Iterative Project Report for Programs & Multi-Year Phased Projects

Submitted to Project Oversight on 07/18/2025

GENERAL INFORMATION

Program/Project Name: Unified Architecture.

Agency Name: Water Resources (DWR).

Project Sponsor: Chris Kadrmas.

Project Manager: Justin Anderson.

PROJECT DESCRIPTION

The projects in the Unified Architecture Program are to align the file storage, Ariel, and LiDAR systems with storage standards and practices of NDIT technology. These systems would then be managed by NDIT. Additionally, the Telemetry and Well Inventory systems updated to a more modern technology; additional systems would be evaluated for upgrades.

BUSINESS NEEDS

1. Add DWR needs technology platforms that have a long-term sustainability and do not rely on institutional knowledge of a few individuals.

2. DWR needs the ability to maintain, grow, and evolve their infrastructure to continue to meet the current and future needs and data demands.

PROGRAM/PROJECT FORMAT

Program/Project Start Date: 9/25/2023.

Budget Allocation at Time of Initial Start Date: $5,615,764.

How Many Projects Expected at Time of Initial Start Date: 5.

Phase Approach Description: Concurrent Waterfall projects.

Estimated End Date for All Phases Known at Time of Initial Start Date: 6/30/2025.

PROGRAM/PROJECT ROAD MAP

The program road map shows the high-level plan or vision for the program/projects/phases. It is intended to offer a picture of the lifespan of all the effort that is expected to be required to achieve the business objectives.

Project/ Phase	Title	Scope Statement	Estimated Months Duration	Estimated Budget
Project 1	File Services Net Application	This project will convert the desktop storage at DWR to the File Services Net Application managed by NDIT	2	$69,980
Project 2	Big Data	This project will take the DWR managed system for Aerial and LiDAR data and transfer to an NDIT managed modern data platform that will be able to maintain the current storage and functionality needs of Water resources and be able to grow to accommodate the projected need over the next 5 years.	20	$4,107,136.50
Project 3	Long Term Application Data Strategy	This project will update the DWR Telemetry and Wells Inventory and assess additional DWR systems to identify potential upgrade needs	20	$1,203,264

Project/ Phase	Title	Scope Statement	Estimated Months Duration	Estimated Budget
Project 4	Computational Services Tooling Environment	This project will look to adopt the use of NDIT solutions for computational services for DWR projects and modeling that take large amounts of computing over extended time.	2	$10,000
Project 5	Website and Online Services metrics/analytics	This project will evaluate options to understand and identify the data consumption of the DWR publicly available data.	2	$10,000

Notes:
Add text here, if necessary.

PROJECT BASELINES

The baselines below are entered for only those projects or phases that have been planned. At the completion of a project or phase a new planning effort will occur to baseline the next project/phase and any known actual finish dates and costs for completed projects/phases will be recorded. The iterative report will be submitted again with the new information.

Project/ Phase	Project/ Phase Start Date	Baseline End Date	Baseline Budget	Funding Source	Actual Finish Date	Schedule Variance	Actual Cost	Cost Variance
Project 1	10/26/2023	1/12/2024	$51,180	State	1/12/2024	0%	$51,180	0%
Project 2	9/25/2023			State			$84,274.06	
Project 3	11/30/2023			State			$81,742.46	
Project 4	7/8/2024			State			$0	
Project 5				State				

Notes:

Project 2 was cancelled in planning as 3 different proof of concept proposals were rejected for quality or cost reasons and was not baselined.

Project 3 was cancelled in planning due to storage dependencies from project 2 and was not baselined.

Project 4 was cancelled in planning as the current NDIT computational services would not be capable of processing the DWR projects and modeling and was not baselined.

Project 5 was cancelled as other options came available before the project began and was not baselined.

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OBJECTIVES

Project/ Phase	Business Objective	Measurement Description	Met/ Not Met	Measurement Outcome
Project 1	NDIT would manage the file storage on a shared platform	All required files would be transferred and storage maintained by NDIT within 6 months of project completion	Met	All applicable file have been migrated and are accessible on a shared system.
Project 2	NDIT would manage the file storage on a modern platform for all Aerial and LiDAR data	DRW time reduced by 75% on maintaining the storage systems	Not Met	
Project 3	Systems would be updated to a platform where maintenance could be shared by NDIT	DRW time reduced by 50% on maintaining the applications	Not Met	
Project 4	Long term processing would be handled on systems maintained by NDIT rather than DWR	DRW time reduced by 100% on maintaining the computational services system	Not Met	

KEY LESSONS LEARNED AND SUCCESS STORIES

A lessons learned effort is performed after each project or phase is completed. This process uses surveys and meetings to determine what happened in the project/phase and identifies actions for improvement going forward. Typical findings include, "What did we do well?" and "What didn't go well and how can we fix it the next time?"

Project/ Phase	Key Lessons Learned and Success Stories
Project 2	A change in sponsorship led to a reassessment of priorities. While ultimately the final proposal was rejected, it did initiate conversations about alternative storage solutions that could be applicable and become a cost savings for other state agencies with similar storage needs.

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