

## Cabinet and Governor Appointed Agencies' Performance Audit Action Item(s) & Status

### Data Backup and Disaster Recovery 2020

(See also [cabinet agency response](#) for full context to Washington State Auditor's Office (SAO) [report](#), September 2020)

Four state agencies were included for this performance audit. Information also was provided by Washington Technology Solutions (WaTech).

SAO Recommendations (Rec) to the four audited agencies:

1. Agencies perform and use IT risk assessments and business impact analyses to identify gaps in current backup and disaster recovery practices and procedures, recovery time objectives, and recovery priorities.
2. Executive management consider the results of these analyses and work closely with IT staff to ensure adequate resources are allocated to design and implement comprehensive backup and disaster recovery practices and procedures.
3. Agencies further align backup and disaster recovery practices and procedures with state requirements and leading practices.

SAO Recommendations (Rec) to the Office of the Chief Information Officer

4. Update the IT Disaster Recovery and Business Resumption Guidelines and make them readily available to state agencies via the ocio.wa.gov website.
5. Offer agencies tools and templates for backup strategies and disaster recovery planning, such as IT Risk Assessments and Business Impact Analyses.

The table below shows the current status of action items the agency initiated to address issues identified in the performance audit report. Please see the [cabinet agency response](#) for additional context and any additional steps already taken.

For an explanation of the columns below, [see the legend](#).

Issue/ Rec	Status	Action Steps	Lead Agency	Due Date	Current Resources?	Budget Impact?	Legislation Required?	Notes
Rec. 1-3	Complete	Audited agencies will establish a cadence for reviewing state requirements and leading practices and improving alignment where feasible.	1-4	12/20	Yes	No	No	
Rec. 1-3	Complete	Agencies will coordinate and gather business unit and technical interdependencies to conduct a business impact analyses through the Interagency Continuity of Operations Planning (iCOOP) Committee, beginning March 1, 2021. We estimate this process to take up to a year.	1	<del>3/22</del> 12/23	Yes	No	No	<b>Completed March 2024</b> Agency 1 has a Continuity of Operations Plan (COOP) that identifies the agency's mission critical and business essential services and applications. This COOP has a complimentary Disaster Recovery (DR) plan that documents recovery prioritization of each mission

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								critical/business essential service and applications. A table top exercise simulating an event that would result in the mobilization of the emergency management team was completed in March, 2024, which resulted in the creation of the aforementioned DR plan. This plan includes foundational service recovery items, as well as documented roles and responsibilities. In addition, a Corrective Action Program has been established, comprised of cross-agency representatives who analyze the documented results of DR plan reviews and exercise activities to identify relevant corrective actions.
Rec. 1-3	Complete	Agencies will coordinate and gather business unit and technical interdependencies to conduct a business impact analyses through the Interagency Continuity of Operations Planning (iCOOP) Committee, beginning March 1, 2021. We estimate this process to take up to a year.	2	3/22	Yes	No	No	
Rec. 1-3	Complete	Agencies will coordinate and gather business unit and technical interdependencies to conduct a business impact analyses through the Interagency Continuity of Operations Planning (iCOOP) Committee, beginning March 1, 2021. We estimate this process to take up to a year.	3	<del>3/22</del> 12/23	Yes	No	No	<b>January 2025:</b> WaTech used the methodologies of several prominent sources to develop its own BIA based on industry best practices. This BIA methodology was developed and shared with iCOOP and MIL prior to its implementation within WaTech. The WaTech internal BIA was completed in July of 2023.

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Rec. 1-3	Complete	Agencies will coordinate and gather business unit and technical interdependencies to conduct a business impact analyses through the Interagency Continuity of Operations Planning (iCOOP) Committee, beginning March 1, 2021. We estimate this process to take up to a year.	4	<del>3/22</del> <del>12/22</del> 12/23	Yes	No	No	<p><b>January 2025:</b> WaTech used the methodologies of several prominent sources to develop its own BIA based on industry best practices. This BIA methodology was developed and shared with iCOOP and MIL prior to its implementation within WaTech. The WaTech internal BIA was completed in July of 2023.</p> <p><b>July 2023:</b> The WaTech BIA tool has been developed and process for populating BIA data has been implemented through the engagement of Service and Business owners. Completion of the BIA tool and the collection of internal data collection was achieved June 30<sup>th</sup>. Updates through the iCOOP Leadership team will provided in late 2023.</p> <p><b>September 2022:</b> WaTech has developed a BIA template for our use as the enterprise tool has not been finalized. This template was tested with service managers to ensure ease of use. The template will be updated from this experience and training will be given to all service managers by the end of October and service managers will complete for all service areas by the end of December 2022. This template will be presented to iCOOP as a possible enterprise solution.</p>

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Rec. 1-3	In progress	Audited agencies will conduct an IT risk assessment and business impact analyses.	1	<del>3/22</del> 12/23 6/25	No	Yes	No	<p>Agency 1 is in the process of designing and completing an agency IT risk assessment.</p> <p>The agency is awaiting the IT risk assessment tools &amp; template from WaTech to complete this requirement as required in WA Tech Sec 04-01-S Data Backup &amp; Recovery Standard.</p>
Rec. 1-3	Complete	Audited agencies will conduct an IT risk assessment and business impact analyses.	2	3/22	No	Yes	No	
Rec. 1-3	In progress	Audited agencies will conduct an IT risk assessment and business impact analyses.	3	<del>3/23</del> 8/23	No	Yes	No	<p><b>July 2023:</b> Agency has contracted with vendor and final report is expected 8/23; contract for backup analysis is in process</p> <p><b>August 2022:</b> Agency is working on a contract with a third-party vendor to assist with this work. Estimated completion date 3/23.</p>
Rec. 1-3	In progress	Audited agencies will conduct an IT risk assessment and business impact analyses.	4	<del>1/23</del> 5/25	No	Yes	No	<p><b>January 2025:</b> The WaTech Business Impact Analysis was completed on 7/17/23. In order perform a fully informed risk assessment it is best to do so following the initial review, update, and exercise of Disaster Recovery Plans. This information will inform the comprehensive assessment performed as part of the IT Risk Assessment projected to complete by 5/1/2025.</p> <p><b>July 2023:</b> The WaTech Business Impact Analysis was completed on 7/17/23. In order perform a fully informed risk assessment it is best to</p>

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								do so following the initial review, update, and exercise of Disaster Recovery Plans. This information will inform the comprehensive assessment performed as part of the IT Risk Assessment projected to complete by 5/1/2025.  <b>September 2022:</b> see above. After completion of the BIA the agency (risk manager and Office of Cybersecurity) will be able to assess our risk and provide results to management by January 31, 2023.
Rec. 1-3	In progress	Audited agencies' executive management (after completion and analysis of the IT Risk Assessment) will consider the results, risks, and resources assigned toward design, implementation and improvement of comprehensive backup routines.	1	<del>10/22</del> <del>12/23</del> 6/25	TBD	TBD	No	Agency 1 is awaiting the IT risk assessment tools & template from WaTech to complete this requirement as required in WA Tech Sec 04-01-S Data Backup & Recovery Standard.
Rec. 1-3	Complete	Audited agencies' executive management (after completion and analysis of the IT Risk Assessment) will consider the results, risks, and resources assigned toward design, implementation and improvement of comprehensive backup routines.	2	10/22	TBD	TBD	No	
Rec. 1-3	In progress	Audited agencies' executive management (after completion and analysis of the IT Risk Assessment) will consider the results, risks, and resources assigned toward design, implementation and improvement of comprehensive backup routines.	3	<del>9/23</del> 6/25	No	Yes	No	<b>July 2023:</b> Agency has contracted with vendor and final report is expected 8/23; contract for backup analysis is in process. Agency is requesting decision package in 9/23 for funding is assumed to be needed to complete this process. Estimated completion date for implementation 6/25.

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								<p><b>August 2022:</b> Agency is working on a contract with a third-party vendor to assist with this work. Agency requested decision package in 9/23 for funding is assumed to be needed to complete this process. Estimated completion date for implementation 6/25.</p>
Rec. 1-3	In progress	Audited agencies' executive management (after completion and analysis of the IT Risk Assessment) will consider the results, risks, and resources assigned toward design, implementation and improvement of comprehensive backup routines.	4	3/23 2/25	TBD	TBD	No	<p><b>January 2025:</b> WaTech has reviewed and revised State Government Enterprise security standards by drafting and approving <a href="#">Security Standard 04-01 Data Backup and Recovery</a>. Changes were made based on workgroup and community feedback to improve clarity for agency adoption and accountability. This standard draws from NIST 800-209-Security Guideline for storage infrastructure. This provides agencies with a single document with data backup and recovery requirements applicable across various contexts. This standard was effective as of 6/23.</p> <p><b>July 2023:</b> The completion of the BIA took more coordination and collaboration with service owners than anticipated. Therefore, the discovery, review, update of DR Plans will not start until August 2023. The assessment of comprehensive backup routines should be assessed following the completion of each technological systems DR exercise. We are working</p>

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								<p>with the Office of Cybersecurity who will have a complete picture of WaTech’s backup posture by <b>9/29/23</b>. A gap analysis of that posture against DR exercise and planning practices will be completed by <b>2/1/25</b>.</p> <p><b>September 2022:</b> Pending results of the IT Risk Assessment and BIA. A decision about mitigating the risks and allocating resources will be made by management in the first quarter of 2023. There may be a need for additional funding/resources in order to mitigate identified risks that could impact implementation.</p>
Rec. 1-3	In progress	Audited agencies’ executive management (after completion and analysis of the IT Risk Assessment) will consider the results, risks, and resources assigned toward design, implementation and improvement of comprehensive disaster recovery routines.	1	<del>10/22</del> 12/23 6/25	TBD	TBD	No	Agency 1 is awaiting the IT risk assessment tools & template from WaTech to complete this requirement as required in WA Tech Sec 04-01-S Data Backup & Recovery Standard.
Rec. 1-3	Complete	Audited agencies’ executive management (after completion and analysis of the IT Risk Assessment) will consider the results, risks, and resources assigned toward design, implementation and improvement of comprehensive disaster recovery routines.	2	10/22	TBD	TBD	No	
Rec. 1-3	In progress	Audited agencies’ executive management (after completion and analysis of the IT Risk Assessment) will consider the results, risks, and	3	<del>9/23</del> 6/25	No	Yes	No	<b>July 2023:</b> Agency has contracted with vendor and final report is expected 8/23; contract for backup analysis is in process. Agency is requesting decision

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		resources assigned toward design, implementation and improvement of comprehensive disaster recovery routines.						<p>package in 9/23 for funding is assumed to be needed to complete this process. Estimated completion date for implementation 6/25.</p> <p><b>August 2022:</b> Agency is working on a contract with a third-party vendor to assist with this work. Agency requested decision package in 9/23 for funding is assumed to be needed to complete this process. Estimated completion date for implementation 6/25.</p>
Rec. 1-3	In progress	Audited agencies' executive management (after completion and analysis of the IT Risk Assessment) will consider the results, risks, and resources assigned toward design, implementation and improvement of comprehensive disaster recovery routines.	4	3/23 2/25	TBD	TBD	No	<p><b>January 2025:</b> WaTech reviewed and revised State Government Enterprise security policy by drafting and approving <a href="#">Security Policy 12 IT Disaster Recovery Planning</a>. This was an update to policy 151. Changes were made based on workgroup and community feedback to improve clarity for agency adoption and accountability. Updates to this standard draw from NIST SP 800-34 Rev. 1, Contingency Planning Guide for Federal Information Systems and NIST 800-53 Security and Privacy Controls for Information Systems and Organizations. This policy was effective as of 11/23.</p> <p><b>July 2023:</b> Due to the delay in how long it took to complete the BIA; the discovery, review, update of DR Plans will not start until August 2023. The assessment of comprehensive disaster</p>



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								<p>recovery routines should be assessed following the completion of each technological systems DR exercise, followed and identified corrective actions have been identified and completed by 2/1/25.</p> <p><b>September 2022:</b> Pending results of the IT Risk Assessment and BIA. A decision about mitigating the risks and allocating resources will be made by management in the first quarter of 2023. There may be a need for additional funding/resources in order to mitigate identified risks that could impact implementation.</p>
Rec. 4-5	In Progress	OCIO will convene a workgroup with Military Department, Office of Cybersecurity (OCS), OCIO and agency Subject Matter Experts (SMEs) to evaluate updates to guidelines and identification of tools and templates.	OCIO	<del>12/23</del> 6/25	Yes	No	No	<p><b>January 2025:</b> WaTech has reviewed and revised outdated 'Business Resumption Guidelines' that supplemented the former Disaster Recovery Policy and drafted a new 'IT Disaster Recovery Planning Standard' to replace it. The newly drafted standard has completed workgroup review and is currently undergoing WaTech internal review. The next steps include review and approval by the Enterprise Security Governance workgroup, Technology Management Council, and the Technology Services Board. Pending additional updates this standard is anticipated to be adopted by June of 2025.</p>

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								<p><b>July 2023:</b> iCOOP has been briefed on the WaTech BIA and are awaiting the completion of the IT DR Compliance project for further review of this tool and possible implementation. Additionally, The Advisory Workgroup was engaged regarding the update of IT Policy 151 ‘Disaster Recovery Planning’; this policy will be updated and approved for the state following review and approval by the Enterprise Security Governance (ESG )workgroup, Technology Mgmt Council (TMC), and the Technology Services Board (TSB) due by December 12, 2023</p> <p><b>August 2021:</b> Met with SMEs at MIL to identify key stakeholders and developed initial strategy for updating statewide DR guidance; next step is convening the workgroup in September</p> <p><b>September 2022:</b> The initial meeting of the Advisory workgroup (OCIO, Military, OCS and WaTech SME) was held on 9/28/21; Several BIA templates were shared with the Advisory workgroup to consider for statewide adoption. WaTech has also developed a survey to help with completion to collect the necessary information to complete WaTech’s BIA which will be shared</p>

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								<p>with the Advisory Workgroup for their feedback by December 2022. The Advisory Workgroup will also work to update the Statewide policy for IT DR (OCIO Policy 151) and associated standards to ultimately present to the TSB for approval. The workgroup will continue to evaluate additional tools and guidance to develop comprehensive data backup and DR strategies and practices and will share them with the community.</p>
Rec. 4-5	Complete	The OCIO with the assistance of the workgroup will publish guidelines, tools and templates.	OCIO	3/22	Yes	No	No	<p><b>January 2025:</b> WaTech has created regular occurring forums for training, education, and awareness on industry best practices in regard to resilience, disaster recovery, and continuity practices called ‘ WaTech DRBC Office Hours’. An externally accessible website site has been developed so that other agencies may directly access IT disaster recovery policy, standards, guidelines, templates, and tools. The go-live date for this resources was 1/3/25.</p> <p><b>July 2023:</b> this step is reliant on the activities and the findings above.</p> <p><b>August 2021:</b> This step is reliant on the activities on the finding above</p>

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								<b>September 2022:</b> This step is reliant on the activities on the findings above.