

**The goWILD! Project**  
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Submitted by  
Division of Natural Resources  
Wildlife Resources Section  
State of West Virginia

**WVDNR goWILD!**  
Digital Government: Government to Citizen

## Nomination Form

***May 23, 2003 extension to deadline granted.***

Title of Nomination:	<b>WVDNR goWILD! Internet Hunting and Fishing Licenses</b>
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Category for judging: **Digital Government: Government to Citizen**

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The following scenario plays out repeatedly during the third week in November at 455 hunting and fishing license agents throughout West Virginia.

John rounded the corner of the isle and his heart sank when he saw the line at the sporting goods counter. Stacked twenty-five deep, the line of camouflage-clad hunters stretched into the Automotive Department. He had done it again, waited till the last minute to get his hunting license. As he took his spot at the end of the line of procrastinators, he thought "...surely there has to be a better way."

Now there is a better way to obtain hunting and fishing licenses in West Virginia thanks to the **goWILD!** (**W**est **V**irginia **I**nternet **L**icense **D**ata **S**ystem) project. WVDNR has taken a large step toward replacing its legacy paper-based system and its inherent logistical problems and risk, with a convenient, web-based application that provides immediate fulfillment twenty-four hours, seven days from anywhere on the internet.

The system designers carefully reviewed what other states offer and found simple shopping cart systems that provide the user with no real help through a maze of complex license regulations. The **goWILD!** online system is more than a shopping cart. It helps the buyer quickly select the correct privileges. And it is available for both resident and non-resident licensing. It was economical to develop. And, it is efficient in terms of the staff required to support it.

The application was designed to be secure in terms of personal information, easy to maintain, extensible, and to be administered by non-IT professionals. Development and operation of the system is through the combined effort of several state agencies including the DNR, the Governor's Office of Technology, and the Information Services and Communications division. The system received a public launch by Governor Bob Wise, and it has been well received by the hunting and angling community. It is on track to complete its first year of operation having processed 6% - 7% of the roughly 662,000 annual license transactions handled by DNR.

Customer response to the system has been overwhelmingly positive. Licensees have made the effort to call and email the DNR License Unit with praise and compliments on how well the system works for them. That success has led to an array of additional projects that have been funded and are now underway.

The **goWILD!** project has made positive economic impact on both public and private sectors in West Virginia and will continue to grow as new modules are added in the future!

## **The Problem**

Obtaining a hunting and fishing license or stamp in West Virginia was not always an easy task. The legacy paper-based system is fraught with logistic problems and financial risk. Many times a hunter or angler is forced to search across several counties for a particular stamp before finding a license agent with one in stock. These barriers negatively impact the WVDNR's annual license sales and the user's access to license privileges. This ultimately decreases the economic impact to the State's economy and may effect long-term participation in hunting and fishing activities.

Because, license stamps have a monetary value, the Hunting and Fishing License agents must maintain a bond to carry inventory. The WVDNR limits an agent's inventory to a certain dollar amount based on the value of the bond they carry. This leaves certain geographical area's of the State with insufficient license stamp inventories. To combat this problem the WVDNR issues inventory in excess of an agent's bond value. While this lessens the inventory problems, it creates an unacceptable financial risk.

## **The Project**

The purpose of **goWILD!** (**W**est **V**irginia **I**nternet **L**icense **D**ata **S**ystem) is to make the secure purchase of hunting and fishing licenses easy for both residents and non-residents while providing them with immediate fulfillment any day of the week, any time of the day, and from any location in the world. In fact, many of the interactions that have been received by the License Unit Help Desk over the first nine months of operation have stated that this is the first time that the license buyer has ever made a purchase on the internet. The **goWILD!** system has given our predominantly outdoors-focused audience a tangible reason to come inside and to use the internet for commerce.

The present system is very much more than a shopping cart for license purchases. The designers and programmers have codified the complex user pay/user benefit business rules that govern licensing in the state of West Virginia and stored that logic in a rules table in the **goWILD!** database. The rules table allows the system to use known bits of information about each visitor gathered by a wizard process –age, residency, prior licenses held, interest in fishing, hunting or combined licenses– and display the correct license privilege items that are available for that person and that are appropriate to the season.

During the design of the system, the developers looked at every available state hunting and fishing license site and found that many of the sites provided only a mail-in form for ordering the license. And license fulfillment was accomplished via postal mail. Some of the sites took the design a step further and allowed the citizen to enter the information online, but the license was still delivered by postal mail. Frequently, the purchaser needed to refer to another site for license regulations in order to be sure that the privileges they were requesting were proper. And not all of the available privileges could be ordered online on many sites.

## Design Goals

The design of the **goWILD!** system had to go several steps beyond what the typical site was providing in order to guide the user to the proper license. Detailed below are many of design elements and specifications incorporated into the **goWILD!** system.

- . Show only privileges appropriate to the individual
- . Provide guidance for difficult sections of the licensing regulations
- . Allow users to override automatically selected pre-requisites
- . Provide helpful suggestions without annoying the user
- . Allow administrative staff to extend the privilege options and the business rules governing when and to whom privileges will be offered

### Show Appropriate Privileges

The system limits the selections displayed to only those appropriate for the residency, age, and stated intentions of the user. For example, a pistol permit is not offered or allowed for a licensee who is under age 21 at the time of purchase. The only way that a user will see a pistol permit or be allowed to purchase the permit is to misstate their birth date.

### Provide Guidance

The system provides immediate feedback in the form of alert messages to the user to guide them through selecting the proper privileges for their licensing circumstances at the particularly difficult areas of licensing regulations. Most resident and all non-resident licensees must purchase a class CS Conservation Stamp, so the system automatically selects this stamp whenever another stamp with this pre-requisite is purchased. The system also provides an alert explaining that the privilege must be purchased only once.

### Allow User Overrides

The system allows the user to override automatic selections if they have expert knowledge of the regulations and know that they are not required to purchase certain privileges for their circumstances. If a Conservation Stamp privilege has already been purchased at a retail location with a fishing privilege for example, the user can uncheck the CS privilege and is not forced to purchase it if they know they do not need it.

### Provide Non-intrusive Suggestions

The system makes helpful suggestions. If the user chooses to ignore the suggestion, the user is not warned for the same conditions again if they come back to a screen to make a correction. For instance, if a purchaser selects resident privileges and later provides an out-of-state mailing address or driver's license number, the system warns the user of that circumstance when the form is first submitted. If the user chooses to ignore the warning and continue the transaction and then later returns to that screen for a correction, they are not nagged about the possible mismatched residency requirement again.

## Maximize Administrative Control

The system allows administrative personnel to add or alter the privileges that are available and the business rules for rendering those items to the purchaser's browser through tables in the database. This eliminates the need for programming changes for routine maintenance of the system, such as changing the range of dates that restricted privileges can be sold. Some privileges such as the RB Extra Buck Gun privilege can not be sold after the start of the season. The license unit administrator can specify the beginning and ending season dates in the database, and the rendering engine will only present those selections for purchasers visiting the site within that date range. This also allows new privileges to be added and tested prior to the date that they are available, and then to be scheduled for activation at midnight on January 1 at the beginning of the license year. Staff does not have to be on site to activate the change at the earliest possible purchase time –they schedule activation of the privilege and then verify it on the internet from home.

## Secure Personal and Financial Data

The system is designed with an overriding concern for the security and integrity of personal and financial information. Also, mechanisms to discourage and detect forgery of licenses have been implemented in association with the DNR Law Enforcement Section. Purchasers print their own licenses which offers convenient and immediate online fulfillment of their license needs. This convenience makes field authentication by Conservation Officers necessary. Licensees can also return to the site and request reprints of their online purchased privileges should their plain paper license become lost, wet, worn out, or destroyed.

## Collaborative Effort

Although **goWILD!** is a WVDNR project, the operation and maintenance team includes three other state agencies. The State's Information Services and Communications Division maintains the system's hardware and operating systems, the West Virginia State Treasurer's Office processes the credit card transactions, and the Governor's Office of Technology acts as reviewer of security and technology policies for **goWILD!** By leveraging these agencies' talent and expertise, the WVDNR can concentrate its efforts on the core application and on providing quality customer service.

## Immediate Results

**goWILD!** has been extremely well received and supported by the hunting and angling community since the announcement of the system by West Virginia Governor Bob Wise on August 5, 2002. The system was introduced with a real-time license purchase that was broadcast over live television at a press conference where Governor Wise watched as Ashley Thompson, one of the essay winners from the annual *Governor's Youth Turkey and Bass Challenge*, purchased a license over the internet using **goWILD!**

Hunters and anglers began using the system immediately, and traffic steadily increased to a peak volume of over 530 transactions per day –a sustained rate of one license sale every two and a half minutes on the Saturday and Sunday before the opening of Deer Gun season in late November. The six-month transaction count at the end of our peak day was 5,966 for a total of \$502,861.50 –more than half a million dollars in the first six months of operation. Users demonstrated a high degree of confidence in the system, going right up to the 12:00 AM deadline for acquiring the extra antlered deer stamp.

The **goWILD!** system is already established as the single largest license outlet in the State. Perhaps the most satisfying thing for the staff members supporting the system is the number of licensees that have taken time to call or email the Customer Service Desk to express their extreme satisfaction with the ease and convenience of the system. We have not experienced a significant number of support calls as a result of implementing the online system and have been able to support the system with no increase in staffing; in fact we eliminated a vacant license clerk position. The system has worked so well that we have replaced paper-based in-house sales with online sales originated by License Unit clerks.

### **Project Costs**

The project budget for the **goWILD!** online module was set at \$250,000 which included development, hardware and software costs. The project came in \$50,000 under budget, thus allowing the WVDNR to upgrade its license encryption system to include the handheld PDA's for the Conservation Officers. Every 1 % of market share that is captured by the online system results in \$8,000 direct cost savings to the WVDNR. This number is comprised of the all costs, including personal services and fringe benefits, to operate the paper-based license system. Printing, mailing, storage, and bad debt expense account for \$350,000 in annual costs to the WVDNR. The online system also enhances revenue with a potential increase of \$100,000 in added interest earnings. As stated earlier, the project has already allowed the Hunting and Fishing License Unit to decrease fulltime staff by one position resulting in a \$40,000 savings to the WVDNR. One of the bolder project goals of the **goWILD!** system is to reduce the overall Hunting and Fishing License Unit budget and return the savings to on-the-ground fish and wildlife management activities.

### **Economic Impact**

The positive financial benefits extend well beyond the Hunting and Fishing License Unit. Conservation Officers will spend less time tending to the needs of the Hunting and Fishing License Agents and more time enforcing the State's game and fish laws. The demand on the Revenue Unit of WVDNR's Administration Section will lessen as a greater share of revenue is collected online. The freeing up of valuable resources allows the benefits of the **goWILD!** system to ripple throughout all of the WVDNR's operations, generating benefits in totally unrelated operations.

Additionally, the cost savings are not limited to the WVDNR. Users of **goWILD!** are not charged an issuing or convenience fee. Although this is a common practice in other states, the WVDNR determined that eliminating user fees would provide an incentive for using the online

system. If all the licenses could be sold online, the cost savings and increased revenue to the WVDNR would exceed \$800,000. License buyers annually pay Hunting and Fishing License agents \$650,000 in issuing fees, but these fees are avoided with the **goWILD!** system. Not only can they save money, but more importantly time!

### **Increasing Returns**

The extraordinary success and public support for the **goWILD!** project has spawned several new development efforts that will result in additional improvements in efficiency, convenience, and data availability. The state legislature recently appropriated \$2 million for the purpose of extending **goWILD!** with an IPOS (Internet Point-of-Sale) module for our bonded license agents throughout the state. The system will allow immediate capture of license data at the point of purchase. It will also implement EFT (Electronic Funds Transfer) clearing of license fees due the state from agents, thereby resulting in improved cash flow, increased interest earnings and decreased bad debt write-offs. The IPOS module is currently in the procurement and design phase, and will be field tested in the fall of 2003 with deployment in January 2004. Using the framework developed in the **goWILD!** online module, the WVDNR will deploy the nation's most cost efficient point-of-sale application to date. The system is a bit of an anomaly in today's technology landscape –under budget, on time, and functioning exactly as it should.

A Palm OS-based mobile license validation application is undergoing final revisions and device testing, and will be deployed in June of 2003. This will result in 125 Conservation Officers receiving handheld computers that can be used to verify in the field that plain-paper licenses are authentic. This key feature allows the WVDNR to issue licenses on a nondurable stock with potential savings of \$200,000 per year in printing costs and more importantly places the license in the hands of the user at the time and location of their choosing.

### **Conclusion**

Admittedly, the **goWILD!** system is not the first hunting and fishing license application deployed on the Internet. It does not even employ cutting edge technology. The **goWILD!** system's value is found in its innovative design approach and its ability to immediately deliver a government service to the public without charging an additional fee. By no means is West Virginia a state rich in financial resources, but our creativity, like our natural resources, is abundant.