

Hydraulic Project Approvals - Protecting fish and their habitat



Washington State

Modernizing Permitting for the Protection of Washington Waters: The HPA Permitting System Transformation

PROJECT: Hydraulic Project Approvals Permitting System Transformation

CATEGORY: Digital Experience: Agency/Program Solutions

PROJECT TIMELINE: March 2023 – April 2025

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EXECUTIVE SUMMARY

The Washington Department of Fish and Wildlife (WDFW) is transforming how it delivers environmental permitting services through the **HPA Permitting System Transformation**. Hydraulic Project Approvals (HPAs) are critical to safeguarding Washington's aquatic environments during construction activities. Yet, WDFW's legacy system—the Aquatic Protection Permitting System (APPS)—was aging, unstable, and inaccessible, creating risks for regulatory compliance, public trust, and environmental protection.

This digital transformation replaced APPS with a modern, secure, and scalable platform built on Salesforce. The new system enhances the digital experience for Tribes, local governments, contractors, and state agencies seeking permits. It delivers on accessibility, responsiveness, and transparency while meeting [state policy mandates](#).

WDFW didn't just replace an old system, it reimagined the permitting lifecycle, offering new compliance tools, a streamlined interface, better data exports, and faster processing times. The result: a more resilient, user-friendly permitting experience that protects Washington's waters and meets the digital expectations of today's citizens and public servants.

PROJECT DESCRIPTION

What problem or opportunity does the project address?

WDFW is legally responsible for issuing thousands of Hydraulic Project Approvals (HPAs)—permits that safeguard aquatic habitats from adverse construction impacts. However, WDFW's legacy Aquatic Protection Permitting System (APPS), deployed in 2014, was increasingly unstable, costly, and ill-suited to support evolving compliance mandates, accessibility needs, or legislative responsiveness. A system failure or extended outage could stall thousands of infrastructure projects annually, impacting Tribal governments, local agencies, and private entities.

Recognizing the growing operational and legal risks, WDFW launched a bold modernization effort to overhaul the permitting system—streamlining permit workflows, improving accessibility, and introducing real-time compliance capabilities on a scalable digital platform.

Why does it matter?

HPAs are essential for ensuring Washington's environmental laws are upheld during construction and infrastructure development. Delays or downtime in the permitting system could lead to:

- Violation of environmental protections,
- Missed regulatory deadlines, and

- Service interruptions for critical public and private sector projects.

WDFW manages thousands of permit transactions each year. These permits influence multimillion-dollar developments, tribal co-management, and habitat preservation. The modernization ensured:

- Permits are issued on time,
- Environmental protections are enforced, and
- State compliance with accessibility (Washington State Policy 188) and modernization mandates (Section 701 MVP) is maintained.

The project ultimately delivered an essential service faster, more securely, and with greater transparency—ensuring WDFW’s mission was met without disruption.

The screenshot shows the homepage of the Washington Department of Fish & Wildlife (WDFW) Aquatic Protection Permitting System (APPS). The header features the WDFW logo and navigation links for Home, Application Search, and Help. The main content area welcomes users to the APPS and explains its purpose as an all-in-one online solution for managing Hydraulic Project Approvals (HPAs). It includes a link to Washington State law (RCW 77.55) and a link to the Hydraulic Project Approval page for more information. Below this, there are three main action buttons: 'Request technical assistance', 'Pre-apply for regulatory review', and 'Apply for a permit'. Each button has a corresponding icon and a brief description of the service. At the bottom, there is a 'Need More Information?' section with links to a Quick User Reference Guide and a Frequently Asked Questions page. The footer contains contact information for the WDFW, including mailing address, email, phone, and support hours, as well as a Public Disclosure Notice.

Washington Department of FISH & WILDLIFE

Home Application Search Help

Welcome to the Aquatic Protection Permitting System

The Aquatic Protection Permitting System (APPS) is your all-in-one online solution for managing Hydraulic Project Approvals (HPAs). Washington State law ([RCW 77.55](#)) requires people planning hydraulic projects in or near state waters to get an HPA from the Washington Department of Fish and Wildlife (WDFW). This includes most marine and fresh waters. An HPA ensures that construction is done in a manner that protects fish and their aquatic habitats.

For detailed information about the HPA permitting program, visit our [Hydraulic Project Approval](#) page.



Request technical assistance

Get information, help, or request a site visit from WDFW anytime, with or without an existing application.



Pre-apply for regulatory review

Unsure if you need an HPA? Request a regulatory review to find out.



Apply for a permit

Select or get help identifying the right HPA permit for your needs.

Need More Information?

Quick User Reference Guide: Review our [user guide](#) to get familiar with APPS.

Frequently Asked Questions: Have a burning question? Take a look at our [FAQ guide](#) to see if your questions have already been answered.



Washington Department of FISH & WILDLIFE

Contact Us

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Public Disclosure Notice

All information and documents submitted are viewable by the public and are subject to disclosure under Washington's Public Records Act ([Chapter 42.56 RCW](#)).

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What makes it different?

This project was not a patch—it was a **full-scale digital reinvention** of a mission-critical system:

- It leveraged a Salesforce-based platform to unify workflows, support compliance enforcement, and enable scalable digital services.
- It met the Washington State Section 701 Minimum Viable Product (MVP) requirements within 180 days of contract signature—a rare and significant achievement.
- It introduced new digital capabilities not present in the legacy system, such as role-based access, automated data exports, and real-time status tracking.
- It is among the first large-scale permitting systems in Washington to be fully compliant with digital accessibility standards.

This combination of compliance, innovation, and user-centered design makes it a leading example of digital experience transformation in the public sector.

What makes it universal?

WDFW's challenges and solutions reflect those faced by agencies nationwide. From natural resource management to construction oversight, many state programs are constrained by:

- Legacy systems unable to meet modern accessibility mandates,
- Inflexible platforms that impede legislative responsiveness, and
- Outdated interfaces that diminish citizen experience.

This project advances universal NASCIO Top Ten Priorities, including:

- **Digital Government / Digital Services:** Improving service access and transparency.
- **Legacy Application Modernization:** Replacing outdated systems with cloud-based, scalable platforms.
- **Cybersecurity and Risk Management:** Retiring insecure infrastructure and mitigating legal risks.
- **Workforce Modernization:** Empowering staff with accessible, data-driven tools to improve service delivery.

These priorities are relevant to all states striving to align digital capabilities with their policy missions.

IMPLEMENTATION

What was the roadmap?

The project roadmap began with a **2022 feasibility study**, followed by a carefully staged implementation plan:

1. **Vendor Selection and Contracting** (Early 2023)

2. **Agile Sprint-Based Delivery Using Azure DevOps**
3. **First Go-Live in December 2024**
4. **Second Go-Live in January 2025**
5. **Project Completion in April 2025—Ahead of Schedule**

Key to the project’s success was its **phased launch** strategy, enabling continuous testing and iterative improvement while preserving user confidence and system integrity.

Who was involved?

The project was led by WDFW in collaboration with WaTech, a system integrator, and external quality assurance partner Vivid Co.. Contributors included:

- Core agency project teams,
- Business subject matter experts (SMEs),
- IT and data governance teams,
- Over 40 directly engaged stakeholders, with hundreds more reached through outreach and training.

A strong communications strategy ensured transparency and aligned stakeholders on goals, timelines, and new functionality.

How did you do it?

Financial:

- Total spend: \$9.1M (under budget by \$1.3M)

Technical:

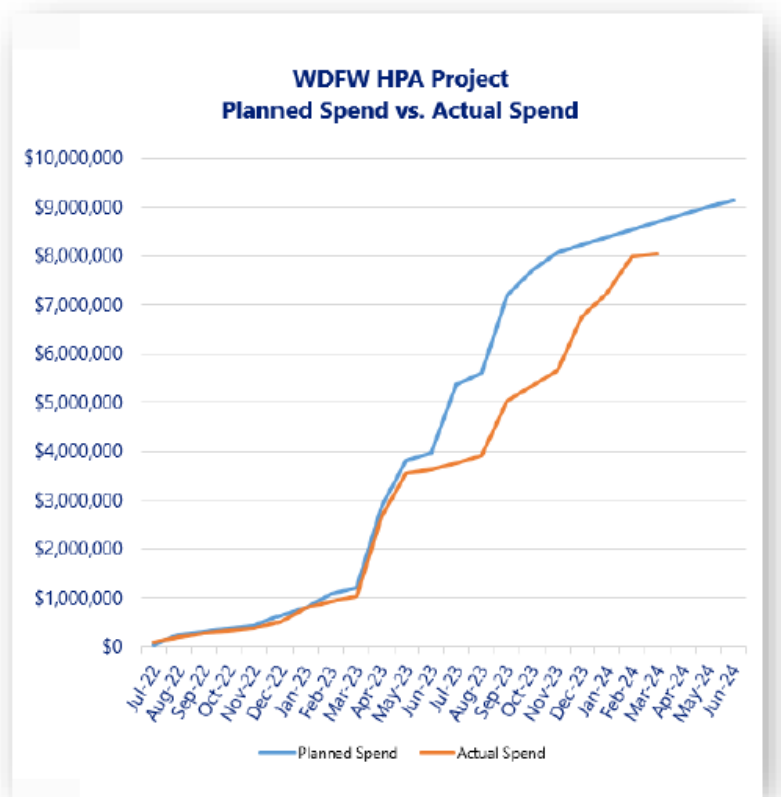
- Salesforce-based platform with enhanced data workflows, compliance tracking, and modular architecture.

Human:

- 40+ subject matter experts involved in development.
- Hundreds more engaged in communications and training.

Process:

- Agile methodology with MVP delivery in 180 days.
- Continuous feedback loops and multi-channel rollout strategy.



IMPACT

What did the project make better?

Before:

- System outages threatened permit timelines.
- No compliance enforcement tools existed.
- Reporting and data extraction were cumbersome.
- The interface was not digitally accessible.
- Risk of noncompliance with legal mandates.

After:

- Legacy APPS system decommissioned—downtime risk eliminated.
- New platform includes real-time compliance tracking.
- Washington State Policy 188 (Accessibility) and Section 701 (MVP) fully met.
- Data is now easily exportable; permit progress is transparent.
- The agency can respond faster to legislative and policy changes.

How do you know?

Measured Results:

- Project underspent by 13%: \$9.1M actual vs. \$10.4M budget.
- Stakeholder validation: QA interviews with 41 users affirmed the system's value and necessity.
- Compliance success: Met MVP and accessibility mandates on time.
- Operational evidence: Staff began issuing permits in the new system in December 2024.
- Process improvement: Data for SMART metrics like permit timelines and satisfaction is now actively collected.

Anecdotal Impact:

"The legacy system was a risk to the agency. This new solution didn't just replace it—we leapt ahead a decade in terms of capability and stability."

— WDFW Project Sponsor

What now?

The new system is live and fully operational. WDFW has established a formal Maintenance and Operations Plan that includes:

- SMART metric collection and reporting.
- Ongoing stakeholder feedback through a user forum.
- Continued training and knowledge-sharing sessions.

The system provides a foundation for future service expansion, integration with partner agencies, and even new public-facing digital features that enhance environmental stewardship. With legal compliance, digital accessibility, and user satisfaction already achieved, the investment promises continued value for Washington and offers a replicable model for other state permitting agencies.

CONCLUSION

The HPA Permitting System Transformation stands as a powerful example of how public sector innovation can modernize core services while meeting legal, operational, and user experience demands. By retiring an unstable legacy platform and replacing it with a scalable, secure, and accessible digital solution, the Washington Department of Fish and Wildlife not only safeguarded critical environmental permitting processes but also elevated transparency, compliance, and service delivery for thousands of stakeholders. This project embodies the essence of digital government transformation—prioritizing equity, agility, and resilience—and provides a scalable model for other states seeking to modernize legacy systems in alignment with NASCIO's strategic priorities.