Objective One:	1. Geospatial Data Management Objective 1a: Optimize enterprise spatial data management standards to accommodate business systems integration for informed decision making. Objective 1b: Develop data migration paths to populate stand-alone or siloed datasets into an enterprise storage environment.	Goal 2 - Objective One: Automate Deliver automation in all areas of IT, develop a culture of automation. Objective Two: Shared Decrease duplication and deliver shared SaaS solutions when possible. Objective Three: Standardization Simplify architecture and infrastructure, develop standardized processes. Objective Four: Capability Simplify architecture and infrastructure, work with other states to develop standardized processes. Objective Five: Agile Thinking Deliver solutions and

ideas that can quickly respond to deliver business value and outcomes.

Objective Two:

2. Data Acquisition and Distribution Objective 2: Research, identify and select a unified platform for authoritative spatial data access and distribution to agency staff and external end users.

Goal 4 - Objective One: Modernization Utilize new processes and technologies to create an IT environment that enables business, improves services, and facilitates innovation.

Objective Three:

3. Emerging Spatial Data Technologies Objective 3a: Working with the Director's Office and agency program staff, develop the policy for UAV operations and data management. Objective 3b: Develop standard data acquisition workflows to integrate UAV data into program business operations. Objective 3c: Optimize mobile data collection platforms for accessibility and integration into current or future program workflows.

Goal 2 - Objective Five: Agile Thinking Deliver solutions and ideas that can quickly respond to deliver business value and outcomes.

Objective Four:

Objective Five:

Add Goal

Agency Goal/Objective

State Strategic Plan Goal/Objective Reference

Goal Four:

Continuity of Operations: Managing Risk to protect department operations and user data.

Goal 3- Cybersecurity Enhancements and Strategy (Protect Smart) Objective Two: Protect citizen's data and the State's IT assets, limiting the scope and impact of potential cybersecurity events.

Objective One:

1. Review and improve the departmental disaster recovery posture in architecture, plans, and procedures

Goal 3 - Objective Five: Recover from cybersecurity events in a timely manner.

Objective Two:

2. Review and improve internal security architecture, plans, and procedures

Goal 3 - Objective One: Identify the people, processes, and technology that support the State's critical business processes. Objective Two: Protect citizen's data and the State's IT assets, limiting the scope and impact of potential cybersecurity events.

Objective Three:

3. Provide targeted information to agency personnel to educate them on security best practices.

Goal 3 - Objective Three: Detect cybersecurity events in a timely manner Goal 5 - Objective Four: Retain, Recruit, and Train Engage human resources on hiring and retention strategies, while providing valuable training to new and current employees.

Objective Four:

Objective Five:

Add Goal

Agency Goal/Objective

State Strategic Plan Goal/Objective Reference

Goal Five:

Infrastructure Ensuring computing resources are proficient and available

Goal 4- Unified Digital Government (Enterprise Smart) Provide consolidated access to government information and services anywhere, anytime, on any device; Objective One: Modernization Utilize new processes and technologies to create an IT environment that enables business, improves services, and facilitates innovation. Objective Four: G2G (Agency-to-Agency, Government-to-Local Government, State-to-State) Implement enterprise technologies that facilitate communication, data access, and information sharing between government entities to reduce costs and increase collaboration.

Objective One:

1. Mobilization Technologies Objective 1a. Pilot, train staff, and deploy virtual desktop infrastructure to improve service efficiency, security, and reduce computing costs Objective 1b. Increase mobile platform standards and utility across the organization Objective 1c. Continually work to provide sufficient network bandwidth for all program operations

Goal 4- Unified Digital Government (Enterprise Smart) Objective One: Modernization Utilize new processes and technologies to create an IT environment that enables business, improves services, and facilitates innovation.

Objective Two:

2. Continuous Deployment Objective 2a. Identify and select a continuous automation platform; obtain needed staff training to implement identified solution Objective 2b. Publish key applications in the continuous deployment environment

Goal 4- Unified Digital Government (Enterprise Smart) Objective One: Modernization Utilize new processes and technologies to create an IT environment that enables business, improves services, and facilitates innovation.

Objective Three:

3. Employ Digital Records Management Objective 3a. Optimize the enterprise content management solution for DNRC programs Objective 3b. Facilitate program migration to leverage digital records management

Goal 1 - Objective One: Cost-Effective Improve efficiencies, optimize costs, and maintain a balanced budget. Objective Two: Transparency Provide accurate IT investment data and transparent budgeting objectives to agencies, governor's office, legislators, and any other users of IT investment data. Goal 4- Unified Digital Government (Enterprise Smart) Provide consolidated access to government information and services anywhere, anytime, on any device; Objective One: Modernization Utilize new processes and technologies to create an IT environment that enables business, improves services, and facilitates innovation.

Objective Four:

4. Leverage Software as a Service (SaaS) and cloud-based solutions where optimal Objective 4a. Reduce need for OIT staff to manage platforms, instead investing staff resources into the integration of technology and program business solutions Objective 4b. Improve security posture through secure cloud environments and continuous deployment structures.

Goal 2 - Objective Two: Shared: Decrease duplication and deliver shared SaaS solutions when possible. Goal 4 - Objective One: Modernization: Utilize new processes and technologies to create an IT environment that enables business, improves services, and facilitates innovation. Goal 3 - Objective Two: Protect: Protect citizen's data and the State's IT assets, limiting the scope and impact of potential cybersecurity events.

Objective Five:

5. IT Resource asset tracking and management Objective 5a: Implement an effective IT asset tracking solution to streamline delivery, service, and replacement of IT solutions

Goal 2 - Objective One: Automate Deliver automation in all areas of IT, develop a culture of automation; Objective Three: Standardization: Simplify architecture and infrastructure; Objective Four: Capability: Simplify architecture and infrastructure,

Add Goal

Link to Agency Goals and Objectives

<http://dnrc.mt.gov/divisions/directors-office>

Information Technology Resources and Capabilities

Information Technology Resources

Summary of information technology resources:

Bureau / Unit Name

Number of FTE

Primary Function / Mission

Office of Information Technology

23

Enable the department to fulfill its mission through technology services to citizens.

Add Resource

Information Technology Capabilities

Summary of Systems:

I have reviewed all of my agency's systems in Assurance CM and certify that it is accurate.

Summary of Hardware:

Total Number of Appliances (Devices designed for internet access and specialized business use, but without capabilities of a fully-equipped server. Can be physical or virtual. Include all chassis, tape systems, firewalls, switches, KVM's, and USB anywhere devices.)

17

Total Number of Physical Servers (Include physical servers used for virtualization. Do not include equipment hosted by SITSD.)

22

Total Number of Virtualized Servers (Do not include equipment hosted by SITSD.)

0

Total Usable Storage Space (SANs and NASs. Do not include storage hosted by SITSD.)

N/A

Device Type (Including, but not limited to desktops, laptops, mobile devices, printers, cameras, etc.)

Quantity

Estimated Replacement Value

Desktops	562	730,600
Laptops	242	399,300
Mobile Devices	260	208,000
Printers	100	Varies
Copiers	34	Varies
Document Scanners	Varies	Varies
Plotters	9	Varies
Note	1	

These estimated replacement values are estimates based on current price of new hardware. This cost is a major reason why many staff utilize older, slower systems. Actual asset current value is significantly less. The OIT seeks to procure the correct system for the task at hand to ensure procured systems can sustain the projected use without over-purchasing to the identified need.

Information Technology Projects

Project Name

TLMS 2.0

Division

Trust Lands Management Division

Project / Program purpose and objectives

Divisional Business System - Manage all aspects of land management and financial tracking for State Lands

State Strategic Plan Goal/Objective Reference

Goal 1 – Fiscal Responsibility (Spend Smart) Create, optimize, maintain a balanced budget; Goal 2 - Objective Five: Agile Thinking Deliver solutions and ideas that can quickly respond to deliver business value and outcomes.

Estimated start date

7/16/2018

Estimated delivery date

12/20/2022

Estimated cost

3063000

HB 10 Request

Yes

Funding Source 1

Federal

Funding Source 1 Amount

33000

Funding Source 2

State Special Revenue

Funding Source 2 Amount

2880000

Funding Source 3

Other

Funding Source 3 Amount

150000

Annual costs upon completion

Est \$30,000-\$40,000 including licensing and hosting (internal)

Status of the project as of March 31, even numbered years. Indicate % completed and status of funds expended.

25% complete, 24% expended

 Add Project**Project Name**

Water Rights Information System 2.0

Division

Water Resources Division

Project / Program purpose and objectives

Management of all Montana Water Rights in accordance with the state constitution and MCA

State Strategic Plan Goal/Objective Reference

Goal 4– Unified Digital Government (Enterprise Smart) Provide consolidated access to government information and services anywhere, anytime, on any device; Goal 5 – Service First (Business Smart) Integrate business relationship management, guiding principles, and user feedback to improve communication, promote services, and share information widely

Estimated start date

6/21/2019

Estimated delivery date

12/20/2022

Estimated cost

4167174

HB 10 Request

Yes

Funding Source 1

State Special Revenue

Funding Source 1 Amount

1255006

Funding Source 2

General Fund

Funding Source 2 Amount

2912168

Funding Source 3**Funding Source 3 Amount****Annual costs upon completion**

Est. \$40,000 - \$100,000 if including infrastructure, license, & hosting costs

Status of the project as of March 31, even numbered years. Indicate % completed and status of funds expended.

20% complete, 11.8% expended.

Add Project

Agency Contact Information

Agency Director / Administrator

Name
John Tubbs

Phone Number
444-1948

Email Address
JTubbs@mt.gov

Mailing Address
1539 Eleventh Avenue, Helena, MT 59601

Information Technology Contact (CIO / IT Manager)

Name
Kreh Germaine

Phone Number
444-0575

Email Address
KGermaine@mt.gov

Mailing Address
1539 Eleventh Avenue, Helena, MT 59601

Information Security Manager

Name
Vacant

Phone Number
444-1283

Email Address

Mailing Address
1539 Eleventh Avenue, Helena, MT 59601