OREGON WATER RESOURCES IT STRATEGIC PLAN 2025 - 2030

The IT Strategic Plan outlines our priorities and provides a high-level roadmap for how we will allocate resources over the next five years to support and enhance the agency's mission.

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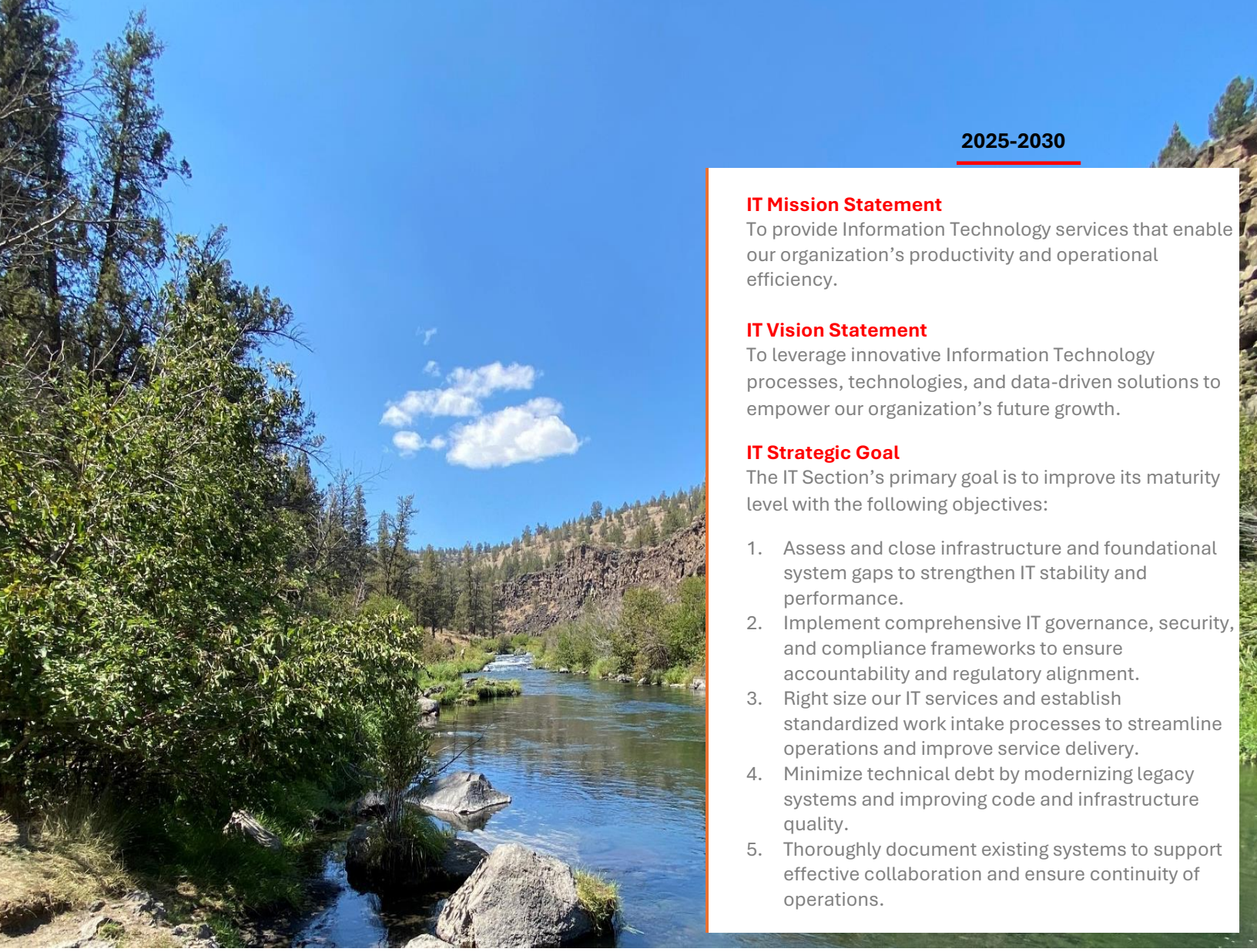


2025-2030

IT Mission Statement
To provide Information Technology services that enable our organization's productivity and operational efficiency.

IT Vision Statement
To leverage innovative Information Technology processes, technologies, and data-driven solutions to empower our organization's future growth.

IT Strategic Goal
The IT Section's primary goal is to improve its maturity level with the following objectives:

1. Assess and close infrastructure and foundational system gaps to strengthen IT stability and performance.
2. Implement comprehensive IT governance, security, and compliance frameworks to ensure accountability and regulatory alignment.
3. Right size our IT services and establish standardized work intake processes to streamline operations and improve service delivery.
4. Minimize technical debt by modernizing legacy systems and improving code and infrastructure quality.
5. Thoroughly document existing systems to support effective collaboration and ensure continuity of operations.

A NOTE FROM THE CIO:

As a new member of the Oregon Water Resources Department (OWRD), I have spent the past few months familiarizing myself with the current state of the IT Section. Overall, the IT environment is marked by outdated technology and limited resources, reflecting a history of underinvestment. However, agency leadership acknowledges the critical role of technology and is committed to strengthening and investing in IT capabilities. In the coming years, our primary focus will be on stabilizing the structure and operations of the IT Section to ensure it can effectively support the department's evolving and expanding needs. Despite the challenges, the dedication and deep institutional knowledge of the existing IT staff have been instrumental in keeping essential services running and provide a strong foundation for future improvements.

The IT section's primary goal is to improve its maturity level from *Firefighter* (supports the business) to *Trusted Operator* (optimizes the business). From a service perspective, Firefighter mode is reactive—focused on fixing issues as they arise—while Trusted Operator represents a proactive approach that streamlines operations and delivers consistent, value-driven IT services. The IT Strategic Plan details our journey with the five strategic objectives on how we will allocate resources over the next five years to support and enhance Oregon Water Resources Department's (OWRD) and Oregon Watershed Enhancement Board's (OWEB) mission.

Amit Dass
CIO, Oregon Water Resources Department

Agency Summary

Agency Overview

The Oregon Water Resources Department (OWRD) is the state agency that is focused on "water quantity." To achieve its mission, the Department's major functions include: (1) Collecting, analyzing, and providing water data; (2) Protecting public safety through well construction and dam safety programs; (3) Distributing water under the water rights system of prior appropriation; (4) Providing planning, technical assistance, and funding to address instream and out-of-stream water supply needs; and (5) Processing water rights transactions.

Agency Organizational Structure

Currently, the Agency is headquartered in Salem, with 21 offices located throughout the state. The State Agency is comprised of six divisions, The Director's Office, Field Services, Technical Services, Water Right Services, Planning Collaboration and Investments and Administrative Services.

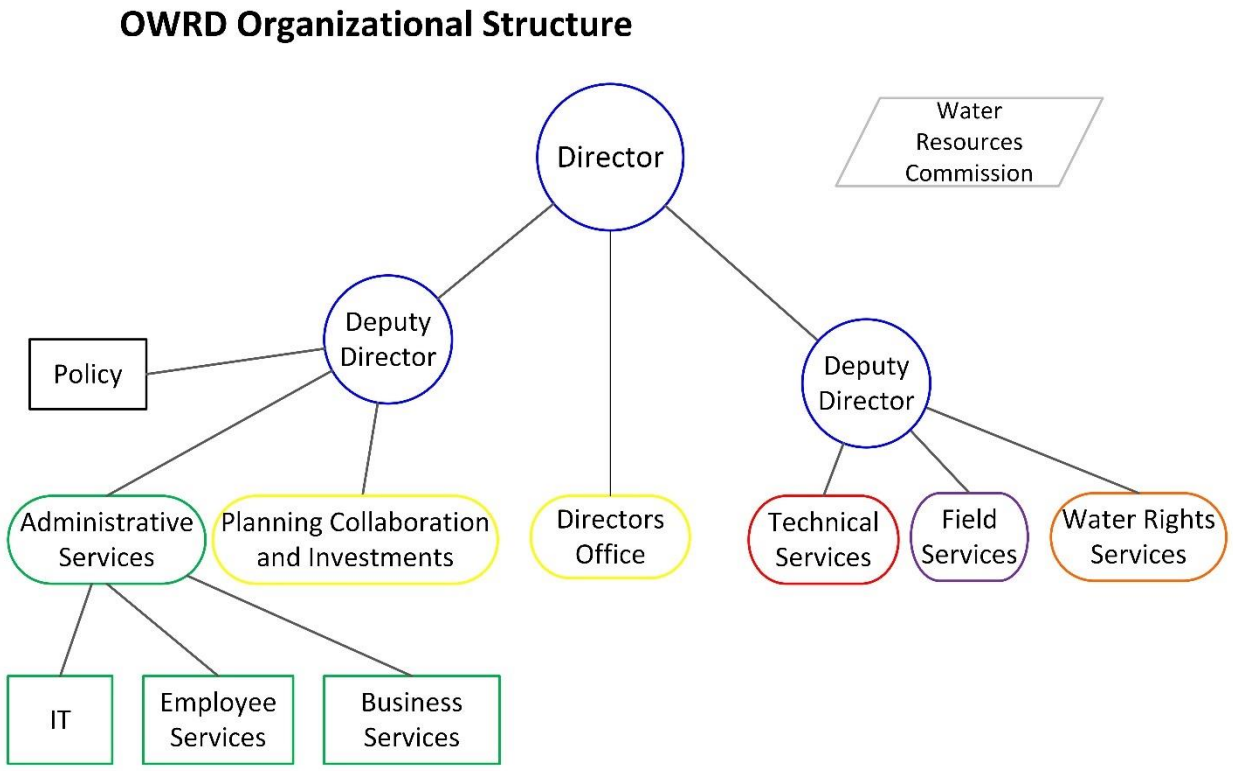


Figure 1. OWRD Organizational Structure (as of May 2025)

Agency Vision and Mission

The Oregon Water Resources Department's vision, mission and equity statements are:

Vision

To assure sufficient and sustainable water supplies are available to meet current and future needs.

Mission

The Department's mission is to serve the public by practicing and promoting responsible water management through two key goals:

- To directly address Oregon's water supply needs.
- To restore and protect streamflow's and watersheds in order to ensure the long-term sustainability of Oregon's ecosystems, economy, and quality of life.

Equity Statement

Water is a shared, vital, and finite resource. The Oregon Water Resources Department strives for meaningful engagement, transparent decision-making, and accessible services for those we serve. Together we will build a resilient and equitable water future for this generation and the many to come.

Agency Core Values

The agency's core values guide the actions of the agency. Those values are:

- **Integrity** – We are accountable for all that we do. We act with honesty and promote transparency.
- **Service** – We are dedicated to providing outstanding service and treating everyone equitably in our management and stewardship of state resources.
- **Technical Excellence** – We base our resource decisions on law, science, and expertise.
- **Teamwork** – We are united in our mission, relying on one another and working together with the communities we serve.
- **Forward-Looking** – We seek innovative and practical solutions to the water challenges of today and tomorrow.

Agency Priorities and Objectives

The agency has several strategic priorities, supported by a larger number of key objectives. IT initiatives will support these priorities and objectives.

Strategic Priorities

This section identifies and describes the Department's four strategic priorities and their relationship with the IWRS.

1) **Act** with urgency on critical water needs
2) **Assist** community with water preparedness efforts
3) **Adapt** to doing more with less Water
4) **Advance** agency workforce & operations: foster and cultivate a forward-thinking, resilient, and adaptive workforce

Key Objectives

- Advance responsible groundwater and surface water management
- Modernize water transactions systems and processes

- Increase protection of public safety and health
- Improve instream protections and increase water conservation
- Understand Oregon's expected future water supply
- Equip basins to plan for their water future
- Invest in Oregon's built and natural water infrastructure

IT Context

IT Section Overview

The Information Technology section is a relatively small but mighty team of professionals who are critical to the optimal functioning of the Oregon Water Resources Department (OWRD). OWRD currently has ~250 FTE.

The information technology team is also responsible for supporting a smaller agency called Oregon Watershed Enhancement Board (OWEB). OWEB is in close vicinity of Oregon Water Resources Department main office in Salem, Oregon. OWEB currently has ~42 FTE.

IT Vision, Mission, and Core Values

The Information Technology Section's vision, mission and guiding principles were created jointly with input from IT Section staff. They are:

IT Vision

To leverage innovative IT processes, technologies, and data-driven solutions to empower our organizations future growth.

IT Mission

To provide IT services that enables our organizations productivity and operational efficiency.

IT Core Values

The IT Core Values are in alignment with the agency's core values. This helps to ensure alignment with the agency's broader strategic efforts that are themselves crafted to align with and support the broader agency core values.

- **Integrity** – We are accountable for all that we do. We act with honesty and promote transparency.
- **Service** – We are dedicated to providing outstanding service and treating everyone equitably in our management and stewardship of state resources.
- **Technical Excellence** – We base our resource decisions on law, science, and expertise.
- **Teamwork** – We are united in our mission, relying on one another and working together with the communities we serve.
- **Forward-Looking** – We seek innovative and practical solutions to the water challenges of today and tomorrow.

Current IT Landscape

The current state of information technology at OWRD follows a general theme of lagging behind the curve in both technology and resources. There is an acknowledgement of historical lack of investment by OWRD executive management. This lack of investment has presented the agency with obstacles as it tries to improve itself. Because of this executive management has expressed support to catch the IT section up with resources needed to effectively support the agency's strategic priorities and objectives.

Our initial analysis came up with quite a few challenges:

- Under-resourced staff forced largely to react rather than act proactively
- Large backlog of work
- Missing key resources. E.g., Networking Engineer
- Missing or incomplete documentation. E.g. Standards and processes
- Incomplete, missing or inaccurate master data
- IT licensing. E.g., Needs attention across the agency
- Missing foundational IT systems or incomplete setup of these foundational systems.
- Missing work intake process
- The hardware refresh lifecycle is a challenge due to limited resourcing
- Align training to work duties and processes. E.g., Project management
- Infrastructure setup requires considerable rework
- Large technical debt. E.g., Legacy Applications (Not technology)
- Disorganized office space setup for the future
- Missing Security program

Other Inputs

In addition to a review of the IT Section challenges other input was also considered like review of application inventory, project lists, section maturity level, budget, 2025 IT strategic workshop session, Oregon's Integrated Water Resources Strategy, Oregon Watershed Enhancement Board (OWEB) IT Strategic Plan 2025 – 2030 and relevant work from the past like Info-Tech diagnostics, SWOT analysis, PESTLE analysis. All these inputs as shown below helped us arrive at our current maturity level and determine our next steps.

Oregon's Integrated Water Resources Strategy (IWRS)

Oregon's IWRS (Appendix A: Oregon's Integrated Water Resources Strategy (IWRS)) is a framework for improving our understanding of Oregon's water resources and meeting our instream and out-of-stream needs, including water quantity, water quality, and ecosystem needs. It provides a statewide inter-agency framework for better understanding and meeting Oregon's instream and out-of-stream water needs. Oregon's Water Resources Commission adopted the first IWRS in 2012 and the second in 2017. Oregon Revised Statute (536.220) was updated in 2023 to requires that the IWRS is updated every 8 years.

- Prevent things from getting worse
- Optimize: highest & best use
- Help communities prepare & adapt

Oregon Watershed Enhancement Board (OWEB) IT Strategic Plan 2025 – 2030

The Oregon Watershed Enhancement Board is a state agency that provides grants to help Oregonians take care of local streams, rivers, wetlands, and natural areas. Community members and landowners use scientific criteria to decide jointly what needs to be done to conserve and improve rivers and natural habitat in the places where they live. OWEB grants are funded from the Oregon Lottery, federal dollars, and salmon license plate revenue.

Oregon's Water Resources IT team provides IT Support to OWEB based on an interagency agreement.

Oregon Watershed Enhancement Board has submitted an independent IT Strategic Plan (Appendix B: OWEB IT Strategic Plan 2025 – 2030) which was also considered while developing our strategic plan.

Ongoing Diagnostics

In the past the IT Section had employed Info-Tech to facilitate survey diagnostics to help ascertain the current state of customer satisfaction, and the importance and effectiveness of core IT processes. These diagnostics are slated to occur again in the Fall of 2025.

IT Satisfaction

The Info-Tech CIO Business Vision diagnostic (Appendix C: IT Satisfaction Scorecard Areas of Focus) was performed to survey management and leadership throughout the agency for IT satisfaction. The results yielded an overall satisfaction score of 64% with an IT value score of 73%. This diagnostic revealed key areas that needed improvement which included Business Apps, Requirements Gathering, Client-Facing Technology, Analytical Capability and Reports, IT Innovation Leadership, and Projects.

Key IT Capabilities Needing Attention

Targeted at the IT Team the Management and Governance diagnostic (Appendix D: Management & Governance Framework Diagnostic Results) had also revealed core services that were scored as being both high importance and low performance: IT Strategy and Governance, Stakeholder Management, Availability and Capacity Management, Application Portfolio. These became areas of focus for the IT Strategic plan. The Info-Tech Management and Governance diagnostic was executed to inform the results of the CIO Business Vision diagnostic. Both diagnostics together improved the understanding and value of the results.

These two diagnostics together along with work sessions targeted at the IT Section resulted in the identification of six key IT processes needing attention. Those core IT processes included **IT Strategy and Governance**, **Stakeholder Management**, **Project Management**, **Data Architecture and Governance**, and **Project Portfolio Management**. Improving the maturity of these core IT processes will be key to improving the IT Section's overall IT maturity and in turn helping to advance the agency's strategic objectives.

SWOT Analysis

A SWOT (Strengths, Weaknesses, Opportunities, and Risks) analysis (Appendix E: SWOT Analysis) was performed. The results helped to feed into the management and governance framework capabilities that should be focused on in this plan. Those capabilities included:

- IT Strategy & Governance
- Stakeholder Relations
- Project Portfolio Management
- Project Management
- Data Governance
- Data Architecture

The SWOT analysis very much aligned with results from the Management and Governance diagnostic and many of the survey's core IT processes matched items identified as Strengths and Weaknesses. This further supported the results of both the SWOT and the diagnostic.

PESTLE Analysis

The agency conducted a PESTLE (Political, Economic, Social, Technological, Legal, Environmental) analysis (Appendix F: PESTLE Analysis). Items identified in that analysis help to shape the understanding of external impacts facing the agency at this time. Awareness of these impacts will help to better shape this plan's strategy and targeted objectives.

There were multiple impacts identified in every PESTLE category, painting a picture of an agency that must be aware of and plan for all of them. However, it was observed that a higher percentage of technological impacts were things that the agency has direct control over, where most of the other category impacts involved much broader concerns which are more difficult to influence. That said, technological impacts appear to be the area where the agency can exert the most influence, making this strategy document necessary tool in addressing those impacts.

Core Applications

The agency has identified a list of 26 core applications that are either custom developed, COTS (Commercial Off the Shelf) or SaaS (Software as a Service) solutions. These are all applications that have significant use and impact within the agency. Additionally, there are just over 200 applications in total when smaller and less used utilities are included. These are used less frequently and by smaller groups of users, overall reducing their level of criticality. These are applications that if unavailable, they won't adversely affect agency staff to a significant degree.

Budget

As of 2025 the current service level is $8.9 million total fund, of which $6.1 million supports staffing. Remaining funds support services and supplies costs of the section and the agency. WRD's IT Department follows the state's budget development process as outlined in the biennial budget instructions published by the Department of Administrative Services.

Current Maturity Level

Based on the collected input and validated information, the Information Technology (IT) Section of OWRD is currently assessed at the *Firefighter* maturity level. As depicted below (Figure 2), this represents the second tier within a five-level maturity model, positioned just above the lowest level, *Unstable*. While the IT Section provides essential support to business stakeholders, it continues to face difficulties in transitioning from a reactive to a proactive operational posture.

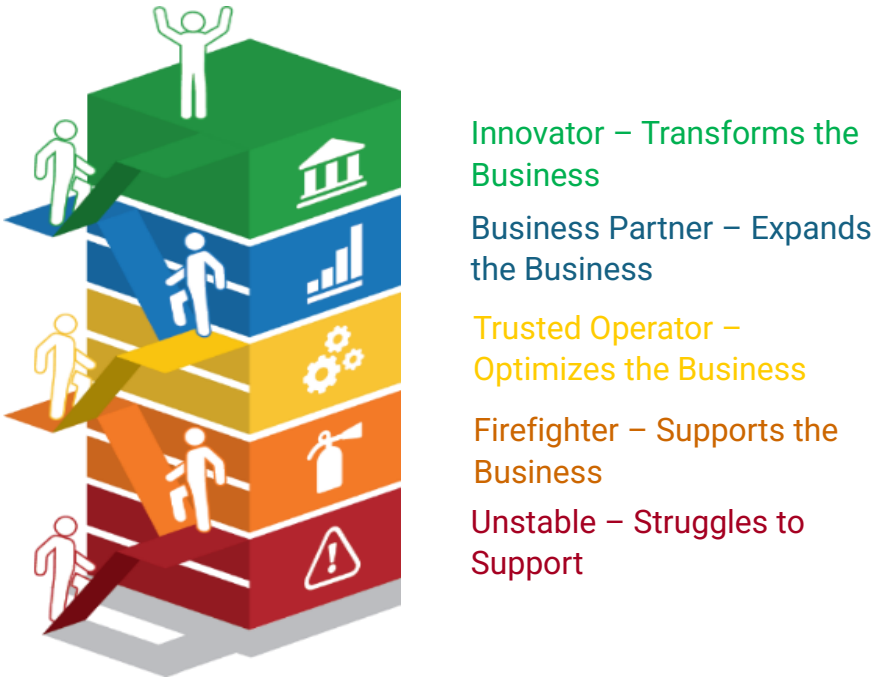


Figure 2. IT Maturity Levels. OWRD currently operates at Firefighter Level.

Target Maturity Level

The IT Section's primary goal is to improve its IT maturity level to the **Trusted Operator level**. By improving the section's maturity level, it will improve its ability to support the business as it strives to achieve its strategic priorities of modernization, securing Oregon's water future, and fostering a forward-looking team. More than ever before, the agency's broader strategic priorities rely on technology and improved IT maturity will enable the IT Section to meet those technological needs. This is seen as a realistic goal for the IT Section over the course of this strategic plan timeframe.

IT Strategic Initiatives

Overview

A review of the business challenges, input from agency staff and operational issues noticed, reoriented us to address some of the basics in our IT section with existing resources and if possible, prepare to get critical resources in the coming five years by demonstrating the alignment and focused work. The five strategic IT objectives reflect that.

1) Assess and close infrastructure and foundational system gaps to strengthen IT stability and performance.
2) Implement comprehensive IT governance, security, and compliance frameworks to ensure accountability and regulatory alignment.
3) Right size our IT services and establish standardized work intake processes to streamline operations and improve service delivery.
4) Minimize technical debt by modernizing legacy systems and improving code and infrastructure quality.
5) Thoroughly document existing systems to support effective collaboration and ensure continuity of operations.

With our five high-level IT strategic objectives we looked at the initiatives which would move us on the path to our Trusted Operator Goal.

IT Objectives and Initiatives Planning Matrix

The following table aligns the IT Strategic Plan's Initiatives to a major outcome mentioned in the Agency Strategic Plan

	Priority Area 4: Advance Agency Workforce & Operations				
Outcomes	**P4.1 Information Technology, Hardware, Software, and Staffing**				
IT Objectives (aka AGENCY TASKS)	Assess and close infrastructure and foundational system gaps to strengthen IT stability and performance	Implement comprehensive IT governance, security, and compliance frameworks to ensure accountability and regulatory alignment	Right size our IT services and establish standardized work intake processes to streamline operations and improve service delivery	Minimize technical debt by modernizing legacy systems and improving code and infrastructure quality	Thoroughly document existing systems to support effective collaboration and ensure continuity of operations
2025-27 IT Initiatives (aka Agency Milestone)	1. Assess and Address Security Gaps 2. Stabilize IT Infrastructure 3. Improve Remote Office Connectivity 4. Revise Hardware Refresh Lifecycle 5. Implement FTP/SFTP Solutions 6. Establish IT Asset and Licensing Management Processes	1. Establish a Right-Sized IT Governance Framework 2. Launch Agency-Wide IT and Security Engagement	1. Establish Work Intake Channels 2. Enhance HALO ITSM to Support Intake Processes 3. Address Staffing Gaps in Critical IT Roles	1. Launch Agency-Wide Intranet Redesign 2. Implement Agile Methodology for Software Development 3. Migrate our code repository system from SVN to Git for better collaboration and modern tools. 4. Initiate Data Quality Improvement Efforts	1. Develop a Comprehensive Data Dictionary 2. Document the IT Application Portfolio 3. Expand use of the IT Wiki
2027-29	We are going to do rolling wave planning and fill				

	this information during strategic refresh.				
2029-31	We are going to do rolling wave planning and fill this information during strategic refresh.				

Strategic IT Initiative Categories

These initiatives have been further categorized into Business Support Initiatives, Innovation IT Initiatives, and IT Excellence Initiatives as a strategic approach to organizing our IT efforts based on their goals, value impact, and alignment with organizational priorities.

Business Support Initiatives

The following business support initiatives focus on enhancing and sustaining day-to-day business operations through reliable IT systems, services, and tools that ensure business continuity and efficiency.

Business Support Initiatives

Initiatives that primarily support operational continuity, staffing, and administrative processes.

- Assess and Address Security Gaps
- Stabilize IT Infrastructure
- Improve Remote Office Connectivity
- Revise Hardware Refresh Lifecycle
- Implement FTP/SFTP Solutions
- Establish IT Asset and Licensing Management Processes
- Develop a Comprehensive Data Dictionary
- Document the IT Application Portfolio

Innovation IT Initiatives

The following innovation IT initiatives focus on forward-looking, transformative projects that leverage emerging technologies to create new capabilities, business models, or customer experiences, aimed at gaining a competitive edge.

Innovation IT Initiatives

Initiatives that involve introducing new solutions or significant improvements to how IT services are delivered.

- Launch Agency-Wide Intranet Redesign

- Implement Agile Methodology for Software Development
- Initiate Data Quality Improvement Efforts
- Migrate our code repository system from SVN to Git for better collaboration and modern tools.

IT Excellence Initiatives

The following IT excellence initiatives will focus on improving the internal performance of the IT organization by optimizing processes, reducing costs, increasing agility, and aligning more closely with business goals.

IT Excellence Initiatives

Initiatives focused on improving performance, stability, and security of IT systems.

- Establish a Right-Sized IT Governance Framework
- Establish Work Intake Channels
- Launch Agency-Wide IT and Security Engagement
- Enhance HALO ITSM to Support Intake Processes
- Address Staffing Gaps in Critical IT Roles
- Expand Use of the IT Wiki

Costs Associated with IT Strategic Initiatives

Making improvements in the IT Section's ability to execute identified IT Strategic Initiatives will come with some costs. Below are some of the projected staffing and fiscal costs associated with the proposed strategic initiatives as known today.

Staffing Needs

To effectively achieve our organizational objectives and uphold the highest standards of public service, it is crucial to address current staffing needs. Additional skilled personnel are necessary to manage growing workloads, support critical projects, and ensure seamless operational efficiency across all departments. By investing in a capable and motivated workforce, we can enhance service delivery, reduce employee burnout, and strengthen our capacity to respond to the evolving needs of the community. A strategic focus on recruitment and retention will enable us to sustain long-term growth, maintain accountability, and fulfill our commitment to the public. We have broken down the staffing needs based on priority one, two and three.

At the first opportunity we will ask for these priority 1 resources using the Policy Options Package (POP) process.

Priority 1: Critical category resource needs to help with IT stabilization and basic capacity building (2025 - 2027)

Key IT Initiative	Additional Staffing Resource
1. Stabilize IT Infrastructure 2. Improve Remote Office Connectivity 3. Address Staffing Gaps in Critical IT Roles 4. Establish IT Asset & Licensing Management 5. Enhance HALO ITSM	○ 1 ISS7 Level Senior Networking & System Administrator ▪ Stabilize IT setup and help on operations workload/large backlog ▪ **Impact if Unfilled:** Ongoing instability, higher MTTR (mean time to resolution), growing technical debt.
1. Initiate Data Quality Improvement Efforts 2. Develop a Comprehensive Data Dictionary 3. Address Staffing Gaps in Critical IT Roles 4. Document IT Application Portfolio	○ 1 ISS6 Level Junior Database Administrator ▪ Backup for DBA and help on operational workload/large backlog ▪ **Impact if Unfilled:** Risk of single point of failure in DBA role, slower modernization/data efforts.
1. Establish a Right-Sized IT Governance Framework 2. Launch Agency-Wide IT & Security Engagement 3. Enhance HALO ITSM / IT Intake 4. Implement Agile Methodology 5. Migrate our code repository system from SVN to Git for better collaboration and modern tools.	○ 1 ISS8/ISS7 Level IT Project Manager ▪ To execute IT governance projects and coordinate IT initiatives ▪ **Impact if Unfilled:** Delayed delivery of governance and strategic initiatives; teams working without coordination.
1. Create IT Service Request Pathways 2. Launch Intranet Redesign 3. Establish IT Asset & Licensing Mgmt. 4. Implement Agile / HALO Enhancements	○ 1 ISS7 Level Business Analyst ▪ To get requirements for projects and coordinate IT initiatives ▪ **Impact if Unfilled:** Projects risk moving forward without defined scope, leading to rework or scope creep.
Total:	**+4 FTE**

Following stabilization efforts, Priority 2 resources (Appendix H: Resourcing Needs Priority 2) identified as high-category needs to support expanding IT services to a Trusted Operator level, while Priority 3 (Appendix I: Resourcing Needs Priority 3) includes moderate-category resource needs focused on preparing for modernization initiatives.

Fiscal Needs 2025-2027

Key IT Initiative	Budget Costs
Help with stakeholder metrics for success	$80K for Info-Tech subscription & diagnostics
Infrastructure upgrade costs (hardware, networking)	$50K specifically for GIS User Group
HALO ITSM platform enhancements and service design engagement	$25K
FTP/SFTP Solutions	$20K & then ongoing
Licensing and asset management platforms	TBD
Total:	**$175K**

Metrics and Targets

Overview

The IT Section will adopt metrics and targets that help determine the success of the section's IT initiatives in relation to the needs of the agency. This will be determined through continued use of survey diagnostics of agency staff and management. Those diagnostics will be performed annually and compared to past results as an indicator for progress in target areas of improvement if funding exists.

Metrics for Objectives

Objectives	Success Metrics (Informational)	Metric Type	Documentation
1. Close Infrastructure & System Gaps	# of Infrastructure Gaps Closed	Project Metric	Semiannually
2. Implement Governance, Security & Compliance Frameworks	# of Projects prioritized by governance	Adoption Metric	Semiannually
3. Standardize Work Intake & Right size IT Services	# of Requests via Official Intake	Adoption Metric	Semiannually
4. Minimize Technical Debt	# of Legacy Systems Updated or Retired within a defined timeframe	Documentation KPI	Annually
5. Document Systems for Collaboration & Continuity	% Systems Fully Documented	Documentation KPI	Annually
	Team Satisfaction w/ Docs	Feedback Metric	Annually

Metrics for Success

In building this strategic plan, the data gathered by the Info-Tech diagnostics were found to be very valuable in measuring the current state of IT at OWRD. Since having that baseline for comparison to future measurements advances the IT Section as it strives to improve its IT maturity, the IT Section will continue to use these diagnostics over the course of this strategic plan to measure performance (if funding exists).

As mentioned previously, the CIO Business Vision diagnostic resulted in overall **IT Satisfaction of 64%** and overall **IT value of 73%**. Additionally, the Management and Governance diagnostic identified four core IT processes that were of High Importance and Low Effectiveness (Appendix D). The IT Section will follow this Strategic Plan with a goal of achieving the following target metrics at the end of each year based on the diagnostics.

Target Metrics for Success

These represent the target metrics for success spanning the five-year duration of this strategic plan. This will give the plan a chance to scale to the final target of a satisfaction and value score of **at least 86%**, and **one core IT processes with a high importance and low effectiveness at the end of 2030**.

CIO Business Vision (Appendix C)

- *2024 - 2025: IT Satisfaction 69%, IT Value 74% (Historical)*
- 2025 - 2026: IT Satisfaction 71%, IT Value 76%
- 2026 - 2027: IT Satisfaction 74%, IT Value 77%
- 2027 - 2028: IT Satisfaction 77%, IT Value 79%
- 2028 - 2029: IT Satisfaction 80%, IT Value 80%
- 2029 - 2030: IT Satisfaction 83%, IT Value 81%

Management and Governance (Appendix D)

- *2024 - 2025*: No more than 4 Core Processes with High Importance and Low Effectiveness *(Historical)*
- 2025 - 2026: No more than 4 Core Processes with High Importance and Low Effectiveness
- 2026 - 2027: No more than 3 Core Processes with High Importance and Low Effectiveness
- 2027 - 2028: No more than 3 Core Processes with High Importance and Low Effectiveness
- 2028 - 2029: No more than 2 Core Processes with High Importance and Low Effectiveness
- 2029 - 2030: No more than 2 Core Processes with High Importance and Low Effectiveness

Achieving these metrics would position the IT Section very well for achieving its goal of advancing its IT maturity to the Trusted Operator stage throughout the duration of this strategic plan.

Metric Lifecycle

Metrics and targets will be reviewed and updated for effectiveness and alignment with the IT Strategic Plan as it is updated. It is important that baseline metrics are maintained year-over-year for comparison. Metrics should only be changed during a strategy update cycle and when the metric is no longer providing value.

IT Roadmap

Over the course of this strategic plan, the IT Section will execute key initiatives in three support areas: Business Support, IT Excellence, and Innovation. These initiatives will elevate the IT Section's IT Maturity and result in improved support of agency goals and objectives.

Communication Plan

The communication plan focuses on eight key communication milestones, each with specific target dates. The following communication actions, formats and dates will be followed:

Communication Activity	Target Audience	Person Responsible	Communication Medium	Date
OWRD IT Strategy Agency Draft Review	ASD Division Administrator	CIO	Plan review in MS Word	May 2025
OWRD IT Strategy Agency Draft Review	Fiscal Officer/Business Operations Manager OWEB	CIO	Plan review in MS Word	May 2025
EIS Asst. State CIO Preview	Asst. State CIO for Natural Resources	CIO	Email with internal link to plan	May 2025
IT Strategy Review	Deputy Director, Strategy and Administration	CIO	Plan review in MS WORD	May 2025
EIS IT Strategy Delivery	Asst. State CIO for Natural Resources	CIO	Electronic Delivery	June 2025
OWRD IT Strategy Delivery	Agency Leadership Team / Agency Management Team	CIO	Virtual meeting with PowerPoint	June 2025
IT Strategy Introduction to IT Section	IT staff	CIO	Electronic Review of Plan followed by Q&A Session	June 2025
Public posting of IT strategic plan	Public	CIO	Website	June 2025

IT Strategic Lifecycle and Conclusion

Alignment with Budget Timelines

The IT Section will align its strategic planning efforts with the agency's overall strategic plan and biennial budget cycle. As needed in coordination with the Information Technology Governance Steering Committee (ITGSC) reviews will be conducted to provide recommendations in coordination with the development of the agency's strategic plan. This approach allows IT priorities and initiatives to be seamlessly integrated into the agency's broader budget development process, including policy option packages for the upcoming cycle. The IT strategy will be re-evaluated and refined based on the agency's final strategic direction and available funding.

IT Strategy & Budget Alignment Milestones	
DATE	**MILESTONE**
July 2025 – December 2025	Identify Unfunded IT Strategic Initiatives
January 2026 – June 2026	Prepare Budget Requests for Next Budget Cycle
July 2026	Budget Requests Submitted at Agency Level
December 2026	Budget Requests Submitted to Legislature by Governor
July 2027	Update Funded Strategic Initiatives
August 2027	IT Strategy Review by IT Governance Committee
September 1, 2027	Determine Impact of Strategy Changes
November 2027 – January 2028	Review and Planning Process Repeats

OWRD Strategic Plan and Associated DEI Actions

The Department also recognizes that there will need to be alignment of this strategy over time to the new OWRD Strategic Plan. While this IT Strategic Plan aligns with the current OWRD 2025-2030 Strategic Plan, a new OWRD Strategic Plan is in development and will be finalized by September 2025. As part of that Plan, the agency will be including actions to advance Diversity, Equity, and Inclusion in its work. Once adopted, it is anticipated that there will need to be a review and update to ensure this plan aligns with the OWRD Strategic Plan and associated DEI actions.

Conclusion

This IT strategic plan serves to guide the operations of the Oregon Water Resources Department's (OWRD) IT Section and ensure alignment between IT initiatives, agency priorities, and the broader goals of the State of Oregon. Developed using the COBIT (Control Objectives for Information and Related Technologies) framework, the plan includes a comprehensive assessment of agency drivers, the current IT environment, strategic context, key initiatives, and performance metrics.

The IT Section's primary goal is to improve its IT maturity level—from Firefighter (supporting the business) to Trusted Operator (optimizing the business). This strategic plan outlines that journey through five strategic objectives, which define how resources will be allocated over the next five years to support and enhance the missions of both OWRD and the Oregon Watershed Enhancement Board (OWEB). Achieving these goals will require sustained investment and appropriate resourcing to modernize systems, support key initiatives, and build long-term IT capacity. Ultimately, this strategy is designed to position the IT Section as a reliable, forward-thinking partner, driving operational efficiency and enabling long-term success.

Appendix A: Oregon's Integrated Water Resources Strategy (IWRS)

https://www.oregon.gov/owrd/programs/planning/iwrs/pages/default.aspx

Appendix B: OWEB IT Strategic Plan 2025 - 2030

Oregon Watershed Enhancement Board
Information Technology Strategic Plan: 2025 - 2030

FOUNDATION

OUR MISSION

To help protect and restore healthy watersheds and natural habitats that support thriving communities and strong economies.

OUR VISION

OWEB is a leader in the conservation of Oregon's natural resources and enjoys strong public support for its contributions to community-based conservation, watershed health, and local economies.

OUR CORE VALUES

From our agency strategic plan: In all things, we will...

Be bold: pursue the greatest potential, not the easiest path. Listen to and explore new ideas, focus on opportunities, and try innovative strategies.

Be open and transparent: develop and maintain strong partnerships. Ensure decisions are transparently made and clearly articulated.

Be forward thinking: We will consider future Oregonians in all we do.

Be curious: encourage staff and partners to ask questions; be responsible and flexible, and listen, learn and think in new ways.

OWEB

STRATEGIC PRIORITIES

GOALS

1. Through our grantmaking, build awareness of the relationship between people and watersheds and watershed protection & restoration
2. Leverage our position as an anchor funder to engage the diversity of Oregonians in watershed work
3. Use our funding to strengthen and leverage capacity of people and organizations to achieve healthy watersheds
4. Advance learning about watershed protection and restoration effectiveness through coordinated monitoring
5. Increase investment connecting urban and working lands to watershed health
6. Take bold and innovative action toward funding projects that advance climate resilience

GUIDING PRINCIPLES

User Focused - Ease of Use:
Technology solutions will be designed to optimize the user's experience while maximizing sharing and reuse of technologies.

Controlling Technology Risks:
IT risk will be evaluated through standard policies, procedures, and a governance model to identify appropriate mitigations.

Fiscally Responsible Investments:
Where possible participate in multi organization IT initiatives to take advantage of economies of scale, and strive for return on investment, and predictability in technology costs.

Innovation and Continuous Improvement:
The organization culture is a catalyst for continuous innovative change, and actively encourages exploration of technology innovation for business benefit.

ACTION PLAN

KEY INITATIVES

Workforce and Domain Knowledge Transition Plan:
Documentation, knowledge sharing, succession planning, resource inventory, and plan testing - these elements were developed during a Risk Analysis assessment conducted with our assistant CIO in 2024.

Finishing PCSRF metrics:
OWEB is using API technology to gather metrics that we report to a federal funder rather than asking for it in applications. It improves the user experience while ensuring we are a responsible administrator of the funds.

OGMO grant to OWRI project(s) Wizard:
OWEB gathers project implementation information via two systems that are currently not connected. OWEB plans to connect these two systems to save users duplicative data entry.

Migrate green OGMO/ARM into Blue OGMS:
Future-proof and modernize the technology base of OWEB's core grantmaking systems. This will be a multi-year initiative that will be implemented incrementally as sections are upgraded and enhanced.

Additional improvements:
Implement additional, prioritized projects identified by the OWEB Executive Team once the projects are fully scoped and business analysis has been completed.

NOTE: OWEB has an interagency agreement with OWRD to provide IT support services (Help desk, Server support, Web hosting, etc.). This agreement provides significant additional resources to OWEB in maintaining compliance with software and hardware requirements as well as a partnership in exploring additional agency needs and strategic initiatives. OWEB and OWRD plan to continue this approach into the coming biennia and explore revisions as necessary to ensure both agencies have the resources needed.

PERFORMANCE

ALIGNED KEY INDICATORS

1. Operations:
OWEB's Workforce and Domain Knowledge Transition Plan helps avoid service disruptions to customers and mitigates risk.

12. Customer service:
OWEB's numeric and narrative customer service KPM results show an increase due to an easier experience submitting applications and metrics.

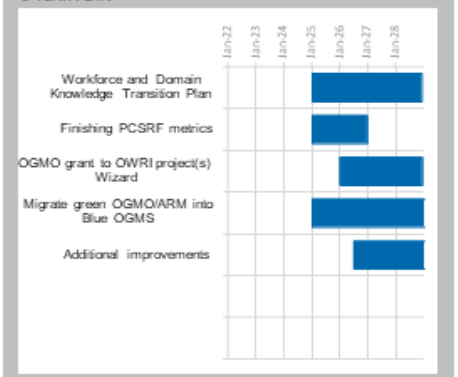
12. Customer service:
OWEB's numeric and narrative customer service KPM results show an increase due to an improved customer experience and less duplicative data entry.

12. Customer service:
N/A - the benefits of this work to customer service are indirect because they allow for future innovative development projects.

12. Customer service:
OWEB's numeric and narrative customer service KPM results show an increase due to an improved customer experience and zero disruptions in service.

ROADMAP

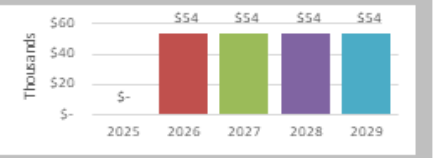
5-YEAR PLAN



INVESTMENT PORTFOLIO

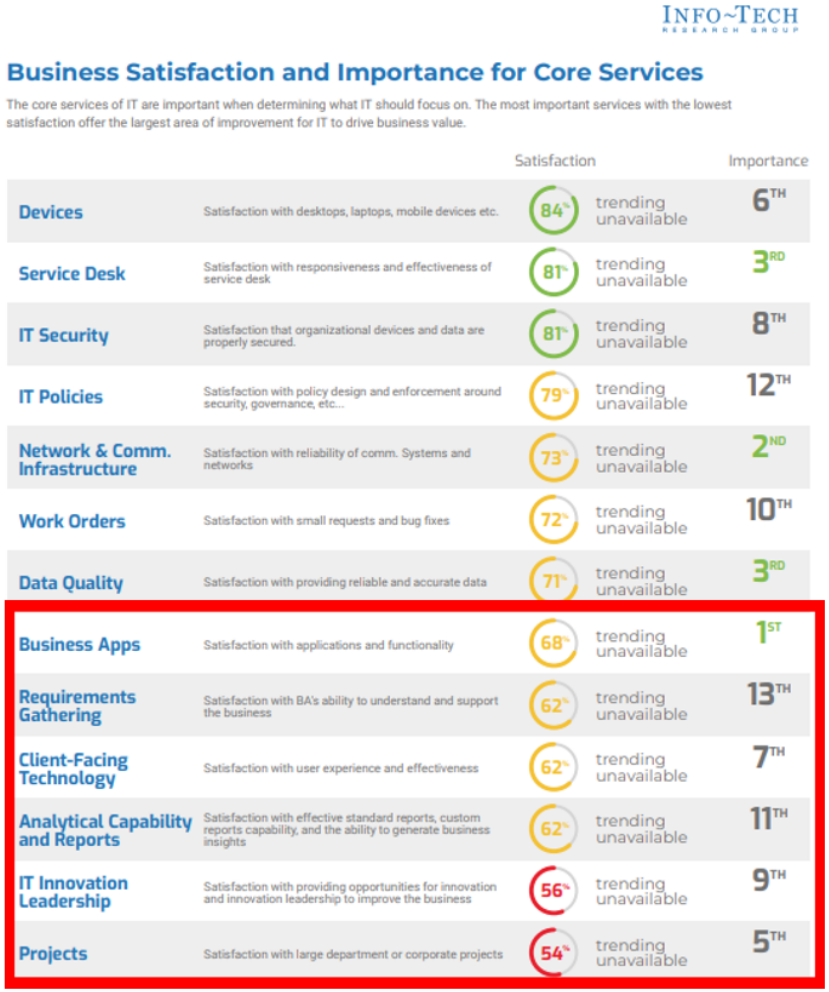
INVESTMENT LEVEL BY OBJECTIVE

COST PROJECTIONS



Appendix C: IT Satisfaction Scorecard Areas of Focus

IT will focus on the highest importance, but lowest performing services and capabilities to drive improved satisfaction levels and to enhance IT service delivery maturity.



Appendix D: Management & Governance Framework Diagnostic Results

SE IT Management & Governance Framework

A comprehensive and connected set of research to help you optimize and improve your core IT processes

INFO-TECH RESEARCH GROUP

STRATEGY & GOVERNANCE	IT OPERATIONS	INFRASTRUCTURE MANAGEMENT		SECURITY & RISK MANAGEMENT	APPLICATION MANAGEMENT
EDM01 APO02 IT Strategy and Governance					BAI03 Application Selection & Implementation
EDM05 APO08 Stakeholder Management	APO10 Vendor Management			APO13 Security Strategy	ITRG07 Data Architecture & Governance
ITRG01 People & Resource Management	DSS02 Service Desk	DSS03 Incident & Problem Management	BAI04 Availability & Capacity Management	DSS04 Disaster Recovery Planning	ITRG09 Analytics & Reporting
BAI01 Project Management	BAI02 Requirements Gathering	BAI09 Asset Management	BAI07 Change & Release Management	DSS04 Business Continuity Planning	ITRG04 Application Portfolio Management

Improve Process Immediately	Evaluate Process	Maintain Process	Leverage Process
High Importance and Low Effectiveness	Low Importance and Low Effectiveness	Low Importance and High Effectiveness	High Importance and High Effectiveness

COBIT 5 AN ISACA® FRAMEWORK

This diagnostic program was developed using the Info-Tech World Class Operations framework which is made up of IT processes that map to the COBIT standard based on the numbers in the top right corner. This page is a snapshot of the IT process landscape within your IT department. The processes have been colour coded based on your team's importance and effectiveness scores for each IT process. Use this page to help you prioritize your IT process improvement initiatives.

Appendix E: SWOT Analysis

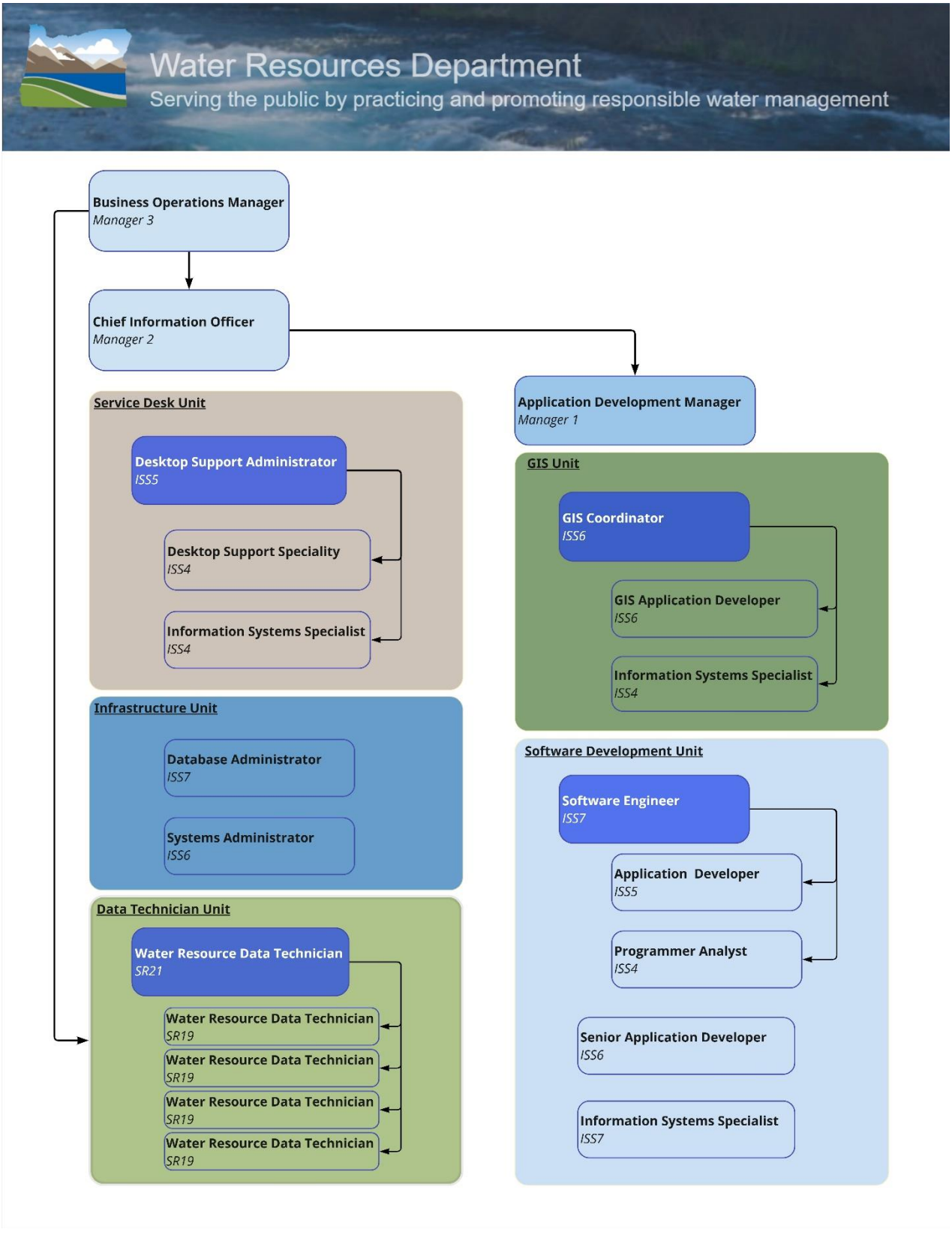
Strengths (Internal)	Weaknesses (Internal)
• Institutional knowledge in IT • Service Desk • Devices • Stakeholder view of security is positive • Staff viewed as responsive	• Staff resource level • Immature IT Governance framework • Business communication • Process documentation • Project Portfolio Management & Project Management resources, skills, templates & standards • Service Catalog requires work • Lack of formal Disaster Recover & Business Continuity plans
Opportunities (External)	**Threats (External)**
• Cooperation/partnerships with other state agencies on common issues • Utilize student population • Migrate to cloud offerings • Emerging 4 IR technologies (Artificial Intelligence, Big Data, predictive analytics, development tools) • Artificial Intelligence for discovery or public info requests	• Lack of formal Disaster Recovery Plan • External view of agency mandate/oversight, lawsuits • Legislative budget or regulatory changes • Shadow IT • Number of key staff approaching retirement (succession planning)

Appendix F: PESTLE Analysis

Political	• There is often not agreement on how water issues should be resolved, which can make it difficult to address policy and management challenges. • Legislative focus on water has led to significant new resources, as well as new responsibilities, which often require planning and time of existing staff. • Influence may alter the agency's approach to its work, resources, and ability to sustainably manage water resources.	• Agency budgets and support for programs relies on Oregon's economic performance. • Fees for fee-supported OWRD programs have not kept pace with costs. • Growth can drive increased water demand for residential and industrial purposes. • Operational costs continue to increase. • The job market remains competitive in Oregon and in water-related careers. • Real estate prices and housing shortages poses challenges for recruiting and retaining staff.	**Economic**
Social	• Water quality impacts to drinking water supplies are driving new workload • Varying societal expectations and understanding about water management, science, costs, and quantity • Media coverage of water issues influences public opinion, which may increase focus on certain water issues. • Public acceptance of new technologies or innovations in water management influences adoption of new solutions. • Water is essential to most of what people value and there are widely different views on how water should be allocated and managed. • Increased focus on understanding and addressing the needs of environmental justice communities • Water often treated as if it is an unlimited resource	• Technologies have advanced significantly in the last decade • OWRD has many older databases and systems that take significant resources to maintain. • AI is an emerging technology: need to assess if and how AI can help OWRD and address any concerns with AI use. • Asks by business units are outpacing capacity of the IT section • Business units report that many current technology solutions are not meeting their needs. • Increased public records requests and litigation, as well as hybrid work increase need to digitize existing paper records. • Customers increasingly request (and federal government requires) digital payments; OWRD does not have a digital payments system.	**Technological**

Legal			Environmental
	• New laws may require the agency to make significant changes to business workflows and rulemaking. • Oregon Water Laws need modernization to better address the water challenges we face today. • Rulemaking, litigation, and protest program workloads exceed available OWRD and DOJ resources. • Federal water laws impact state water management especially in relation to the Endangered Species Act	• Drought increases staff workloads across various sections of the agency. • Climate change is driving changes in the hydrologic cycle, that will require the agency to update and adapt its policies, data, and management. • Diminishing water supplies requires the Department to engage with other states on water management issues. • Water is a finite resource; increased complexity and conflict as the resource is fully appropriate.	

Appendix G: Information Technology Organization Chart



Appendix H: Resourcing Needs Priority 2

Priority 2: High category resource needs to help with Expand IT Services at trusted operator level

Key IT Initiative	Additional Staffing Resource
1. Implement Agile Methodology 2. Expand Use of the IT Wiki 3. Document IT Application Portfolio	○ 1 ISS6 Level Systems Analyst ▪ Succession planning and creates a ladder position in the development unit
1. Initiate Data Quality Improvement Efforts 2. Document IT Application Portfolio 3. Develop a Comprehensive Data Dictionary 4. Stabilize IT Infrastructure	○ 1 ISS6 Level GIS Developer/Analyst ▪ Succession planning and creates a ladder position in the GIS area of the development unit
1. Establish IT Governance Framework 2. Launch Agency-Wide IT & Security Engagement 3. Enhance HALO ITSM & Service Request Pathways 4. Migrate from SVN to Git 5. Implement Agile Methodology	○ 1 ISS8/ISS7 Level IT Project Manager ▪ Succession planning and creates a position in the Project Management Area to help execute IT governance projects and coordinate IT initiatives
1. Initiate Data Quality Improvement Efforts 2. Develop a Data Dictionary 3. Setup Data & Reporting Unit 4. Launch Intranet Redesign 5. Assess and Address Security Gaps	○ 1 ISS7 Level Sr Data Analyst ▪ To setup Data & Reporting Unit
Total:	**+4 FTE**

Appendix I: Resourcing Needs Priority 3

Priority 3: Moderate category resource needs to help in preparation for Modernization

Key IT Initiative	Additional Staffing Resource
Enterprise Integration Readiness	○ 1 ISS5 Level Developer ▪ Setup integration using APIs in preparation for modernization
Change Control Program	○ 1 ISS6 Level Change Management Analyst ▪ Setup Change Control Board in preparation for modernization
Data Modernization Strategy & Execution	○ 1 ISS6 or ISS5 Level data analysts ▪ To help with data activities in preparation for modernization
Total:	**+3 FTE**