Eastern Washington Pheasant Enhancement Program Annual Report

Washington Department of Fish and Wildlife

Washington Department of FISH & WILDLIFE

Dec. 1, 2023

State of Washington
DEPARTMENT OF FISH AND WILDLIFE
Mailing Address: PO Box 43200, Olympia, WA 98504-3200 · 360 902-2200 · TDD 360 902-2207
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December 1, 2023

The Honorable June Robinson
Chair, Senate Ways and Means
303 John A. Cherberg Building
Post Office Box 40448
Olympia, WA 98504-0438

The Honorable Timm Ormsby
Chair, House Appropriations
315 John L. O'Brien Building
Post Office Box 40600
Olympia, WA 98504-0600

The Honorable Kevin Van De Wege
Chair, Senate Agriculture, Water
Natural Resources, and Parks
212 John A. Cherberg Building
Post Office Box 40424
Olympia, WA 98504-0424

The Honorable Mike Chapman
Chair, House Rural Development,
Natural Resources, and Parks
132B Legislative Building
Post Office Box 40600
Olympia, WA 98504-0600

Dear Chairpersons Robinson, Ormsby, Van De Wege, and Chapman:

I am writing to provide you with the Washington Department of Fish and Wildlife's (Department) annual report regarding the Eastern Washington Pheasant Enhancement Program (EWPEP). The Department is required to submit an annual report summarizing the Department's Eastern Washington pheasant activities under the program (RCW 77.12.820).

Pheasant harvest and hunter participation has declined in Eastern Washington in the past 20 years. The Department created the EWPEP in 1997 to improve hunting success rates and address pheasant habitat loss through habitat enhancement projects. Projects completed as part of EWPEP benefit wild pheasant populations and targets the decline in hunter participation by releasing adult rooster pheasants for hunting on public lands.

The Washington State Legislature funded the EWPEP in 1997 with a dedicated account called the Eastern Washington Pheasant Enhancement account. The funding is derived from a portion of small game hunting licenses, based on the proportion of purchasers who hunt pheasants in Eastern Washington.

Over the past decade, the decline in harvest and hunter participation has slowed, remaining mostly stable with few exceptions related to the beginning of the COVID-19 pandemic. Hunter success rates, calculated as the number of harvests per hunter, remained stable through the past three decades, averaging two to three pheasants harvested per hunter. Efforts to improve pheasant nesting and brood rearing habitat and to recruit interest in pheasant hunting will continue through EWPEP.

The attached report includes the history of the EWPEP, pheasant release numbers since 2000, and activities and expenditures for 2022. Appendices include the 2009 program audit and the 2023 pheasant status and trend report. When reviewing this information, please note that the process for hunter reporting and data analysis changed in 2022 to improve accuracy of harvest estimates. Due to this change, results from 2022 are not comparable to previous years.

If you have any questions, please do not hesitate to contact Tom McBride, WDFW's Legislative Director, at (360) 480-1472.

Sincerely,

Kelly Susewind
Director

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Cover photo by Carrie Dugovic

Background

Pheasant harvest and hunter participation has declined in Eastern Washington in the last 20 years. The Department created the EWPEP in 1997 to improve hunting success rates and address pheasant habitat loss through habitat enhancement projects. Projects completed as part of EWPEP benefit wild pheasant populations and targets the decline in hunter participation by releasing adult rooster pheasants for hunting on public lands.

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To fulfill requirements of RCW 77.12.820: Eastern Washington pheasant enhancement account

> *"The eastern Washington pheasant enhancement account is created in the custody of the state treasurer. All receipts under RCW **77.12.810** must be deposited in the account. Moneys in the account are subject to legislative appropriation and shall be used for the purpose of funding the eastern Washington pheasant enhancement program. The department may use moneys from the account to improve pheasant habitat or to purchase or produce pheasants. The department must continue to release rooster pheasants in eastern Washington. The eastern Washington pheasant enhancement account funds must not be used for the purchase of land. The account may be used to offer grants to improve pheasant habitat on public or private lands that are open to public hunting. The department may enter partnerships with private landowners, nonprofit corporations, cooperative groups, and federal or state agencies for the purposes of pheasant habitat enhancement in areas that will be available for public hunting. The department shall submit an annual report to the appropriate committees of the legislature by December 1st regarding the department's eastern Washington pheasant activities." (RCW 77.12.820)*

Dedicated fund revenue for the Eastern Washington Pheasant Enhancement account for calendar year 2022: $351,642.94

History

2009 Audit of the Eastern Washington Pheasant Enhancement Program (EWPEP)

In 2009, the Legislature requested an audit of the EWPEP. The Washington State Auditor's findings confirmed that WDFW was fulfilling its legislative mandate to release pheasants (Appendix 1). The auditors concluded that pheasant populations continued to decline primarily due to loss of habitat, and that releasing pen-raised pheasants was not effectively sustaining or improving pheasant populations in Eastern Washington. Additionally, the auditors determined that the EWPEP was leveraging its limited resources by engaging in habitat enhancement activities through partnerships with other organizations that have complementary objectives.

In 2009, SHB 1778 "Fish and Wildlife Provisions – Modernization" eliminated the requirement for the program to use 80% of EWPEP funding to buy domestically reared pheasants for wild release. The purpose of this legislative change was to devote more funding to habitat enhancement projects on public and private lands.

In 2010, WDFW implemented the recommendation by reducing the amount spent to buy pen-raised pheasants by up to 10% annually and reallocated those funds to habitat enhancement activities. This funding shift continued until most EWPEP funds were spent on habitat improvements. Currently, more funds are spent on pheasant release than on habitat enhancement because of rising bird costs and because many habitat contracts were moved to or are utilizing other funding sources.

Pheasant hunting success in the Palouse. Photo by Todd Hart.

Historical release numbers

In 2010, WDFW implemented the audit recommendations. This resulted in a lower number of pheasants released compared to 2009. Release numbers have remained relatively consistent since the implementation of the audit recommendations in 2010 (Figure 1).

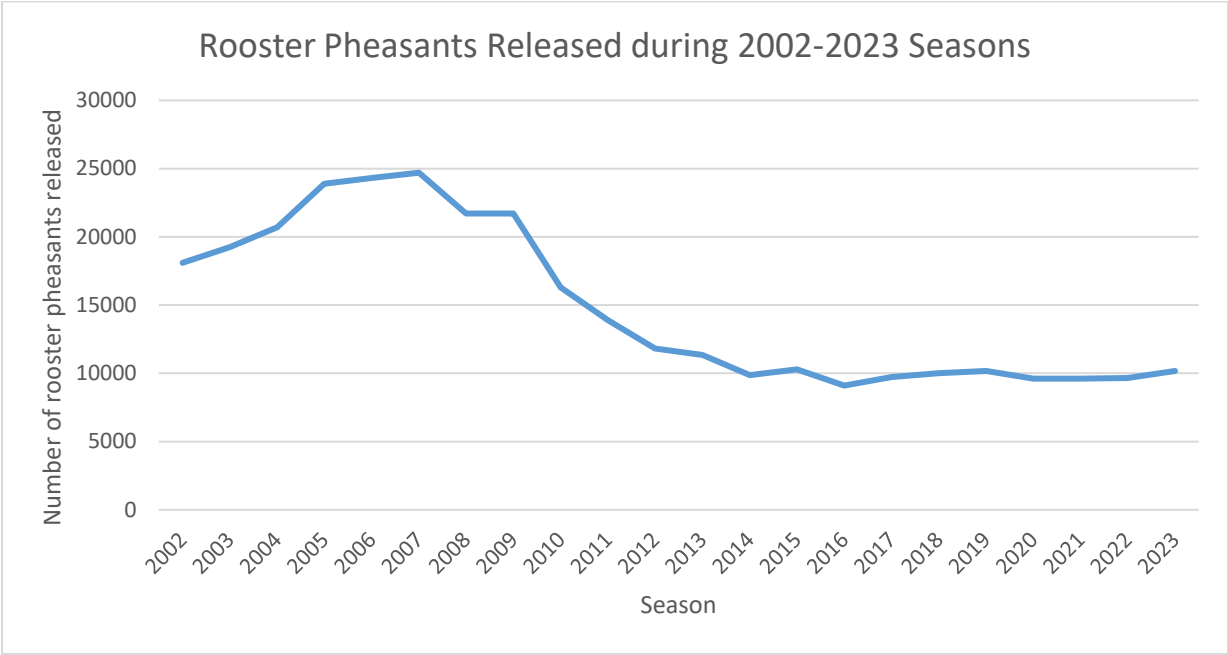


Figure 1. Number of rooster pheasants released during the 2002-2023 seasons.

Activities and Expenditures in 2022

Rooster Pheasant Release

The Eastern Washington Pheasant Enhancement Program released 9,648 rooster pheasants on 28 designated release sites during the 2022 fall hunting season:

- 6,498 from WDFW's Bob Oke Game Farm in Centralia, Washington
- 3,150 from Little Canyon Shooting in Peck, Idaho

To maximize hunter harvest and participation, WDFW scheduled releases around youth and general season openers and major holidays.

WDFW used private contractors to raise and deliver adult roosters to Ferry, Lincoln, Spokane, Whitman, Garfield, Columbia, Asotin, and Walla Walla counties with $66,112.20 spent for services rendered.

The Bob Oke Game Farm produced and delivered adult rooster pheasants to the remaining eastern Washington release locations. A total of $298,936.20 was spent from the account for pheasant release. This amount includes regional staff time to deliver the birds to the various release sites across eastern Washington.

Figure 2. Map of Eastern Washington Primary Pheasant Zone and Pheasant Focus Area, which includes portions of Whitman, Garfield, Columbia, and Walla Walla counties.

2022 Habitat Improvement Projects

Improvements to brood rearing habitat

Improvements to brood rearing habitat were made in the pheasant focus area, which includes portions of Whitman, Garfield, Columbia, and Walla Walla counties. This primarily involved planting forb (herbaceous flowering plant) seeds in Conservation Reserve Program fields. Increased forb abundance, in turn, increases insect abundance, with the latter being the key limiting factor for pheasant chick survival and growth.

Cover plots in Grant and Adams counties in partnership with federal programs

WDFW implemented additional habitat enhancement projects throughout Eastern Washington by providing hunting access on privately owned land through partnership agreements with private landowners. These projects were dependent upon funding, staff availability, and landowner interest. Many of these projects are smaller in scale but provide a large impact to the availability of huntable land and available habitat to pheasants. One example of smaller scale projects includes the installment of cover plots. Cover plots generally consist of planting grasses and shrubs, which provide nesting, hiding, and overwintering cover for pheasants. With the help of federal programs, additional cover plots were created in Grant and Adams counties during the 2022 season.

Voluntary Public Access – Habitat Incentive Program (VPA-HIP) Grant

In 2020, WDFW was awarded the Voluntary Public Access – Habitat Incentive Program (VPA-HIP) Grant totaling $2.7 million. The VPA-HIP Grant is a three-year grant; however, it was extended for one additional fiscal year into 2024. This grant provides the opportunity to enhance pheasant hunting access statewide and improve and maintain crucial habitat in pheasant focus areas around the state. Due to some funding constraints with this version of the grant, the EWPEP funds are crucial for many habitat projects in Eastern Washington. Both funding sources complement each other in an ongoing effort to provide pheasant hunting access and habitat enhancement opportunities in Eastern Washington. EWPEP funding during the 2023 season will continue to focus on encouraging private landowners to maintain existing pheasant habitat, completing habitat enhancement projects, and promoting hunting access to the public. Habitat enhancement projects are overseen by the local Private Lands Biologists.

To encourage private landowners to enroll their lands for both access and habitat enhancement, WDFW private lands staff has brought back a historical program from over a decade ago called “Partnership for Pheasants.” In the past, the program was partially legislatively funded and encouraged landowners to provide hunting opportunities to the public while also requiring habitat restoration projects be completed on their lands. The program was successful in the past, but dissolved when the funding was no longer available. In 2020, WDFW private lands staff determined that this program was a good way to use EWPEP funds on a smaller scale to encourage participation by private landowners. WDFW began efforts to enroll landowners in this new program and spent roughly $44,600 during the season on over 2,500 acres. WDFW private lands staff intend to continue to offer this program to interested landowners. WDFW also plans to continue to monitor the overall success and potential of this program.

Appendix 1:

Washington State Auditor's Report on the Eastern Washington Pheasant Enhancement Account

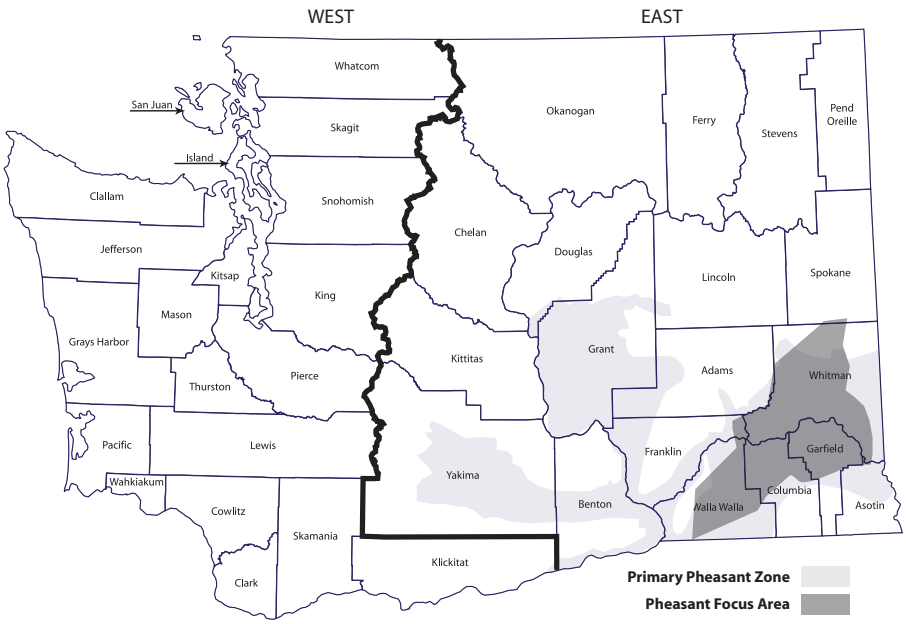
Performance Audit Report

Eastern Washington Pheasant Enhancement Program

Department of Fish and Wildlife

Report No. 1002127

Eastern Washington Primary Pheasant Zone and Pheasant Focus Area



December 10, 2009

Washington State Auditor Brian Sonntag, CGFM

www.sao.wa.gov

About the audit

We audited the Eastern Washington Pheasant Enhancement Program in response to a legislative request.

Objectives

This audit was designed to determine if the Department of Fish and Wildlife uses:

- Effective strategies to improve pheasant harvests in Eastern Washington.
- Sufficiently reliable data to support management decisions.

Scope

We audited the performance of the Eastern Washington Pheasant Enhancement Program from its inception in 1997 through 2008. We focused on whether the Program is meeting Department goals and Program objectives and whether it uses best practices to meet those goals and objectives. We did not audit the Western Washington Pheasant Program.

What we found

Pheasant populations have decreased in Washington primarily due to loss of habitat, which is the critical factor in sustaining healthy pheasant populations. Although the Department fulfilled its legislatively mandated pheasant release strategy, that strategy has not been effective at sustaining or improving pheasant populations and hunting opportunities in Eastern Washington. In contrast, South Dakota, which is a recognized leader in pheasant management, has increased its pheasant population and hunting opportunities by focusing on habitat enhancement instead of pheasant releases.

The Program has leveraged its limited resources by engaging in habitat enhancement activities through partnerships with other organizations that have complementary objectives. The 2009 Legislature rescinded the requirement for the Program to use 80 percent of its funding on pheasant releases. This will allow the Program to expand these partnerships by reallocating funds it formerly used for pheasant releases.

The Program uses pheasant harvest estimates from an annual hunters' survey to monitor long-term pheasant population trends. This is reasonable because harvest estimates trend similarly to roadside counts in states that measure both. The Program will need to develop on-site population monitoring to help assess its habitat enhancement efforts.

Mission Statement

The State Auditor's Office independently serves the citizens of Washington by promoting accountability, fiscal integrity and openness in state and local government. Working with these governments and with citizens, we strive to ensure the efficient and effective use of public resources.

About Initiative 900

Washington voters approved Initiative 900 in November 2005, giving the State Auditor's Office the authority to conduct independent performance audits of state and local government entities on behalf of citizens to promote accountability and cost-effective uses of public resources.

I-900 directs us to address the following elements in each performance audit:

- Identification of cost savings.
- Identification of services that can be reduced or eliminated.
- Identification of programs or services that can be transferred to the private sector.
- Analysis of gaps or overlaps in programs or services and recommendations to correct them.
- Feasibility of pooling auditee's information technology systems.
- Analysis of the roles and functions of the auditee and recommendations to change or eliminate roles or functions.
- Recommendations for statutory or regulatory changes that may be necessary for the auditee to properly carry out its functions.
- Analysis of the auditee's performance data, performance measures and self-assessment systems.
- Identification of best practices.

Initiative 900 provides no penalties for auditees that do not follow recommendations in performance audit reports.

The complete text of the Initiative is available on our Web site.

Map courtesy of the Department of Fish and Wildlife

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Audit results

Audit issue	Recommendations
Issue 1: Pheasant populations and hunting opportunities have declined due to loss of habitat.	**Recommendation 1:** The Program should reallocate funds to habitat enhancement and develop pilot projects to demonstrate the effectiveness of specific habitat enhancement methodologies. A portion of reallocated funds could be used as matching funds for federal Voluntary Public Access and Habitat Enhancement Program grants. The Program should continue to emphasize the pheasant focus area, but also consider areas within the larger Eastern Washington primary pheasant zone for additional projects. Department-owned or -managed lands and Natural Resources-managed lands enrolled in the Conservation Reserve Program may offer flexible management options for establishing habitat improvement demonstration areas.
	Recommendation 2: The Program should identify and pursue additional opportunities for partnering with others to leverage habitat enhancement funding. The Program should pursue partnerships with conservation organizations and consider opportunities outside of the pheasant focus area but within the primary pheasant zone to preserve and restore landscapes such as wetlands, shrub-steppe, grasslands and working farms.
	Recommendation 3: The Department should increase pheasant hunting opportunities on private lands by addressing landowner concerns. The Department should develop guidelines that reasonably limit the number of hunters and access hours without compromising public access objectives. Requiring written permission may be acceptable if the Department can ensure that landowners are not showing favoritism.
	Recommendation 4: The Department should scale down pheasant releases in Eastern Washington with the goal of limiting releases to specific high-demand events such as youth hunts and holidays. Because pen-reared pheasants are easy targets for predators and do not sustain populations over time, they should only be released just prior to a limited number of events that attract large numbers of hunters. The Department should scale down pheasant releases at a rate that accommodates the needs of hunters while wild pheasant populations rebound.
	Recommendation 5: The Department should provide the legislature with evidence that reallocating funds from pheasant releases to habitat enhancement and hunter access is an effective use of resources. The Department's annual report to the Legislature should focus on progress toward achieving the activities and benchmarks already identified in the 2009-2015 Game Management Plan, including: • Developing a method to determine the degree to which Eastern Washington pheasant releases impact overall program objectives, including pheasant harvest and hunting opportunities. • Doubling the number of acres of quality pheasant habitat by 2014. • Developing annual reports that describe efforts to evaluate habitat enhancement efforts on pheasant population levels. • Monitoring pheasant populations. The annual Pheasant Status and Trend reports provide a good template for reporting to the Legislature. In its first report to the Legislature, the Department should include a plan, developed in consultation with stakeholders, on how it intends to scale down pheasant releases in Eastern Washington and a discussion of adjustments it intends to make in its other activities.

Audit issue	Recommendations
Issue 2: The Eastern Washington Pheasant Enhancement Program does not have the data it needs to measure the effectiveness of its habitat enhancement efforts.	**Recommendation 6:** The Department should continue to survey approximately 25,000 small game hunters but should survey a higher proportion of hunters in the groups that harvest more game. By surveying a higher proportion of hunters in groups 2 and 3, the Department can reduce uncertainty in its harvest estimates without needing to increase the number of hunters in its survey.
	Recommendation 7: The Program should monitor pheasant populations on a local basis to measure the success of its habitat enhancement efforts and to strategize various methods to sustain pheasant populations and increase hunting opportunities. The Program should develop performance measures to evaluate the effects of its efforts on the pheasant population. This information should be included in the Program's annual report to the Legislature. The Program should analyze whether the Breeding Bird Survey data may be useful in developing its pheasant population monitoring protocols and use the data if it is found to be potentially useful.
	Recommendation 8: The Program should analyze the pheasant harvest and roadside count data for Grant and Adams Counties and determine the feasibility of using these data sources. County-level harvest estimates, Department-led roadside counts, and Breeding Bird Survey data are all available annually. Cross-validating this data over time may shed light on its utility for measuring population trends on a county or local basis.
	Recommendation 9: The Program should use the data it has started collecting in 2009 on harvest of released pheasants to analyze the effectiveness of pheasant releases in Eastern Washington. The Program should use this information as evidence of the preference for funding habitat enhancement and hunter access instead of pheasant releases.

What's next?

Initiative 900 requires the legislative bodies for the government agencies in this report hold at least one public hearing to consider the audit findings and to receive comments from the public within 30 days of this report's issue.

The corresponding legislative body must consider this report in connection with its spending practices. A report must be submitted by the legislative body by July 1 each year detailing the status of the legislative implementation of the State Auditor's recommendations. Justification must be provided for recommendations not implemented. Details of other corrective action must be provided as well.

The state Legislature's Joint Legislative Audit and Review Committee (JLARC) will summarize any statewide issues that require action from the Legislature and will notify the appropriate fiscal and policy committees of public hearing agendas. Initiative 900 provides no penalties for audited entities that do not follow recommendations in performance audit reports.

Follow-up performance audits of any state or local government entity or program may be conducted when determined necessary by the State Auditor.

For more information

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About the Audit

Why We Did This Audit

We audited the Eastern Washington Pheasant Enhancement Program in response to a legislative request. This audit was designed to determine if the Department of Fish and Wildlife uses:

- Effective strategies to improve pheasant harvests in Eastern Washington.
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What We Found

Pheasant populations have decreased in Washington primarily due to loss of habitat, which is the critical factor in sustaining healthy pheasant populations. Although the Department fulfilled its legislatively mandated pheasant release strategy, that strategy has not been effective at sustaining or improving pheasant populations and hunting opportunities in Eastern Washington. In contrast, South Dakota, which is a recognized leader in pheasant management, has increased its pheasant population and hunting opportunities by focusing on habitat enhancement instead of pheasant releases.

The Program has leveraged its limited resources by engaging in habitat enhancement activities through partnerships with other organizations that have complementary objectives. The 2009 legislature rescinded the requirement for the Program to use 80 percent of its funding on pheasant releases. This will allow the Program to expand these partnerships by reallocating funds it formerly used for pheasant releases.

The Program uses pheasant harvest estimates from an annual hunters' survey to monitor long-term pheasant population trends. This is reasonable because harvest estimates trend similarly to roadside counts in states that measure both. The Program will need to develop on-site population monitoring to help assess its habitat enhancement efforts.

Scope and Methodology

We audited the performance of the Eastern Washington Pheasant Enhancement Program from its inception in 1997 through 2008. The audit focuses on whether the Program is meeting Department goals and Program objectives, as well as whether it uses best practices to meet those goals and objectives. Our recommendations are limited to the Eastern Washington Pheasant Enhancement Program; we did not audit the Western Washington Pheasant Program.

We reviewed published research on pheasants and pheasant programs in other states to identify best practices. We identified state legislation relevant to Department goals and the Program and its objectives, and determined whether legislation, goals and objectives are aligned with best practices. We interviewed Program staff; reviewed Department and Program reports; reviewed historical data regarding the numbers of pheasant hunters, harvest and releases; and analyzed Program activities and the availability and quality of data that the Program needs to measure success.

The Department provided the data we used to portray pheasant harvest and hunter trends. The Department estimates these numbers based on responses to its annual hunter survey. We analyzed the Department's methodology and are making a recommendation that should reduce the level of uncertainty of harvest estimates. The Department uses this data in its own reports and publications and acknowledges

that the pheasant harvest and number of hunters have declined significantly over the years. *Based on this, we determined that our use of the data would not change our audit conclusions.*

We conducted this performance audit in accordance with generally accepted government auditing standards, prescribed by the U.S. Government Accountability Office. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

In addition, we addressed the nine elements contained in Initiative 900, detailed in Appendix A.

Background

The Legislature created the Department in 1993 by combining the Department of Fisheries and the Department of Wildlife. The supervising authority for the Department is the Fish and Wildlife Commission, which is composed of nine citizens, appointed by the Governor, who serve staggered six-year terms. The Commission appoints the Department Director; establishes Department policy; and monitors the Department's implementation of the goals, policies and objectives the Commission established.

The Department has a dual mission to protect, restore and enhance fish and wildlife and their habitats while providing sustainable fish and wildlife-related recreational and commercial opportunities. The Commission established goals to assist the Department in achieving this mission:

- Achieve healthy, diverse and sustainable fish and wildlife populations.
- Ensure sustainable fish and wildlife opportunities for social and economic benefit.
- Ensure effective use of current and future financial resources in order to meet the needs of the state's fish and wildlife resource for the benefit of the public.
- Implement processes that produce sound and professional decisions, cultivate public involvement and build public confidence and agency credibility.
- Promote development and responsible use of sound, objective science to inform decision-making.

The Department's six-year Game Management Plans include species-specific management objectives. The Department recently released a Game Management Plan for 2009-2015 that included revised objectives pertaining to the Eastern Washington Pheasant Enhancement Program. The Program, along with other game species programs, periodically reports to the Commission, the Department Director and the public on its progress in meeting its objectives. The most recent report was released in 2007.

The ring-necked pheasant is the most popular game bird in Washington. According to the Department, more than 25,000 hunters harvested an estimated 94,000 pheasants in Washington in 2007. Although considerable, this is well below levels in the mid-1980s and prior, when the annual harvest was consistently more than 250,000, and often more than 500,000. In response to the decline, the 1997 Legislature created the Eastern Washington Pheasant Enhancement Program to increase hunting opportunities by requiring the release of pen-reared rooster pheasants on

sites accessible for public hunting. The legislation created the Eastern Washington Pheasant Enhancement Account and authorized the Department to use a portion of these funds to pay landowners to enhance habitat on public or private lands. The legislation also required that at least 80 percent of the money in the account be used to purchase or produce pheasants.

Pheasants were introduced to North America from Asia. They require a blend of habitats for nesting, roosting (sleeping and resting) and feeding. Uncultivated vegetation near cultivated crops is ideal pheasant habitat, but pastures, wetlands and streamside areas also provide suitable habitat. Adults feed primarily on cultivated grains and wild fruits, but will also eat weed and grass seeds, particularly in winter. Hens, chicks and juveniles consume insects during the breeding season. Pheasants are vulnerable in winter because concealing cover is scarcer and pheasants must forage for food at greater distances, exposing them to predators and harsh winter weather. Because pheasants have adapted well to the land on the edges of cultivated agricultural areas, populations have declined due to changes in agricultural practices that reduce the amount of uncultivated vegetation in the vicinity of cultivated crops. These changes have included farmers' use of machinery that cuts wheat stubble shorter and leaves less grain on the ground following harvest. The shorter stubble reduces protective cover and less grain reduces the food supply.

Commendations

In 2009, the Department supported successful legislation that rescinded the part of the law that required at least 80 percent of Eastern Washington Pheasant Enhancement Account funds to be used for pheasant rearing and release. This gives the Program more flexibility to implement effective pheasant management strategies. The Program is now working with other state and federal programs to leverage its limited resources with programs that have complementary objectives.

Partnering with other organizations to optimize the use of limited resources and to focus habitat enhancement efforts in select areas rather than to spread resources too thinly is a best practice. The Program has done both of these, by partnering with other organizations that participate in activities that complement the Program's habitat enhancement objectives and by concentrating its efforts in a designated pheasant focus area in Southeastern Washington.

Audit Results and Recommendations

Issue 1: Pheasant populations and hunting opportunities have declined due to loss of habitat.

Prior to 2009, state law required that at least 80 percent of the funds allocated to the Program be spent on purchasing or producing pheasants. This restricted the Department's ability to fund habitat enhancement, which is the most critical factor in sustaining long-term pheasant populations. It also hampered the Department's ability to meet its goals to preserve, protect, perpetuate and manage the pheasant population in Eastern Washington. Passage of the legislation puts the Program in a better position to sustain population and maximize hunting opportunities in Eastern Washington by reallocating resources to activities based on wildlife science, federal programs and hunter priorities. Since most good pheasant habitat is on private lands, Program efforts to increase access to this land will help increase hunting opportunities.

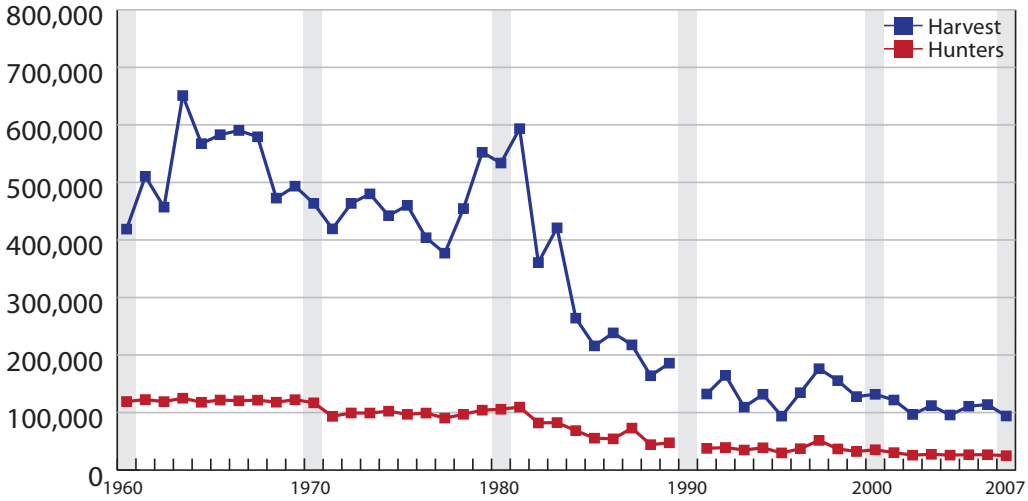
Harvests have declined from a peak of 651,000 pheasants to less than 100,000 annually.

Maintaining the delicate balance between public demand for recreational hunting and sustaining populations is not difficult in the case of pheasants, which naturally repopulate an area following hunting, so long as only roosters are harvested and habitat is maintained.

However, habitat in Washington was lost over time and pheasant harvest declined statewide, from a peak of 651,000 in 1963 to less than 100,000 in 1995.[1] This was due in part to nationwide changes in farming practices that left less uncultivated edges available for pheasant cover and less waste grain on the ground for food. The number of pheasant hunters in Washington declined similarly, from more than 90,000 annually through the 1970s, to less than 30,000 in 1995. Although the decrease in hunter activity may be partially the result of nationwide declines in hunter interest, the magnitude of the decline suggests that lack of pheasant may have contributed to the decrease in pheasant hunting. These trends are illustrated in Exhibit 1.

1 Harvest and hunter trends are similar in Eastern and Western Washington. The Department uses estimates of harvest counts as a substitute for population because it does not perform actual population counts. This issue is discussed in Issue 2, Data Management.

Exhibit 1
Pheasant Harvest and Number of Hunters Has Declined Statewide



Source: Washington Department of Fish and Wildlife

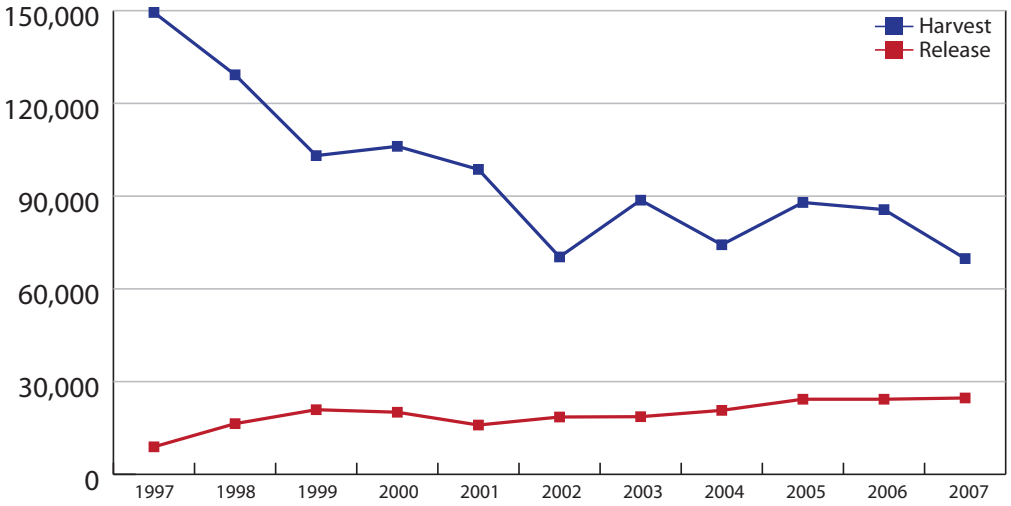
Note: Data for 1990 is not available. See limitation on data in Scope and Methodology section on Page 1.

The Eastern Washington Pheasant Enhancement Program has not achieved its goal to stem the decline in pheasant populations.

In response to declining pheasant populations and hunting opportunities, the 1997 Legislature created the Eastern Washington Pheasant Enhancement Program to increase hunting opportunities by focusing on the release of pen-reared rooster pheasants on sites accessible for public hunting. Because pen-reared pheasants do not have the natural instincts to find food in the wild and avoid predators, they have a much lower survival rate than wild birds. The Department releases pen-reared pheasants to improve hunting opportunities, not as a population management tool. Habitat enhancement, on the other hand, supplies pheasants with the food and cover needed for survival and has a greater potential effect on sustaining longer-term populations.

Comparing pheasant releases to harvest in Eastern Washington (Exhibit 2) presents compelling evidence that spending most of the available funds on pheasant rearing and releases has had little, if any, effect on sustaining pheasant populations over the long term.

Exhibit 2
Eastern Washington Pheasant Harvest Declined Although Releases Increased



Source: Washington Department of Fish and Wildlife

Note: See limitation on data in Scope and Methodology section on Page 1.

During the first six years of the release program (1997-2002), harvest continued to decline significantly. Releases have continued to increase, but harvest has at best stabilized. Because harvest would have rebounded quickly if pheasant releases had an effect on population, we can conclude the pheasant release program has had no long-term effect on population. In addition, the gap between pheasant releases and harvest suggests greater hunting opportunities exist for wild pheasant than for released pheasant in Eastern Washington. Because the Department's hunter surveys indicate some continuing support to fund pheasant releases, limiting releases to peak periods – such as the start of the hunting season, holidays and youth hunts – would be a more effective use of Program resources.

Habitat is the most important factor in sustaining pheasant populations.

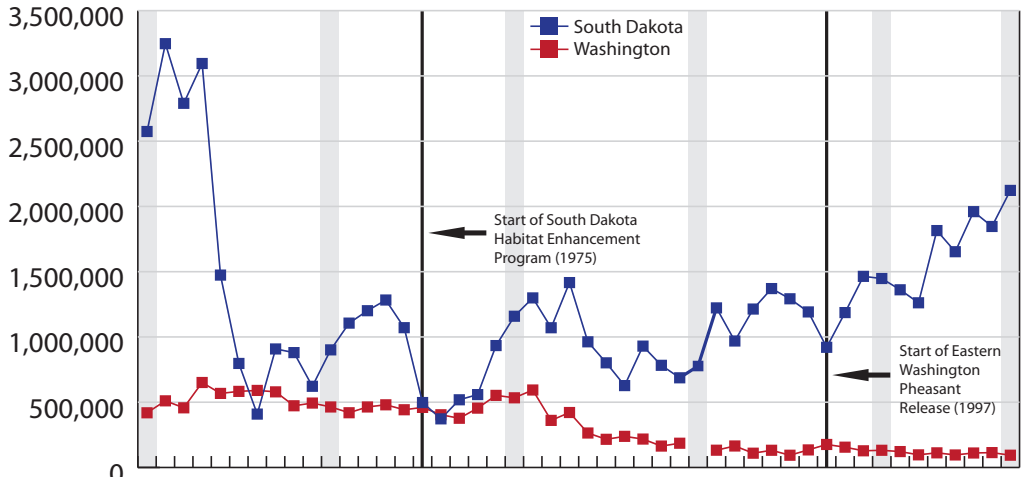
The pheasant population in a given area depends on habitat and weather. The effects of weather are short term, causing pheasant populations to fluctuate annually. The critical factor for long-term populations, therefore, is good quality habitat for breeding, avoiding predators and winter survival.

South Dakota is a leader in pheasant management, which includes a focus on habitat enhancement. Comparing South Dakota's pheasant harvests as an index of population with Washington provides further evidence of the advantage of focusing on habitat enhancement. Having found that pheasant release programs were either ineffective or cost-prohibitive, South Dakota discontinued releases. South Dakota has instead focused on habitat enhancement since 1975. Funded by a special pheasant stamp, spending on pheasant habitat in South Dakota has averaged over $550,000 per year. In comparison, the Program manager estimates that expenditures on pheasant habitat in Eastern Washington have averaged approximately $165,000 per year since Program inception, including $11,000 per year from the Eastern Washington Pheasant Enhancement account, while expenditures for pheasant rearing and release have

averaged $242,000 per year. While pheasant populations have decreased significantly in Eastern Washington, they have rebounded in South Dakota following a steep decline during the mid-1960s (Exhibit 3). South Dakota officials attribute their stable pheasant populations to "habitat quality and quantity."

South Dakota's climate and abundance of ideal pheasant habitat provide better conditions for pheasant than is found in Eastern Washington, so the effects of shifting expenditures from pheasant rearing to habitat will likely be less pronounced in Eastern Washington than in South Dakota. Development of suitable habitat and resulting growth in pheasant population may take several years to achieve because Eastern Washington receives less rainfall than South Dakota.

Exhibit 3
South Dakota's Pheasant Harvest Increased While Washington's Decreased



Source: Washington Department of Fish and Wildlife and South Dakota Division of Wildlife

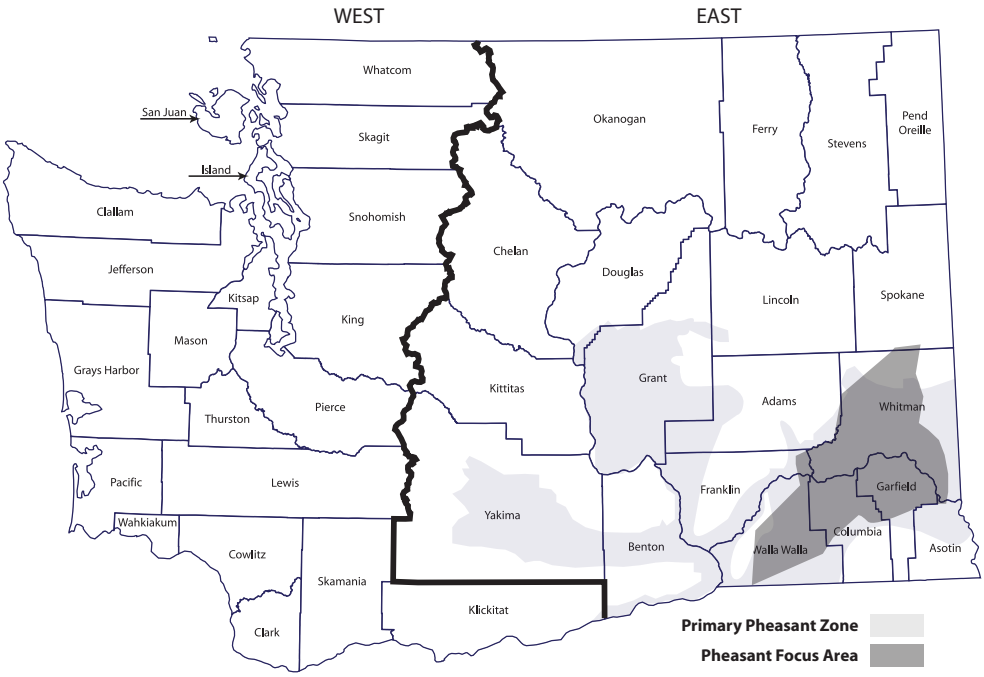
Note: Data for 1990 is not available. See limitation on data in Scope and Methodology section on Page 1.

The Program has leveraged its limited funding by partnering with others to focus its habitat enhancement efforts.

Program staff work with other organizations that have complementary objectives, thereby effectively leveraging limited Program resources. In partnership with federal programs such as the Conservation Reserve Program, they engage in activities that include enhancing habitat and increasing access to privately owned lands for public hunting within the Department-designated Eastern Washington primary pheasant zone. The Program further optimizes its resources by concentrating its efforts in the pheasant focus area in Southeastern Washington, which includes four counties: Whitman, Garfield, Columbia, and Walla Walla. The Department identified this area based on three criteria:

- Cost of improving habitat on nonirrigated farmland is relatively low compared to irrigated agricultural areas.
- Annual rainfall is conducive to producing quality habitat without irrigation.
- Availability of Farm Bill programs such as the Conservation Reserve Program.

Exhibit 4
Eastern Washington Primary Pheasant Zone and Pheasant Focus Area



Source: Department of Fish and Wildlife

Two recent activities illustrate the Program's partnering efforts:

- The Program manager participated in a Department effort to secure state funding for a land purchase in the pheasant focus area. The primary objective was to protect threatened and endangered species, but the land also provided excellent pheasant habitat.
- The Department worked with the state offices of the U.S. Natural Resource Conservation Service and the U.S. Farm Services Agency to change the Conservation Reserve Program in Washington to encourage CRP-participating land owners to provide suitable pheasant habitat. This should help make up for the loss of CRP-enrolled acreage in Eastern Washington, which has declined in recent years due to record high wheat and alfalfa prices.

The Program can augment its successful habitat enhancement efforts by reallocating pheasant release funds and expanding its partnerships.

Reallocating a portion of funds spent on pheasant rearing would offer the Program the opportunity to expand these efforts, increasing the likelihood that the Program can meet the Department's dual mandates to sustain the pheasant population, while attempting to maximize public recreational hunting opportunities.

The Program focuses its habitat enhancement activities in the pheasant focus area, which has been a judicious use of resources. The 2009-11 state operating budget appropriated $100,000 to enhance pheasant habitat on public and private lands in Grant, Franklin and Adams Counties. These counties are mostly outside of the pheasant focus area but within the primary pheasant zone.

Some areas within the primary pheasant zone are targeted by other organizations for ecosystem and/or habitat conservation. Besides farmland and pasture, these include wetlands, shrub-steppe and grassland, which have all been identified as high

priority landscapes for protection and restoration and can also provide high-quality pheasant habitat. These programs may offer opportunities for leveraging funds and cooperatively enhancing and maintaining pheasant habitat on a landscape scale, avoiding habitat fragmentation.

The following programs are operating within the pheasant enhancement area and may offer additional opportunities for partnership:

- The Nature Conservancy has purchased more than 30,000 acres in the Moses Coulee and Beezley Hills areas to preserve shrub-steppe. Moses Coulee borders the Department-designated primary pheasant zone, and Beezley Hills is within it. This protected acreage could help maintain pheasant habitat on contiguous areas, increasing natural pheasant populations.
- The Office of Farmland Preservation, in the State Recreation and Conservation Office, promotes conservation practices on working farms. Farmland preservation grants may be used to enhance ecological functions, including habitat, that provide benefits to wildlife.
- The state Department of Natural Resources manages 1.1 million acres of agricultural land and grasslands and has more than 47,000 acres enrolled in the Conservation Reserve Program, including 7,873 acres in the pheasant focus area, and 10,198 acres in Adams, Franklin and Grant Counties. Because Natural Resources promotes sustainable use of the lands it manages, its CRP-enrolled parcels may be appropriate for habitat enhancement pilot projects.
- At the state level, the Washington Biodiversity Council released the Washington Biodiversity Conservation Strategy in December 2007. The strategy's guiding principles include improving coordination among federal, state and local government; taking an ecosystem approach; and active stewardship by private landowners. Lands within the primary pheasant zone that are categorized as significant in the strategy may offer opportunities for cooperative management for biodiversity and habitat.

Landowner participation in hunter access programs has been limited.

In addition to high-quality pheasant habitat, access to privately owned lands for pheasant hunting is important to the Department's goal of maximizing hunting opportunities because most pheasant hunting takes place on privately owned lands.[2] South Dakota has increased its focus on public access to private lands since 1997, spending an average of $632,000 per year on access from 1997 to 2001. As can be seen in Exhibit 3, pheasant harvests have been increasing at a faster rate in South Dakota since 1997, when it began to increase this emphasis. The Washington Department of Fish and Wildlife's Partnerships for Pheasants Program has partnered with private landowners to open approximately 6,000 acres to public hunting within the pheasant focus area. Participation by private landowners has been limited because some have concerns about uncontrolled access to their lands. Landowners in the pheasant focus area who were interviewed stated participation likely would increase if the Department limited the number of hunters accessing the property or required hunters to obtain written permission prior to going onto the land. The Program has been evaluating changes to access programs that consider these concerns while offering reasonable accommodation to the public.

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2 Seventy-five percent of the Eastern Washington pheasant hunters responding to a Department-sponsored survey in 2008 reported hunting on private lands. An earlier survey in 1997 reported that 76 percent of hunters' time was spent on nonpublic lands.

A new federal program offers the opportunity to expand habitat enhancement while providing public access on privately owned lands.

The federal Voluntary Public Access and Habitat Incentive Program (also known as "Open Fields") will provide grants to state and tribal governments to encourage owners and operators of privately held farm, ranch and forest land to voluntarily make it available for access to hunting or fishing. The Eastern Washington Pheasant Enhancement Program is a strong contender for Open Fields funding because it already has habitat and access programs, and its Partnership for Pheasants program has similar objectives. Funds now used for pheasant rearing and releases could be reallocated to provide matching funds, improving the chances of selection for a grant. With $50 million of funding authority over a four-year period, Open Fields could significantly increase the acreage of private land that is managed for pheasant habitat and available for public access in Eastern Washington.

Recommendations

Now that the Program's funding restrictions have been rescinded, we recommend the Department take the following actions to ensure it meets the goals of the Eastern Washington Pheasant Enhancement Program.

Recommendation 1

The Program should reallocate funds to habitat enhancement and develop pilot projects to demonstrate the effectiveness of specific habitat enhancement methodologies. A portion of reallocated funds could be used as matching funds for federal Voluntary Public Access and Habitat Enhancement Program grants. The Program should continue to emphasize the pheasant focus area, but also consider areas within the larger Eastern Washington primary pheasant zone for additional projects. Department-owned or -managed lands and Natural Resources-managed lands enrolled in the Conservation Reserve Program may offer flexible management options for establishing habitat improvement demonstration areas.

Recommendation 2

The Program should identify and pursue additional opportunities for partnering with others to leverage habitat enhancement funding. The Program should pursue partnerships with conservation organizations and consider opportunities outside of the pheasant focus area but within the primary pheasant zone to preserve and restore landscapes such as wetlands, shrub-steppe, grasslands and working farms.

Recommendation 3

The Department should increase pheasant hunting opportunities on private lands by addressing landowner concerns. The Department should develop guidelines that reasonably limit the number of hunters and access hours without compromising public access objectives. Requiring written permission may be acceptable if the Department can ensure that landowners are not showing favoritism.

Recommendation 4

The Department should scale down pheasant releases in Eastern Washington with the goal of limiting releases to specific high-demand events such as youth hunts and holidays. Because pen-reared pheasants are easy targets for predators and do not sustain populations over time, they should only be released just prior to a limited number of events that attract large numbers of hunters. The Department should scale down pheasant releases at a rate that accommodates the needs of hunters while wild pheasant populations rebound.

Recommendation 5

The Department should provide the legislature with evidence that reallocating funds from pheasant releases to habitat enhancement and hunter access is an effective use of resources. The Department's annual report to the Legislature should focus on progress toward achieving the activities and benchmarks already identified in the 2009-2015 Game Management Plan, including:

- Developing a method to determine the degree to which Eastern Washington pheasant releases impact overall program objectives, including pheasant harvest and hunting opportunities.
- Doubling the number of acres of quality pheasant habitat by 2014.
- Developing annual reports that describe efforts to evaluate habitat enhancement efforts on pheasant population levels.
- Monitoring pheasant populations.

The annual Pheasant Status and Trend reports provide a good template for reporting to the Legislature. In its first report to the Legislature, the Department should include a plan, developed in consultation with stakeholders, on how it intends to scale down pheasant releases in Eastern Washington and a discussion of adjustments it intends to make in its other activities.

Issue 2: The Eastern Washington Pheasant Enhancement Program does not have the data it needs to measure the effectiveness of its habitat enhancement efforts.

The Eastern Washington Pheasant Enhancement Program needs reliable information on pheasant population trends, hunter efforts and annual harvest in Eastern Washington to develop strategies and monitor progress on its goals of sustaining the pheasant population while maximizing hunting opportunities. The Program uses estimates of the number of pheasants harvested, based on an annual hunters' survey conducted by the Department, to monitor long-term population trends. Our analysis found it reasonable to use pheasant harvest estimates to track population trends. However, changing the survey methodology would reduce the degree of uncertainty in the Department's harvest estimates. The Program has just begun tracking the number of pen-reared pheasants that are harvested to determine the effectiveness of its pheasant release program. The Program does not currently monitor the effects of its habitat enhancement efforts on the pheasant population, but has identified this as a Program objective in the 2009-2015 Game Management Plan.

The use of harvest estimates to monitor population trends is reasonable, but the precision of the Department's harvest estimates is low.

The Department uses pheasant harvest estimates to monitor long-term population trends. These estimates are based on an annual survey of a randomly selected group of small game hunters. Respondents report by county and species the small game they harvested and the number of days they hunted. The Department uses the survey results to estimate the total number of pheasants harvested based on the proportion of small game hunters that hunted pheasant in Eastern Washington, which is used to allocate funds to the Program.

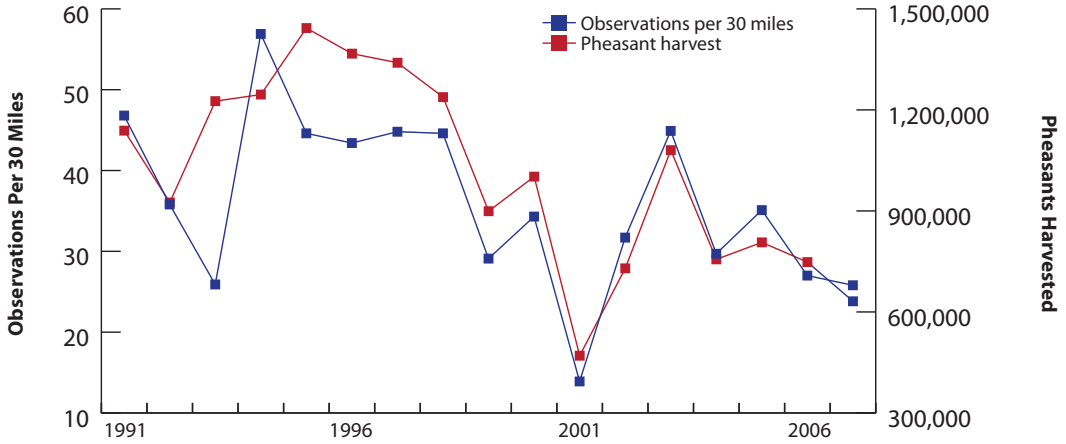
Oregon, Idaho and Midwestern states that have large pheasant populations[3] make widespread use of population counts taken along roadsides.[4] To yield consistent results, these counts are taken by driving routes at certain times of day under specific weather conditions when pheasants are easy to count. States use these counts to predict how successful the upcoming pheasant hunting season will be and to track long-term population trends. The Department conducted roadside pheasant counts through 1998 but discontinued most of them due to budget constraints. It continues to conduct limited roadside counts in Grant and Adams Counties, but does not use these counts to estimate the harvest. The Program's reliance on harvest data for tracking statewide population trends may be appropriate if the harvest data closely tracks population counts and if it is reasonably accurate. To determine the reasonableness of using harvest data instead of population counts, we reviewed roadside count and harvest data for South Dakota, Iowa and Kansas, which have been collecting this data annually for many years. The data showed that roadside count and harvest data have similar variation over time. The

3 We analyzed information on the following Midwestern states: Iowa, Kansas, Minnesota, Missouri, Nebraska, South Dakota and Wisconsin.

4 In Iowa, for example, biologists and conservation officers drive 30 miles along designated backroads in August and count the number of pheasants and other small game they see. They drive 210 routes statewide.

following graphical comparison of Iowa's roadside counts and pheasant harvest confirms that pheasant harvest can be used to estimate population trends.

Exhibit 5
Iowa Roadside Pheasant Counts and Harvest Trend Similarly



Source: Iowa Department of Natural Resources

The Department categorizes hunters by harvest in its small-game hunter survey sampling but does not gain full advantage of this categorization.

The Department estimates the number of pheasant harvested by obtaining data from hunters at the beginning and end of the season. When hunters buy a license that permits small-game hunting, the Department asks how many small game, including pheasants, they harvested the previous year and categorizes the hunter into one of four groups, based on their response. At the end of the hunting season, the Department randomly selects approximately 25,000 small-game hunters, including a portion from group, for a survey that asks about their harvest of small game by species and county. The Department then extrapolates a harvest estimate for each species and each hunter group based on respondents' reported harvest and the percentage of hunters in each group who responded to the survey.

This categorization is done to produce statistically improved harvest estimates. In theory, these improvements result from surveying a larger percentage of the groups with fewer hunters, and from surveying a higher proportion of hunters who harvest more game. In Exhibit 6, which shows the number of hunters and proportion surveyed in each group, groups 2 and 3 have these attributes. However, because the Department does not survey a higher proportion of hunters in these groups, it does not achieve the potential advantages of this methodology.

Exhibit 6
Proportion of Small-Game Hunters Surveyed by Group
2008 Small-Game Hunters' Survey

Harvest Reported When Buying a Small-Game Hunter License			**Small-Game Hunter Survey**	
Group	Harvest Reported	Number of Hunters in Group	Hunters Surveyed	
			Number	Percentage
0	0	67,471	21,456	31.8%
1	1 to 5	12,536	1,800	14.4%
2	6 to 20	5,828	1,312	22.5%
3	21+	2,607	632	24.2%

Source: Department of Fish and Wildlife

The Program can now estimate the proportion of harvested pheasants that are pen-reared.

Although pen-reared pheasants are tagged prior to release, the small-game hunter's survey did not distinguish between wild and pen-reared pheasant prior to 2009. Having this information would help the Program interpret harvest data to determine if the release program is a viable method of increasing hunting opportunities and pinpoint specific situations in which pheasant releases would be effective.

The Program does not monitor the effects of habitat enhancement on pheasant population or harvest.

Wildlife biologists agree that high-quality pheasant habitat is the most important factor in maintaining pheasant populations. Pheasants need a blend of habitat types for foraging, nesting and winter survival. Because of these complexities, Program staff should monitor pheasant habitat enhancement projects for effectiveness.

Pheasant harvest data are reported at the county level but are of limited use for measuring habitat enhancement success, which often takes place at a more localized level. The 2009-2015 Game Management Plan calls for monitoring pheasant population status within the pheasant focus area and gauging how habitat improvements are affecting population trends. The lack of baseline data, other than harvest estimates, will continue to make it difficult to quantify progress on meeting its objectives.

Data from the North American Breeding Bird Survey may be a cost-effective way to establish a baseline level of pheasant abundance in priority habitat areas, and possibly for tracking progress over time. The survey, sponsored by the U.S. Geological Survey and the Canadian Wildlife Service, uses a highly standardized protocol to measure population trends and abundance of species. More than 270 scientific publications have relied heavily, if not entirely, on the survey's data, including a report on population effects due to changes to the Conservation Reserve Program. The researcher of this report was satisfied with the robustness of the surveying protocols. The U.S. Fish and Wildlife Service also uses the survey's trends as one indicator to assess bird conservation priorities. There are seven routes in the survey that are within or adjacent to the Eastern Washington primary pheasant zone where one observer has

counted pheasants annually since 1992 or earlier[5]. These routes provide an excellent opportunity for the Program to use data that is already available to monitor pheasant population trends.

Recommendations

We recommend the Department take the following actions to ensure the Program has the data available to measure progress on its habitat enhancement efforts.

Recommendation 6

The Department should continue to survey approximately 25,000 small game hunters but should survey a higher proportion of hunters in the groups that harvest more game. By surveying a higher proportion of hunters in groups 2 and 3, the Department can reduce uncertainty in its harvest estimates without needing to increase the number of hunters in its survey.

Recommendation 7

The Program should monitor pheasant populations on a local basis to measure the success of its habitat enhancement efforts and to strategize various methods to sustain pheasant populations and increase hunting opportunities. The Program should develop performance measures to evaluate the effects of its efforts on the pheasant population. This information should be included in the Program's annual report to the Legislature. The Program should analyze whether the Breeding Bird Survey data may be useful in developing its pheasant population monitoring protocols and use the data if it is found to be potentially useful.

Recommendation 8

The Program should analyze the pheasant harvest and roadside count data for Grant and Adams Counties and determine the feasibility of using these data sources. County-level harvest estimates, Department-led roadside counts, and Breeding Bird Survey data are all available annually. Cross-validating this data over time may shed light on its utility for measuring population trends on a county or local basis.

Recommendation 9

The Program should use the data it has started collecting in 2009 on harvest of released pheasants to analyze the effectiveness of pheasant releases in Eastern Washington. The Program should use this information as evidence of the preference for funding habitat enhancement and hunter access instead of pheasant releases.

5 There are other routes that either have gaps in coverage or were not counted by the same individual each year.

APPENDIX A: Initiative 900 Elements

Cross-reference of where the nine elements of I-900 are addressed in the report.

I-900 Element	Issue 1	Issue 2
1. Identification of cost savings	None	None
2. Identification of services that can be reduced or eliminated	√	None
3. Identification of programs or services that can be transferred to the private sector	Not applicable	Not applicable
4. Analysis of gaps or overlaps in programs or services and recommendations to correct gaps or overlaps	√	√
5. Feasibility of pooling information technology systems within the department	Not applicable	Not applicable
6. Analysis of the roles and functions of the department, and recommendations to change or eliminate departmental roles or functions	√	√
7. Recommendations for statutory or regulatory changes that may be necessary for the department to properly carry out its functions	None	None
8. Analysis of departmental performance data, performance measures, and self-assessment systems	√	√
9. Identification of best practices	√	√

APPENDIX B: Department's Response

State of Washington
DEPARTMENT OF FISH AND WILDLIFE

Mailing Address: 600 Capitol Way N • Olympia, WA 98501-1091 • (360) 902-2200, TDD (360) 902-2207
Main Office Location: Natural Resources Building • 1111 Washington Street SE • Olympia, WA

December 4, 2009

The Honorable Brian Sonntag
State Auditor
Post Office Box 40021
Olympia, Washington 98504-0021

Dear Auditor Sonntag:

Thank you for the opportunity to respond to the performance audit of the Washington Department of Fish and Wildlife's (Department) Eastern Washington Pheasant Enhancement Program. The department strongly supports the use of performance audits as an important tool to improve state government, which is why we have worked so closely with the Auditor's staff on this and past performance audits.

We agree with both issues stated in the report. The first issue confirms that pheasant populations have declined due to loss of habitat. The second issue recognizes that the department does not have adequate data to measure habitat effectiveness efforts. With the recent shift of emphasis away from raising and releasing pheasants, we will be focusing our efforts on habitat enhancement, improving harvest opportunity, and developing better ways to measure the impacts of our work.

We appreciate the Auditor's commendation on the department' s successful efforts to rescind the part of the law that required the department to spend at least 80% of the Eastern Washington Pheasant Enhancement Account funds for pheasant rearing and release. This allows the state's limited resources to focus on pheasant habitat and provides the flexibility to implement more effective pheasant management strategies.

Enclose is the Department's response to the audit. We will track and report our progress on completing these tasks to the Governor.

Sincerely,

Phillip Anderson
Director

Enclosure

cc: Kimberly Dutton Cregeur, Office of the Governor

Official Response: Performance Audit of the Washington State Department of Fish and Wildlife
From the Washington State Department of Fish and Wildlife
December 4, 2009

Issue 1: Pheasant populations and hunting opportunities have declined due to loss of habitat.

The Department of Fish and Wildlife concurs with Issue 1 as presented. Research conducted throughout pheasant range shows that creating and maintaining quality habitat is the most effective way to increase and maintain pheasant populations and associated recreational opportunity.

Recommendation 1: The Program should reallocate funds to habitat enhancement and develop pilot projects to demonstrate the effectiveness of specific habitat enhancement methodologies.

AGENCY RESPONSE:

The Department of Fish and Wildlife concurs with this recommendation. Using a phased reduction will allow the Department to strategically reduce releases, increase habitat enhancement efforts, and inform the public of our actions. Funding allocated to habitat enhancement will be used to help address Objective 98 in the 2009-2015 Game Management Plan; to double the amount of quality pheasant habitat in the Pheasant Focus Area by 2015.

Action Steps and Timeframe:

- Reduce the amount of funding devoted to purchasing pen-raised pheasants by at least 10% per year and reallocate those funds to habitat enhancement activities. The Department will begin reallocating funds beginning in 2010 with an ultimate goal of spending the majority of funds on habitat improvement activites.

- Develop specific habitat enhancement prescriptions for key habitats. General prescriptions have been developed and more refined prescriptions are being developed. Preliminary results should be available by 2011.

- Establish demonstration habitat plots on private or public lands by 2011. The Department began working on establishing demonstration plots in the fall of 2009.

Official Response: Performance Audit of the Washington State Department of Fish and Wildlife
From the Washington State Department of Fish and Wildlife
December 4, 2009

Recommendation 2: The Program should identify and pursue additional opportunities for partnering with others to leverage habitat enhancement funding.

AGENCY RESPONSE:

The Department of Fish and Wildlife concurs with this recommendation. Partnerships with federal and state agencies, as well as non-governmental organizations, increase the effectiveness of limited state resources. Partnerships can improve the Department's ability to work with landowners to improve habitat. There are also opportunities to use limited state resources to provide incentives to maximize the value of United States Department of Agriculture (USDA) Farm Bill programs that are designed to improve fish and wildlife habitat (e.g., Conservation Reserve Program (CRP)), or to improve public access in conjunction with habitat enhancements.

Action Steps and Timeframe:

- Annually pursue contribution agreements with the Natural Resources Conservation Service (NRCS) to increase habitat enhancement opportunities. A pilot agreement was reached in the last quarter of the 2009 Federal Fiscal Year. Additional agreements are actively being pursued.

- Pursue granting opportunities with the USDA and others. Granting rules for the USDA Voluntary Public Access Program (known as Open Fields) are due to be released in early 2010. Once a granting opportunity is available, the Department will pursue a grant with pheasant habitat and associated public hunting access as a component.

- Develop cost-share habitat and/or staffing agreements with Pheasants Forever, local Conservation Districts, or other entities on an annual basis.

Recommendation 3: The Department should increase pheasant hunting opportunities on private lands by addressing landowner concerns.

AGENCY RESPONSE:

The Department of Fish and Wildlife concurs with this recommendation. Landowner concerns vary widely and the Department must make sure that accommodations made to address the landowner's concerns do not greatly impact general public benefit. Increasing pheasant hunting opportunity is an objective identified in the 2009-2015 Game Management Plan (Objective 100).

Action Steps and Timeframe:

- Document rationale for landowner resistance to public hunting on their property and summarize by 2011 and use the results to help improve hunting access.

Official Response: Performance Audit of the Washington State Department of Fish and Wildlife
From the Washington State Department of Fish and Wildlife
December 4, 2009

- Develop quality private lands hunting opportunities through a variety of means. Investigate the feasibility of developing a hunting reservation system that addresses landowner concerns as well as the need for the Department to provide public benefit.

Recommendation 4: The Department should scale down pheasant releases in Eastern Washington with the goal of limiting releases to specific high-demand events such as youth hunts and holidays.

AGENCY RESPONSE:

The Department of Fish and Wildlife concurs with this recommendation. We think that a phased approach to the reduction is important so the decrease in releases and the increase in habitat enhancement spending are strategic and address the highest and best use of both released birds and habitat funding.

Action Steps and Timeframe:

- By 2011, utilize the Upland Game Advisory Committee and Regional WDFW staff to help identify the most effective release areas and timeframes. Annually coordinate reductions with identified priorities.

Recommendation 5: The Department should provide the legislature with evidence that reallocating funds from pheasant releases to habitat enhancement and hunter access is an effective use of resources.

AGENCY RESPONSE:

The Department of Fish and Wildlife concurs with this recommendation. We intend to provide reports as required by legislation. As stated in the program audit report, habitat enhancement provides the best opportunity to increase pheasant populations. Hunter participation tends to closely follow population trends.

It is important to note that habitat enhancements do not create immediate results, especially on a large scale. It will take time to implement habitat improvement projects (especially with existing staffing limitations) and have those improvements affect local pheasant populations. As habitat improvements are made across a larger area, more far-reaching effects can be made.

Action Steps and Timeframe:

- Create pheasant status reports on an annual basis. These reports will include habitat enhancement efforts, the results of population monitoring efforts, and a discussion on program effectiveness.

Official Response: Performance Audit of the Washington State Department of Fish and Wildlife
From the Washington State Department of Fish and Wildlife
December 4, 2009

Issue 2: The Eastern Washington Pheasant Enhancement Program does not have the data it needs to measure the effectiveness of its habitat enhancement efforts.

The Department of Fish and Wildlife concurs with Issue 2 as presented. The precision of current harvest estimates is not adequate to measure the effectiveness of habitat enhancement efforts.

Recommendation 6: The Department should continue to survey approximately 25,000 small game hunters but should survey a higher proportion of hunters in the groups that harvest more game.

AGENCY RESPONSE:

One of the Department's goals is to improve the precision of our pheasant harvest and hunter participation estimates, specifically in areas where it will help us measure the effectiveness of habitat enhancement efforts. We are not sure if increasing the proportion of hunters in the groups that harvest more game will accomplish that goal, but we are willing revisit our allocation formulas to see if we are allocating samples properly, and adjust if we find that changes will improve our precision.

Action Steps and Timeframe:

- Review small game harvest survey protocols to determine if changes to sampling or stratification will improve precision. Implement identified changes by 2011.

Recommendation 7: The Program should monitor pheasant populations on a local basis to measure the success of its habitat enhancement efforts and to strategize various methods to sustain pheasant populations and increase hunting opportunities.

AGENCY RESPONSE:

The Department of Fish and Wildlife concurs with this recommendation. As noted in the audit report, hunter harvest is a valid method to index population trends. However, the precision of harvest and hunter participation estimates at the county level should be improved. Funding reductions and changing priorities in the late 1990's resulted in the curtailment of spring crowing counts and summer brood counts. Both of these techniques can be used as an index to population trends.

Action Steps and Timeframe:

- By 2011, modify the small game harvest survey to increase the precision of harvest and hunter participation estimates at the county level. Concentrate efforts in the Pheasant

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December 4, 2009

Focus Area first, and then expand efforts to other important pheasant counties as possible.

- By 2011, consider implementing crowing count and brood count surveys in the Pheasant Focus Area to improve population trend information at the county level or smaller. Survey routes have been identified and a few pilot surveys were conducted in 2009.

Recommendation 8: The Program should analyze the pheasant harvest and roadside count data for Grant and Adams Counties and determine the feasibility of using these data sources.

AGENCY RESPONSE:

The harvest information collected in these counties is collected in the same manner as the remainder of the counties in the state. Additional data analysis for these counties will not reach a different conclusion concerning the usefulness of these data. Since funding is limited, efforts to increase the precision of harvest data and to increase the number of roadside counts (i.e., crowing and brood counts) will first be directed toward making improvements within the Pheasant Focus Area (see Action Steps in Recommendation 7 above).

Recommendation 9: The Program should use the data it has started collecting in 2009 on harvest of released pheasants to analyze the effectiveness of pheasant releases in Eastern Washington.

AGENCY RESPONSE:

The Department of Fish and Wildlife concurs with this recommendation. We began collecting this data in 2009 in an effort to evaluate the effect released birds have on overall harvest estimates. Continuing to collect the data over time should allow us to investigate the impacts, if any, of reduced releases.

Action Steps and Timeframe:

- As part of each year's small game harvest estimation process, develop specific statistics for banded pheasant harvest.

Appendix 2:

2023 Pheasant Status and Trend Report

Pheasant Status and Trend Report

STATEWIDE

SARAH GARRISON, Statewide Small Game Specialist

Introduction

Ring-necked pheasants (*Phasianus colchicus*) were first introduced to Washington from China in 1883. Pheasants were able to thrive in agricultural fields, a habitat generally unsuitable to native galliforms. Agriculture at this time created a patchwork of small fields with diverse cover, slow hay harvest that allowed good nest success, abundant weeds in the crops for brood habitat and winter cover, and abundant waste grain for winter food (National Wild Pheasant Technical Committee [NWPTC], 2021). Pheasant populations peaked around the 1960s then began to decline as grain production increased in the 1970s and agricultural intensification reduced habitat quality by removing perennial cover for nesting, brood rearing, and winter cover (NWPTC, 2021). Pheasants have become an important driver for conservation by motivating the creation of wildlife habitat in agro-ecosystems that benefit a myriad of species, especially grassland birds and pollinators, while controlling soil erosion and improving water quality (NWPTC, 2021).

In Washington, wild pheasant (i.e., not pen-raised) populations occur only in the eastern part of the state due to unsuitable climate and habitat in western Washington. In western Washington, a pheasant release program exists to provide an upland bird hunting opportunity to western Washington hunters. For more information about the pheasant release program, see wdfw.wa.gov/hunting/locations/pheasant-release.

Population Guidelines and Objectives

Management objectives for upland birds, including pheasant, are outlined in the Washington Department of Fish and Wildlife's (WDFW) Game Management Plan (WDFW, 2014). Goals are to bolster pheasant numbers through habitat enhancement to ensure healthy, productive populations for recreation. Additional strategies are described in the National Wild Pheasant Conservation Plan (NWPTC, 2021), which emphasizes the importance of resources such as the Farm Bill and other habitat conservation opportunities, managing fragmented populations and habitats, understanding drivers of hunter participation, showcasing pheasant-related values, and leveraging partnerships across the pheasant range. Washington-specific strategies are also outlined in the meeting summary from the 2003 Pheasant Workshop (WDFW, 2003).

Hunting Seasons and Recreational Harvest

The pheasant harvest season in 2022 began in September with a 2-day statewide youth season followed by a 5-day season for hunters 65 and older and hunters with disabilities. The general pheasant season ran 87 days from mid-October to mid-January in eastern Washington and 68 days from late September to the end of November in western Washington, with a 15-day early December extended season in some areas of western Washington.

For the past two decades, harvest and hunter participation have been estimated based on a survey mailed to a stratified random sample of 25,000 hunters. Beginning in 2022, this mailed survey was replaced with an online survey of all small game license holders. This updated survey has the

advantages of increased sample size and improved stratification. Additionally, a sample of hunters who did not respond to the online survey were called for a follow-up phone survey, which enabled correction for non-response bias. Due to these improvements in the survey and analysis, data from 2022 are more accurate but are not directly comparable to previous years.

During the 2022 season, 35,741 pheasants were released at designated sites in western Washington, and 4028 licenses were purchased for this opportunity. An estimated 3476 hunters (95% CI = 3390 – 3558) pursued pheasant for 30236 (95% CI = 29334 – 31150) days and harvested 24249 (95% CI = 23488 – 25021) birds in western Washington.

Estimates of harvest and hunter participation for the remainder of this report include the following eastern Washington counties: Adams, Asotin, Benton, Chelan, Columbia, Douglas, Ferry, Franklin, Garfield, Grant, Kittitas, Klickitat, Lincoln, Okanogan, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman, and Yakima.

Participation in pheasant hunting peaked in the 1950s, while harvest peaked in the 1960s. Changing farming practices have deteriorated pheasant habitat, resulting in long-term population declines along with a decline in hunting participation (Table 1). During the 2022 season, an estimated 7914 (95% CI = 7365-8491) hunters harvested 23249 (95% CI = 21362-25260) pheasant over 42522 (95% CI =39177-45961) days. Since 1997, rooster pheasants have been released in the fall as part of the state-funded Eastern Washington Pheasant Enhancement Program (EWPEP). Harvest estimates have included both released and wild birds. Therefore, the harvest of wild pheasants is lower than reported above and depicted in Table 1.

Table 1. Estimates of annual pheasant hunters, harvests, and hunting days in eastern Washington averaged over the past two decades.

Decade	Harvests	Hunters	Days
2002 to 2011	71951	24246	*NA*
2012 to 2021	40217	14019	71067

In 2009, the EWPEP was audited at the request of the Legislature. The findings confirmed that WDFW was fulfilling its legislative mandate to release pheasants. Auditors concluded that pheasant populations continued to decline primarily due to loss of habitat and that releasing pen-raised pheasants was not effectively sustaining or improving pheasant populations in eastern Washington. In 2009, the Legislature rescinded the requirement for the program to use 80% of EWPEP funding for purchasing domestically reared pheasants for wild release in order to devote more funding to habitat enhancement projects on public and private lands.

In 2022, WDFW released 9648 pheasants in eastern Washington and is planning to release a similar number in the fall of 2023. Funding that is allocated to habitat enhancements will help address objectives identified in the 2015-2021 Game Management Plan (WDFW, 2014) to increase the amount of quality pheasant habitat in the pheasant focus area.

A primary pheasant management zone was established in Washington, where populations have been historically high. Within this primary zone, WDFW has delineated a southeast Washington pheasant focus area that includes portions of Columbia, Garfield, Walla Walla, and Whitman

counties to focus pheasant management efforts where adequate rainfall (i.e., 14-inches and over) is most conducive to supporting desirable plant communities (Figure 1).

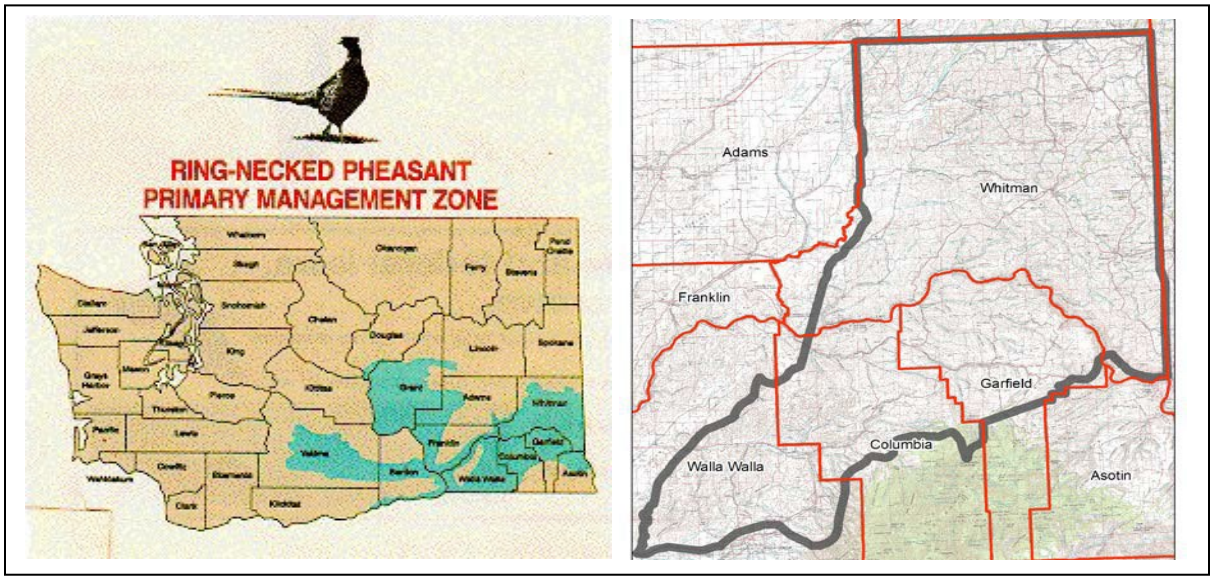

Figure 1: Washington state ring-necked pheasant primary management zone (left) and the southeast Washington Pheasant Focus Area (right).

Population Monitoring

In addition to long-term declines in pheasant harvest, crow counts and brood counts also indicated declines during surveys in the primary management zone from 1982 through 1998. Though these are coarse measures of population trend, they suggest population declines in the range of 5-10% per year in that zone during that period (Rice, 2003). Rice (2003) found that crow and brood surveys were only likely to detect large population changes in the short term. Therefore, these surveys were not considered cost-effective and were discontinued.

In 2022, WDFW initiated public incidental brood surveys for multiple game bird species, including pheasant (wdfw.wa.gov/hunting/management/game-bird-survey). These surveys are modified from a standardized protocol for turkey brood surveys developed by the National Wild Turkey Federation Technical Committee (2019). During the brood survey period of July and August, 10 pheasant observations were reported. Of those, seven observations were of broods. Increased participation in future years will be necessary for this survey to be used as an effective monitoring tool.

North American Breeding Bird Survey (BBS) data indicate pheasant population declines over the past three decades, with stabilization in the last 10 years (Figure 2; Sauer et al., 2020). Results from recent years are not yet available.

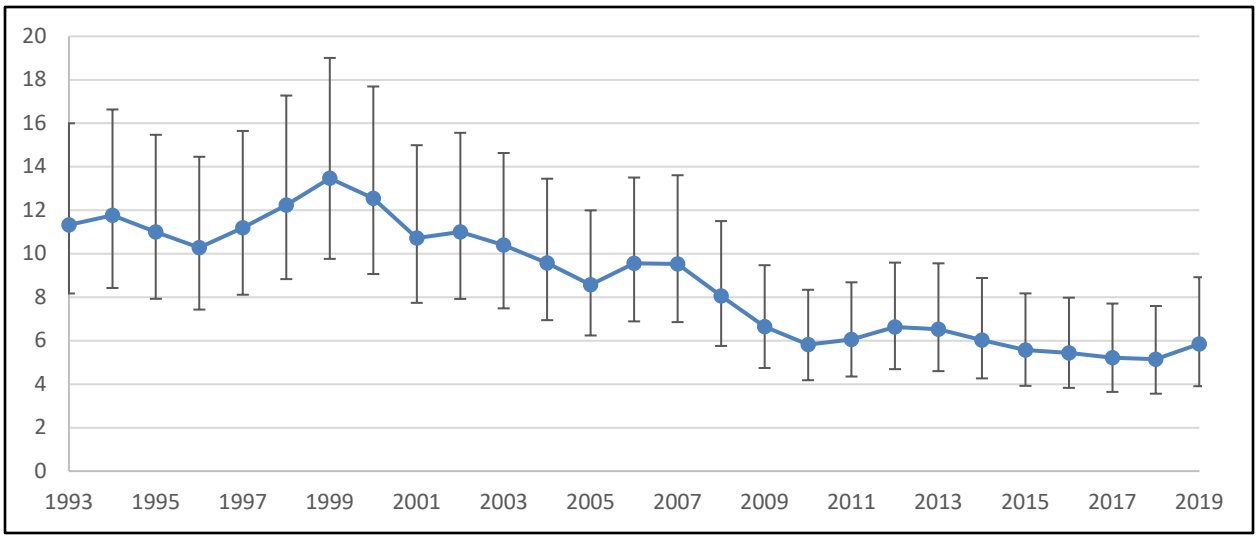

Figure 2. North American Breeding Bird Survey annual indices for pheasant in Washington, 1993-2019.

Harvest and hunter effort data can provide an index to population trends. Standardizing harvest estimates by the amount of hunter effort expended to achieve that level of harvest can offer some indication of whether populations are increasing, decreasing, or stable. Harvest estimates for the Columbia, Snake River, and Yakima Basins have been used to monitor trends within the primary pheasant management zone.

For this report, the "Yakima River Basin" consists of Yakima and Benton counties, the "Snake River Basin" is made up of Asotin, Garfield, Columbia, Walla Walla, and Whitman counties, and the "Columbia River Basin" includes Lincoln, Adams, Grant, Douglas, and Franklin counties.

In all three basins, days hunted per harvest has remained fairly stable with a slight increasing trend over the past two decades (Figure 3). With some variation among years, days per harvest averaged between one and two days in the Snake River Basin, just under two days in the Columbia River Basin, and just over two days in the Yakima River Basin (Figure 3). With the change in harvest data collection in 2022, results from this year are not directly comparable to data from past years. In 2022, the new harvest survey resulted in an estimate of just over two days per harvest in the Yakima and Columbia basins, and between one and two days per harvest in the Snake River Basin.

Upland game bird fall population densities and related harvest can be influenced by spring weather conditions. For example, recently hatched chicks are vulnerable to cold rains before they are sufficiently feathered. Still, spring rains are needed to provide early plant growth for nesting cover, while consistent warm early summer rains create insect-rich environments for pheasant chicks. Even with normal temperatures, early spring drought conditions may decrease insect availability. A large portion of pheasant chick diets consists of calorically dense, high-protein insects (Savory, 1989). Spring of 2021 was unusually warm and dry, leading to a record-breaking heat wave in June that was likely detrimental to pheasant nesting and brood-rearing. This was followed by an extended drought season that likely limited forage throughout the summer and adversely impacted populations. Conversely, spring of 2022 was unusually wet and cool, which may have been detrimental to hatching chicks but led to improved forage production throughout the season.

WDFW is seeking additional cost-effective methods for monitoring pheasant and other upland species. In 2023, WDFW funded a research project with the University of Idaho Drone Lab to assess the use of drones for detecting and identifying pheasants and turkeys. Both thermal imagery and regular RGB imagery are being assessed. Data collection includes flights over wild birds as well as flights over controlled numbers of birds at the state-operated Bob Oke Game Farm where pheasants are produced for the release program. Research is ongoing and results should be available in 2024.

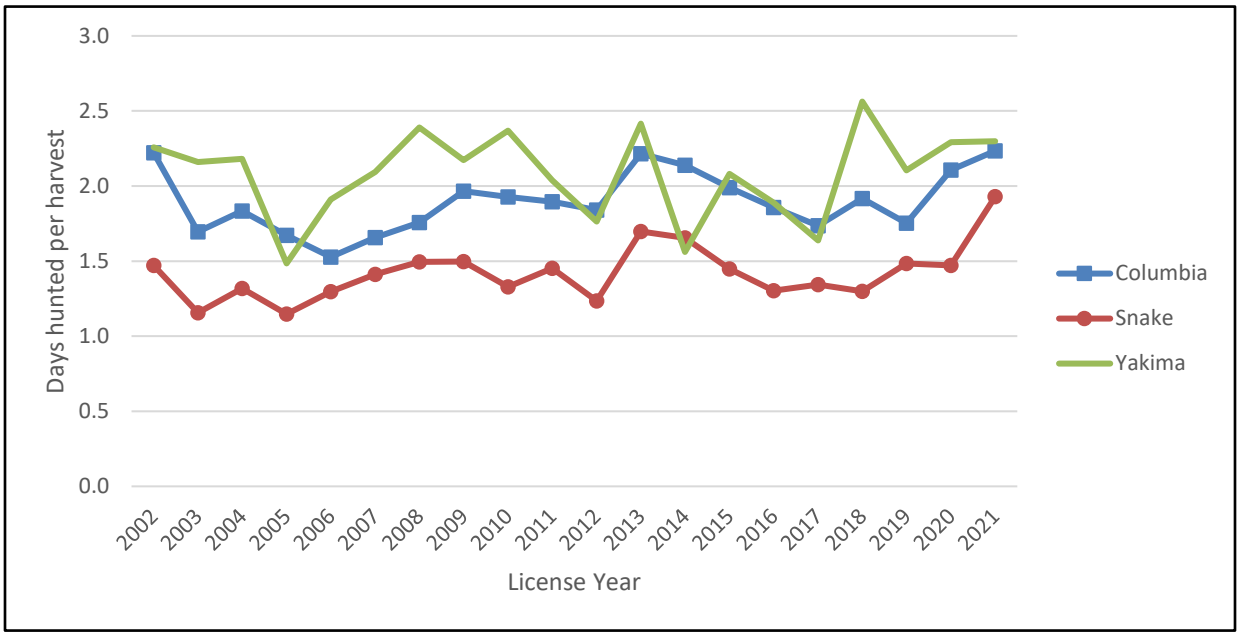

Figure 3. Estimated number of days hunted per pheasant harvest in each river basin, 2002-2021.

Habitat

Permanent cover is critical to pheasant production, particularly where forest stands consist of a diverse mix of grasses and broadleaf, flowering plants (i.e., forbs). Diverse vegetation can produce more suitable nesting and brood-rearing habitat (Midwest Pheasant Study Group, 2013). Research in many parts of the United States indicates that loss of habitat is the primary factor for declining pheasant populations (Labisky, 1976, Warner et al., 1984, Coates et al., 2017). Of particular importance is the loss of nesting and brood-rearing habitat, winter cover, and escape cover to elude predators (Warner, 1979). Most of eastern Washington's pheasant habitat is heavily influenced by agriculture, and as a result, the Conservation Reserve Program (CRP) is a critical component of contiguous pheasant habitat.

WDFW leverages multiple programs to improve habitat quality for pheasant and other upland game birds, including the State Acres for Wildlife Enhancement (a CRP program), the Natural Resources Conservation Service's Voluntary Public Access and Habitat Improvement Program, the Environmental Quality Incentive Program, and others. Managing for pheasant on private

agricultural lands through these and other programs also extends benefits to conservation of other species (Stoate, 2002). For example, the benefits of CRP extend to sage grouse (Schroeder and Vander Haegen, 2011), honeybees (Ricigliano et al., 2019), waterfowl and grassland passerines (Drum et al., 2015). Private lands biologists provide support to landowners to install and enhance wildlife habitats, including the planting of high-diversity mixes of grasses and forbs, shrub cover plots, and food plots across eastern Washington that benefit upland birds and other wildlife. For more information, see the Private Lands Access chapter of this report.

Evolving farming practices, pesticide and herbicide use, and urban sprawl can contribute to declines in pheasant populations. Herbicide application to wheat stubble and reduced stubble height are considered a primary cause of pheasant population decline on the central High Plains (Rodgers, 2002). In some areas of eastern Washington, wheat stubble may be the only cover available to pheasants at certain times of the year. The shorter stubble height increases a predator's ability to see pheasants, thus making pheasants more vulnerable to predation. Pesticide use in early spring reduces early germinating plants that are important food resources at that time of year (De Snoo and De Leeuw, 1996). Some insecticides, organophosphates for example, can have a direct effect on individual pheasants by sickening them and/or by killing them (Blus and Henny, 1997). Neonicotinoid insecticides can impact pheasant survival and breeding reproduction (Sundall, 2020). Herbicide use reduces overall plant diversity, which is a crucial component of high-quality pheasant habitat. Across all agricultural states, pesticides are used on an increasingly broader scale and have negatively impacted pheasant habitat quality throughout their introduced range. Additionally, houses now occupy many of the areas where pheasants were abundant. This trend is especially apparent within the Columbia Basin and southwest Washington.

Management Conclusions

Harvest and historical survey data indicate that eastern Washington pheasant populations and hunter participation have experienced a long-term decline. Recent harvest data indicate that population declines may be stabilizing, though these data only allow for coarse interpretation, and more rigorous surveys would be beneficial. It is not fully understood whether limitations on hunting access, economic changes, or other factors might be playing a role in declining hunter participation.

Causes for the population declines are not clearly understood, but habitat loss and land use changes are likely primary drivers. Suitable habitats are becoming increasingly fragmented and isolated or have been severely degraded. Monitoring is needed in combination with increased efforts to improve habitat, especially nesting cover and brood-rearing habitat, to sustain viable pheasant populations in eastern Washington.

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