

# TRANSFORMING DATA BETTER INFORMATION EFFECTIVE CONSERVATION LAW ENFORCEMENT







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hen asked what the Washington Department of Fish and Wildlife (WDFW) Law Enforcement Program wanted most from its new records management system when it went live in 2010, Chief Bruce Bjork's concise reply was, "Good data." That meant getting at data locked in standalone databases, as well as information previously captured on hardcopy forms – or not captured at all.





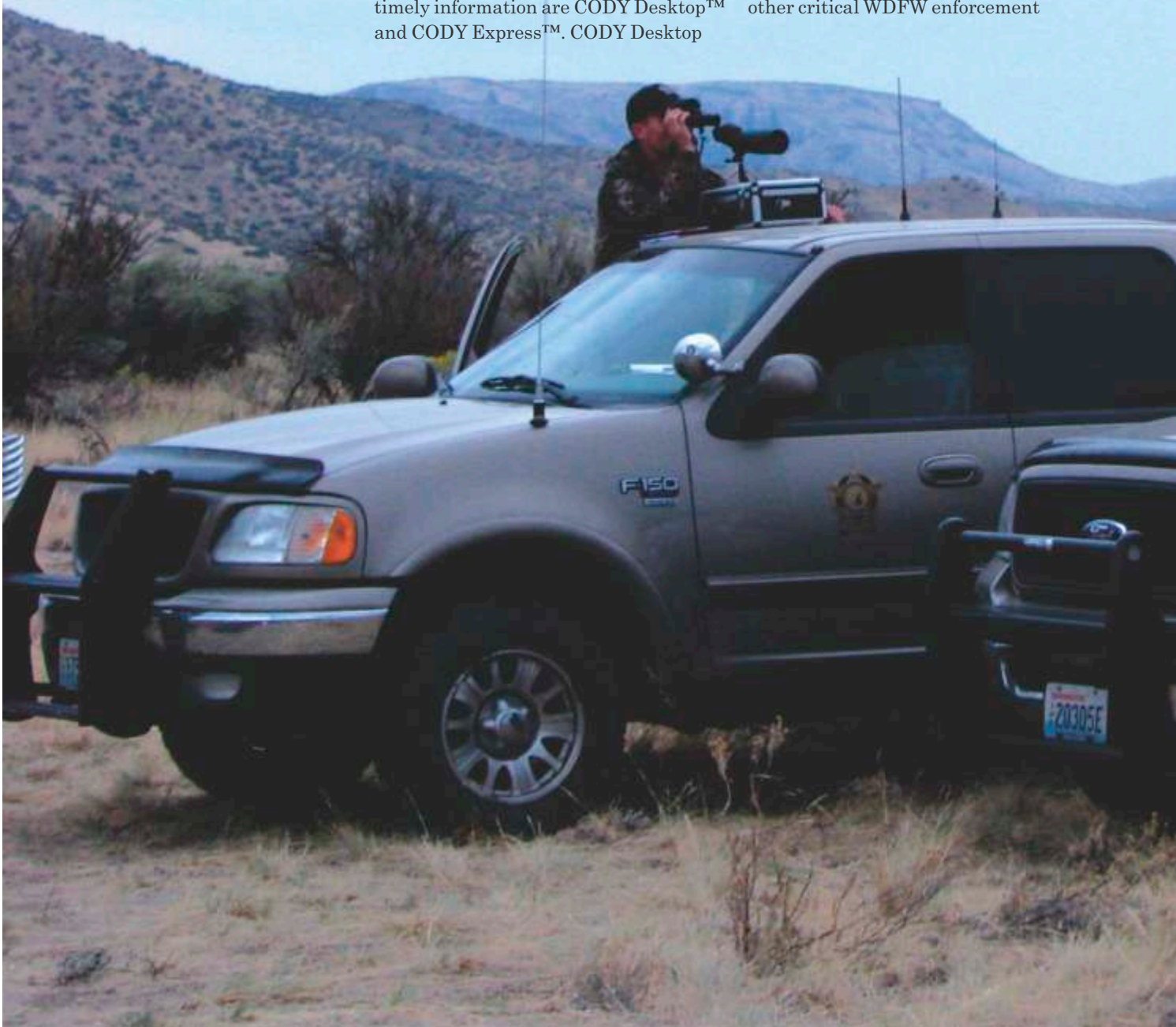
**T**o help make this happen, WDFW needed a partner that knew data and could approach the solution from a holistic data integration perspective, rather than simply as a packaged software installation. CODY Systems, based in Pottstown, Pennsylvania, was the logical choice. CODY brought solid state-level experience in integrating data from multiple sources, and expertise in transforming it into actionable information for public safety and regulatory enforcement. That experience and expertise has

also helped WDFW eliminate reliance on standalone legacy systems and databases and reduce associated maintenance costs.

Now operational statewide for two years, the new CODY system has delivered more complete, accurate, and timely information that has made WDFW officers more effective and the agency itself more responsive. “CODY has helped make this one of our biggest successes,” said Chief Bjork.

The two key modules of the CODY records management system (RMS) that deliver this more complete, accurate, and timely information are CODY Desktop™ and CODY Express™. CODY Desktop

provides the 'in-house' RMS functionality needed for collecting and maintaining information previously kept in hardcopy files, while CODY Express provides real-time 'anywhere' RMS access for officers in the field. The system also facilitates the collection and sharing of information from other agency and external data sources that was never available before, including photos, video, and text. In the system, master name records on WDFW customers and contacts are linked to incident reporting, citation tracking, property and evidence management, and other critical WDFW enforcement





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business processes. Information is entered once and then shared across the system.

Most users access the RMS through CODY Express, a system designed and optimized for laptop/tablet users over wireless networks. CODY Express is deployed in the WDFW vehicles assigned to the agency's 140 field-based law

enforcement officers, who can access information via the Internet using cellular communications over a secure network.

With this new mobile solution, officers have “one-stop” access to all the information they need, rather than having to search each database separately. They can query the records database – as well as state and federal databases – for information on a person or vehicle, complete incident reports, and manage records electronically and remotely in the field. The system puts “...data at their fingertips,” according to Chief Bjork. “It is like having a full RMS system in your mobile unit.”

Mobile users, like Detective Lenny Hahn, agreed. “I love having everything in one place. You capture more information and it's a real time saver, especially in writing incident reports. The system

pulls the name and any other information on the person right into the report. And you can complete it while you're at the scene in the field, so you don't have to rely on notes for witness statements or other details.” Detective Hahn pointed to a recent case, where using the new system saved him about 20 hours.

Having access to that information helps the next officer interacting with an individual involved in that incident, and helps WDFW management better understand and communicate how the department is fulfilling its mission. “Now every incident gets an incident report in our CODY system,” said WDFW Project Manager Garret Ward, “Everything is tracked and accessible to all officers.”





**E**asier access to more information also helps others make better decisions. “When we’re asked by another law enforcement agency ‘What do you know about this person?’ we can get them the answer right away,” Detective Hahn said.

To help identify high-payoff areas where the new system could make an officer more productive and effective, CODY suggested that WDFW assign a team of “power users” to the project.

“It was a great idea,” said Ward. “It turned out better than I ever thought it could. They helped me and department leadership balance how to get the data we needed while limiting the data entry impact on officers. The success of this project is a direct result.”

The power users helped identify what was important in the field, which was also critical to user acceptance. “You have to have selling points to get buy-in,” said Detective Hahn, one of the ten power users.

“Officers want to know ‘How does it help me?’ By showing them how the new system does work for you – by pre-populating fields in the incident report right from a query return, for example – they get it.”

“The key,” added Sergeant Jeff Wickersham, another power user, “is to be able to demonstrate to the officer in the field that entering information can actually make their job easier.” That

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really hits home, he said, “...when an officer gets information from a prior incident report entered by another officer that helps him in a case.”

The power users have played an instrumental role at every stage of the project, including validating user requirements, pilot testing, and training other users. Having the power users lead the field training further helped build user acceptance of the new system because they knew exactly what it could do for the officers. Since the system went live in June 2010, the power users have also served as the first line of help for officers when they have a question or problem.

The power users also continue to be involved in Phase 2 of the project. CODY Desktop and CODY Express are the key

modules included in Phase 1 of WDFW’s implementation of a comprehensive public safety system. WDFW decided to implement the new system in phases, rather than the more common approach in which all modules are rolled out at one time. Phasing allowed WDFW to spread the cost of the public safety system over multiple budget periods. It also delivered mobile functionality to the field sooner and produced an early success that has helped build credibility, both internally and externally. Finally, the phased approach helped both the project team and users ease into learning the new system’s full capabilities.

The cornerstone Phase 2 module – CODY Dispatch™, a computer-aided dispatch (CAD) solution – is currently in the pilot stage. The dispatch product will be used primarily by communications officers in the department’s new WILDCOMM dispatch center. Communications officers using Dispatch will be able to communicate silently and securely with officers using CODY Express and add an incident record to CODY Desktop automatically from any call.

As part of a fully integrated public safety system, all of these modules use a common master database. Information on a person or incident, for example, can be entered once and shared everywhere, including at the point of call entry for a dispatcher, making calls faster, more efficient, and more accurate.

If criminal justice and licensing information was already available electronically in another system, WDFW wanted to make it available to officers directly through the mobile system, saving the time previously spent accessing a separate system or rekeying data to get that information. In some cases, this meant integrating that external information directly into the system, and in others, it required building a real-time interface with the external system for users.

Making information available on fish and wildlife license holders from the Washington Interactive Licensing Database (WILD) database required both. Integrating information on all current license holders into the master name database has proved one of the





most valuable features of the system from an officer perspective. It immediately gives officers critical information for better decision-making, including any license suspensions or revocations, based on a simple name search. Having that information directly available in the field has made officers more effective in handling the more than 250,000 citizen contacts they make each year.

WILD is maintained by the state's point-of-sale license purchase system vendor, which provides information periodically to the WDFW IT Department. Integrating this data into the new system required the expertise that CODY brought from its large-scale public safety data integration projects like Missouri's statewide MoDEX data exchange. Since there are more than 60 different WDFW license types, and an individual can purchase multiple licenses at different times, the master name record had to be configured to handle frequent updates to a large number of fields imported from an external system.

"And we don't always have the best data to work with," Ward said. "We did a lot of work mapping data and developing protocols for handling abnormalities. The working relationship between CODY and [WDFW] IT was invaluable in making this happen."

Before the new system went live, CODY successfully completed the

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migration of demographic and license information on more than 1.5 million individuals to the system's master name file, handling potential duplicate person records on the fly to eliminate cluttering of the database. That information is periodically and automatically updated based on new license-related transactions in the WILD data.

In addition to integrating specific WILD data directly into the master name file, the system also includes a WILD View interface for direct access to the WILD database from CODY Express. Through WILD View, an officer can verify an individual's claim that he has the required license or tag, even if it's not in his possession. This simple check helps WDFW improve customer

satisfaction and provide better customer service to a legitimate license holder who now doesn't receive a written warning or citation.

**B**y centralizing data, WDFW has also been able to shut down other standalone systems and databases, saving money and freeing IT resources, as well as making it easier for officers in the field to get the information they need. For example, along with its other field-RMS functions, CODY Express replaces a third party mobile data system for querying federal and state databases for stolen vehicle reports, outstanding warrants, and other criminal justice information. Now, an officer doesn't have to sign in to a separate system to run a name. With a single click from the person screen, the officer can quickly initiate a query.

WDFW was also able to replace its legacy activity logging system with functionality already embedded in CODY Express. For example, solid metrics on the number of officers and hours involved in responding to dangerous wildlife incidents, license fraud investigation, and other hot-button issues helps clearly demonstrate the importance of WDFW enforcement presence to the public and the agency's stakeholders.

Even as the agency as a whole has had to absorb staffing cuts in recent years, the enforcement program has been able to maintain its officer staffing level. Having the right information on officer workload has been an effective tool. "I can pull the data," said Chief Bjork, "and walk it right up the Hill [to the State Legislature]. It builds credibility. The worst thing you can say to legislators is 'I don't know' or 'I don't have that data available'."

One of the important lessons learned on this project is that success depends on strong leadership on both sides of the project. That starts with personal executive commitment, and Chief Bjork has certainly shown that commitment since the beginning of the project. But, according to Garret Ward, it's just as important for the executive to make sure that you have the right resources to make the project successful. Chief Bjork echoed those comments: "How you build

the support infrastructure is critical. We set it up to be successful.”

That infrastructure includes a strong WDFW project team – from the executive steering committee to the project team of power users and other staff who dedicated the time and energy to make it happen. As project manager, Ward has provided strong and consistent leadership to that team since the beginning of the project. That same strong and consistent leadership was mirrored in the CODY team. WDFW asked for Barbara Falcaro to be assigned as the CODY project manager based on her work on similar projects with conservation agencies in North Dakota and Indiana. Falcaro and Ward have continued to work closely together since day one of the project.

WDFW was able to maximize the cost advantages of using proven software to build a system that serves the needs of conservation enforcement. The team made software modifications, including relabeling fields where necessary, to ensure the best possible entry of data.

“This wasn't a turnkey project,” noted Chief Bjork. “Adapting an off-the-shelf product to our unique process wasn't easy, but CODY was great to work with.”

A key to success of this project was the partner relationship that both WDFW and CODY fostered at all levels. The foundation of that relationship was listening, compromising, working together, and facing challenges with open minds and total focus on finding the right solution. With any project of this scope, some problems can't be anticipated. Finding solutions to these

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problems starts at the project management level, but sometimes requires resources outside the scope of the project. That's when the partners need to be able to work together at the executive level to find the right solution.

On this project, one of these problems surfaced soon after CODY Express was rolled out statewide, when officers in the field reported slow system response time, and it appeared initially as though CODY Express might be the culprit. The system is designed to operate in disconnected mode, so officers can write reports when cellular network service is interrupted or unavailable, but this situation was clearly different. With all the different components that could potentially be the cause – including the servers maintained by the state's central IT department, the commercial communications networks, the software, and the new laptops that WDFW had just deployed to the field – the situation was primed for finger-pointing and blame-shifting. However, the strong working relationship that had been built at the project level and the leadership of Chief Bjork and the agency Chief Information

Officer helped ensure that didn't happen.

CODY brought in its top network specialist to work with the WDFW project team to diagnose the problem (it was traced to a combination of electronic distribution of new anti-virus software, Windows updates, Microsoft Outlook and other network-heavy applications that were saturating the available wireless bandwidth). But the process of working through it cemented the partnership between the two organizations. “Even though our company is based three time zones away,” said Falcaro, “WDFW knows that we're all there to support them every day 24-7, even when an issue isn't the result of our software.”

Chief Bjork also stressed the importance of the partnership. “WDFW's partnership with CODY Systems has been a good one,” he said. “As a Conservation Law Enforcement entity it has taken a lot of work, software customization, and enhancements to get to where we are now with our system, and there are future enhancements that we will still be considering to get to where we want to be.”

Bjork added, “I frequently talk to other law enforcement executives about their record management systems and hear some of the horror stories that they've experienced with their vendors. That has not been WDFW's experience with CODY Systems. We've worked collaboratively on issues, negotiated fairly on upgrades and enhancements, and built an excellent governmental/private partnership.”



Photo courtesy of Lewis and Clark National Historical Park