

Excerpt from the Game Management Plan

July 2015 - June 2021



Washington
Department of
**FISH and
WILDLIFE**

EXECUTIVE SUMMARY

This Game Management Plan (GMP) will guide the Washington Department of Fish and Wildlife's management of hunted wildlife for the next six years. The focus is on the scientific management of game populations, harvest management, and other significant factors affecting game populations.

As mandated by the Washington State Legislature (RCW 77.04.012), "... the Department shall preserve, protect, perpetuate, and manage the wildlife..."; "the Department shall conserve the wildlife... in a manner that does not impair the resource..."; and "The commission shall attempt to maximize the public recreational... hunting opportunities of all citizens, including juvenile, disabled, and senior citizens." It is this mandate that sets the overall policy and direction for managing hunted wildlife. Hunters and hunting will continue to play a significant role in the conservation and management of Washington's wildlife.

An Environmental Impact Statement (EIS) was completed on November 27, 2002, after public review of draft and supplemental EIS documents. The Washington Fish and Wildlife Commission formally adopted the Game Management Plan on December 7, 2002. This comprehensive process facilitated public discussion and understanding, while cooperatively developing the priority strategies.

The purpose of this Supplemental EIS is to update the plan for 2015-21. The Environmental Impacts Chapter (Chapter 2) from the original EIS is not included in this document, as no changes were made to that section. Several of the original strategies and objectives have been accomplished, additional studies and research have been conducted, and some priorities have changed. Those are the changes that have been addressed in this SEIS. Public outreach earlier this year helped shape the priority issues, objectives, and strategies identified in the SEIS.

The overall goals are to protect, sustain, and manage hunted wildlife, provide stable, regulated recreational hunting opportunity to all citizens, protect and enhance wildlife habitat, and minimize adverse impacts to residents, other wildlife, and the environment.

With all of these issues, it is understood that the implementation of strategies are conditioned first on meeting game population objectives. Science is the core of wildlife management, supporting WDFW's legislative mandate to preserve, protect, and perpetuate wildlife populations while maximizing recreation.

Science and the professional judgment of biologists is the foundation for all objectives and strategies identified in this plan. At times, the science may not be as strong as managers would like. In those instances, management actions will be more conservative to minimize the potential for significant negative impacts to hunted wildlife species. Chapter 2 focuses on the science and management of hunted species and lays out how those populations will be monitored to ensure perpetuation of these species over the long term.

CHAPTER 1

Introduction

The mission of the Washington Department of Fish and Wildlife (WDFW) is “Sound Stewardship of Fish and Wildlife.” The Department serves Washington’s citizens by protecting, restoring, and enhancing fish and wildlife and their habitats, while providing sustainable fish and wildlife-related recreational and commercial opportunities. Planning helps the Department prioritize actions to ensure accomplishment of its mission and mandate.

The purpose of the Game Management Plan is to assess current issues for hunted wildlife and outline strategies to help WDFW prepare for the future. The emphasis in this plan is the scientific management of hunted species populations, harvest management (hunting), and other significant factors affecting game populations. The plan is dynamic, and it is designed to facilitate resolution of emergent issues and allow adjustment of priorities when issues are resolved. The issues and options in the plan are based on current management information. As new information becomes available, options may be modified or new ones developed.

The plan identifies priorities for hunted wildlife and keeps the Department focused, directed, and accountable. The plan will guide the development of the three-year hunting season packages for 2015-17 and 2018-20. In addition, the plan will direct the development of WDFW Game Division work plans and budget proposals. Implementation will begin July 2015 and continue through June 2021.

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Public Involvement

Active public involvement is important for successful planning. In May 2001, WDFW asked the public to identify the key game management issues that need to be addressed in the future. This was done using a series of questionnaires and by facilitating input via a webpage on the agency’s website. Over 2,500 responses were received. Based on the issues identified during this process, WDFW hired a consulting firm to conduct a telephone survey of both the hunting public and the general public. This was used to get a more scientific sampling of the public. Responsive Management conducted the surveys using randomly selected telephone numbers with a sample of over 800 citizens for the general public survey and over 700 hunters for the hunter survey. References to public opinion based on this survey are made throughout this plan. To further refine the priority issues, WDFW consulted with the Game Management Advisory Council, the Wildlife Diversity Advisory Council, and members of the Fish and Wildlife Commission. The advisory councils include a cross section of interested citizens who provide feedback and advice to WDFW on a variety of topics. The information from the surveys, polls, and consultations identified the issues addressed in this plan. Finally, WDFW followed the Environmental Impact Statement (EIS) process to facilitate public involvement in reviewing alternatives and setting priorities.

The main issues identified by the public were categorized into several key areas:

- Scientific/professional management of hunted wildlife
- Public support for hunting as a management tool
- Hunter ethics and fair chase
- Private lands programs and hunter access
- Tribal hunting
- Predator management
- Hunting season regulations
- Game damage and nuisance
- Species-specific management issues

The first public release of the Draft Environmental Impact Statement (DEIS) for the Game Management Plan (GMP) was on July 26, 2002. After an extension, the deadline for public comment was September 10, 2002. Comments were received from over 77 groups and individuals. Extensive public comments resulted in significant re-writing and re-formatting of the EIS and GMP. Key changes included the EIS formatting, modification of elk and cougar issues, refining objectives and strategies, and consideration of the impacts of hunting on non-target wildlife species.

A Supplemental EIS (SEIS) was released on October 18, 2002, with a public comment deadline of November 18, 2002. During this comment period, a scientific peer review of the cougar management section of the plan was also solicited by WDFW.

The process of developing a non-project EIS allowed WDFW to use an iterative process, with releases of a Draft and a Supplemental EIS to facilitate public comments and add, modify, or delete strategies. This iterative process was used instead of the more traditional use of preferred and alternative strategies. Essentially, the number of alternative strategies was not limited and the preferred strategies were developed in concert with the public through a long scoping and development process and multiple comment periods.

The current process (2014) of developing a Supplemental EIS included a public scoping period, discussions with the Game Management Advisory Council, the Wolf Advisory Group, the Master Hunter Advisory Group, the Waterfowl Advisory Group, an updated telephone survey of hunters and the general public, and the current comment period for the draft of this supplemental EIS. Thousands of comments have been received to help shape the amended issues, objectives, and strategies to be implemented in the 2015-2021 Game Management Plan.

A few new issues or emphasis areas have also surfaced including:

- Wildlife Conflict Management
- Recruitment & Retention of Hunters
- Disease Impacts
- Non-toxic Ammunition
- Re-introduction of pronghorn
- Wolf Management

Commission and Department Authorities

The establishment of hunting seasons and management of game species is consistent with the authorities granted the Fish and Wildlife Commission and Department of Fish and Wildlife by the Washington State Legislature through Title 77 of the Revised Code of Washington. The Fish and Wildlife Commission develops and adopts hunting regulations (i.e., rules in the Washington Administrative Code) per the authority granted under Title 77 authority. In addition, various Commission and Department policies and procedures, including this Game Management Plan (GMP) guide game management.

The Washington Fish and Wildlife Commission and Department of Fish and Wildlife are responsible for the management and protection of fish and wildlife resources in Washington State. The Legislative mandate (RCW 77.04.012) for the Commission and the Department includes the following directives for wildlife management:

- The Commission, director, and the Department shall preserve, protect, perpetuate, and manage the wildlife...
- The Department shall conserve the wildlife resources in a manner that does not impair the resource. The Commission may authorize the taking of wildlife only at times or places, or in manners or quantities, as in the judgment of the Commission does not impair the supply of these resources.
- The Commission shall attempt to maximize the public recreational hunting opportunities of all citizens, including juvenile, disabled, and senior citizens (see Title 77 Revised Code of Washington).

In addition, various policies and procedures guided the Commission and Department in developing this GMP. In particular, the Washington Department of Fish and Wildlife Hunting Season Guidelines (August 1999), and further amended by the Commission in 2014, provide further guidance for this GMP:

Hunting seasons and regulation recommendations should be based on good science. When biological information is lacking or insufficient, management decisions should be sufficiently conservative to ensure protection of wildlife resources. At no time should decisions favor income to the agency or recreational opportunity to the detriment of conservation of wildlife populations.

1. *In general, hunting seasons and boundaries of game management units should be easy to understand while maintaining hunting opportunity and management options.*
2. *Continuity in hunting seasons over time is highly valued by the public; therefore Department recommendations for significant changes to seasons should be adequately explained to the public and should address a resource management need.*
3. *Establishing hunting seasons shall be consistent with the Commission Policy C-3607 regarding cooperatively managing wildlife resources with the tribes.*
4. *In general, hunting seasons shall be consistent with species planning objectives and provide maximum recreation days while achieving population goals.*
5. *A three-year season setting process which provides consistent general seasons from year to year with annual changes in permit levels to address emergent resource issues; natural disasters; and to meet requirements of federal guideline changes; etc.*

6. *The public shall be offered substantial and timely opportunity to make comments on and recommendations for the three-year hunting rules decision-making process. These opportunities must comply with the state's Regulatory Reform Act.*
7. *Public involvement for annual permit season setting shall include at a minimum, a standard written comment period and one public meeting where comments will be considered.*
8. *Hunting rules shall provide separate deer and elk general season recreational opportunities for archers, muzzleloaders, and modern firearm hunters.*
9. *Special deer and elk permit hunt opportunities shall be allocated among three principal user groups (archery, muzzleloader, and modern firearm) using the approved formula of success/participation rate.*
10. *Weapon and hunting equipment restrictions should maintain public safety; protect the resource; allow wide latitude for individuals to make equipment choices; be easy to understand and allow effective enforcement.*
11. *Disabled hunter opportunities shall emphasize equal access consistent with the Americans with Disabilities Act.*
12. *For disabled hunters, graduates of Master Hunter programs, youth hunters, and hunters over 65, strategies for enhanced opportunity shall include special consideration during general seasons, opportunities for special access, and other incentives rather than special permit hunts. Master Hunter incentives should return to the program's original intent, which was to address wildlife problems, issues associated with hunter ethics, and the challenging hunting circumstances on private lands.*
13. *Private landowner hunting issues such as season length, damage control, and trespass should be given consideration when developing hunting season recommendations.*
14. *The rules shall standardize furbearer seasons to provide trapping opportunity and address damage control.*
15. *The migratory bird and small game regulations shall provide maximum hunting opportunity considering federal guidelines, flyway management plan elements, and Department management objectives.*
16. *The hunting season closures and firearm restrictions shall be sufficient to assure resource conservation and public safety.*
17. *The goat, sheep, and moose permit hunting rules shall maintain high quality opportunities consistent with resource availability.*
18. *The Department shall maintain programs that offer the public high quality hunter education and firearm safety training.*
19. *The Department shall promote high standards of hunter ethics and adoption of principles of fair chase.*

Implementing the legislative mandate and the Commission guidelines for game species requires knowledge of game population trends and impacts of hunting regulations, development and management of hunting seasons and actions that support and maximize public recreation, and conservation of wildlife resources. The Fish and Wildlife Commission adopts major hunting seasons every three years. Minor adjustments are made annually such as modifying permit levels or addressing crop damage or nuisance problems. Migratory waterfowl seasons are adjusted annually in coordination with the U.S. Fish and Wildlife Service and the Pacific Flyway Council. The process for developing hunting seasons typically includes the following steps:

1. Staff determine the status of game populations and impacts of previous harvest strategies;
2. Staff engage in preliminary discussion of ideas with the tribes, the public, state and federal agencies, and WDFW biologists and managers;
3. Staff develop a set of season and regulation alternatives;
4. Staff prepare formal submissions pursuant to the Administrative Procedures Act of the draft regulations and identify the period for public comment;
5. Staff receive, consider, and summarize public comments;
6. Staff develop final recommendations for hunting season rules;
7. The Fish and Wildlife Commission considers staff recommendations, public comments, and related information and adopts regulations governing hunting seasons.

The process of establishing hunting seasons, bag limits, and geographical areas where hunting is permitted is exempt from State Environmental Policy Act (SEPA) rules through WAC 197-11-840. In addition, feeding of game, issuing licenses, permits and tags, routine release of wildlife, or re-introductions of native wildlife are also listed as exemptions from SEPA rules. However, policy development, planning, and all other game management actions are not considered exempt from SEPA rules.

Background and Setting

Native Americans

Native Americans have inhabited the State of Washington for at least 9,000 years. The Cascade mountain range splits Washington State into two very distinct environments: the dry conditions of the east and the much wetter, rain forest areas of the west. Native Americans adapted to these different conditions and evolved into two distinct patterns. The Pacific Coast Indians inhabited a land of plenty with an abundance of fish, shellfish, roots, berries, and game. While Native Americans east of the Cascades also had access to salmon and steelhead returning up the Columbia River system, they depended more on game and other food sources (Pryor 1997).

In 1853, Isaac I. Stevens was named the first Territorial Governor of the Washington Territory. He was also appointed Commissioner of Indian Affairs and negotiated treaties between Pacific Northwest tribes and the United States of America to pave the way for settlement and assimilation of Native Americans into non-Indian society. The treaties established a number of reservations for the Indian people, and in exchange the tribes ceded much of their territory to the U.S. government. The treaties and associated tribes are shown in Table 1.

Table 1. Indian Treaties between the United States of America and Northwest Indian Tribes.

Treaty	Indian Tribes	Location and Date
Treaty with the Yakamas	Yakama confederated tribes and bands	Camp Stevens, Walla Walla Valley June 9, 1855
Treaty with the Walla Wallas	Walla Walla, Cayuse and Umatilla tribes and bands	Camp Stevens, Walla Walla Valley June 9, 1855
Treaty of Olympia	Quinault, Hoh, and Quileute	Qui-nai-elt River –Jan. 25, 1856
Treaty of Point No Point	Jamestown S’Klallam, Port Gamble S’Klallam, Lower Elwha, Skokomish	Point No Point, Suquamish Head Jan. 26, 1855

Table 1. Indian Treaties between the United States of America and Northwest Indian Tribes. (Continued)

Treaty	Indian Tribes	Location and Date
Treaty of Point Elliott	Lummi, Nooksack, Stillaguamish, Swinomish, Upper Skagit, Suquamish, Sauk Suiattle, Tulalip, and Muckleshoot	Point Elliott January 22, 1855
Treaty with the Nez Perces	Nez Perce	Camp Stevens, Walla Walla Valley June 11, 1855
Treaty of Neah Bay	Makah	Neah Bay January 31, 1855
Treaty of Medicine Creek	Nisqually, Puyallup, Squaxin Island, Muckleshoot	Medicine Creek December 26, 1854

The tribes that signed the treaties retained certain rights and privileges. For example, Article 3 from the Medicine Creek Treaty with the Nisqually, Puyallup, Squaxin Island, and Muckleshoot Tribes states:

The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians in common with all citizens of the Territory, and of erecting temporary houses for the purpose of curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses on open and unclaimed lands...

Washington State courts have interpreted this treaty language to mean that treaty tribes can hunt within the boundaries of the area ceded to the federal government by their treaty, or in areas traditionally “used for hunting and occupied over an extended period of time,” on open and unclaimed lands that have not been put to a use that is inconsistent with hunting. In conjunction with such hunting, tribes are responsible for the management of their own hunters and hunting activities.

Not all of the tribes signed treaties with the government. Several of these tribes have reservations designated by federal executive order. These include the tribes of the Colville, Spokane, and Kalispel reservations in eastern Washington and the Chehalis and Shoalwater reservations in western Washington. Tribal hunting rights for these tribes are typically limited to areas on the reservation, or in the case of the Colville Tribe to areas that were formerly part of the reservation. There are additional tribal groups that are recognized by the federal government, but have no specific reservation or tribal hunting rights. Since tribal and non-tribal hunters impact the wildlife resource over much of the state, it is important that WDFW and the tribes work cooperatively to develop management strategies that can meet the needs of both. This process is complicated by the fact that tribal subsistence and ceremonial hunting and state recreational hunting are two very different philosophies steeped in different traditions and cultural heritages (McCorquodale 1997). This means that both sides have to work very hard to understand and appreciate other views.

Tribal governments take an active role in the management of wildlife resources. They typically have a tribal hunting committee that meets to develop regulations and management strategies. Many tribes have hired biologists or have access to biological staff that can advise them on the development of management approaches. Tribes have taken the lead in several areas on research projects to gather the information that is needed to better manage wildlife resources. WDFW and various tribes are working together to develop herd plans for key wildlife populations. WDFW is also working cooperatively with tribes to rebuild or augment populations that are below desired levels.

European Settlement

During the early European settlement of North America, hunting was primarily a subsistence activity (Organ and Fritzell 2000). The same was true for the early immigrants to the Washington Territory. Hunting was also used to eliminate animals that posed a threat to humans or their livelihood. Hunting eventually became a profitable commercial venture promoted initially by the fur trade and later for food, clothing, and jewelry. Conflicts between market hunters and sport hunters began to occur by the mid-1800s and nationally some influential sportsmen's organizations were formed (Trefethen 1975). During the 19th century, hunting changed from mostly a subsistence activity to a commercial one, and then to the beginnings of a recreational activity. At the same time, wildlife habitats were being fenced, plowed, burned, developed into towns, and cut by roads and rails (Madson and Kozicky 1971).

By the late 1800s, there was a new movement of sportsmen and other conservation minded people. Theodore Roosevelt led a social movement that pressed for an end to commercial traffic in wildlife and for government oversight of wildlife conservation (Reiger 1975, Warren 1997). Roosevelt introduced a new thought, "conservation through wise use" (Madson and Kozicky 1971). It was also the foresight of President Roosevelt that was responsible for the establishment of the U.S. Forest Reserves (Service) and the creation the National Wildlife Refuges. His legacy of public lands is in place today, more important than ever before, as strongholds of fish and wildlife in Washington State and the Nation.

In 1928, the American Game Conference, chaired by Aldo Leopold, formed a committee on Game Policy. During this period, wildlife conservation programs focused on laws and enforcement, but a formal wildlife management profession did not exist. The report (Leopold 1930) described the problem of declining wildlife and recognized the need for scientific facts concerning game species management. The committee called for the reorganization of state game departments and outlined the steps needed to reverse the trend (Madson and Kozicky 1971, Organ and Fritzell 2000).

"The report strongly urged that conservation be taken out of politics, that fish and game funds be earmarked for fish and game programs, and that every effort be made to build competent, stable, adequately-financed conservation departments (Madson and Kozicky 1971)."

Funding for key elements of the (government) agencies was linked to earmarked fees paid by hunters. Most significant were the Migratory Bird Hunting Stamp Act (1934), which funded National Wildlife Refuges; and the Federal Aid in Wildlife Restoration Act (1937), which provided federal funding for state agencies.

As the population of Washington increased, laws were enacted to protect the wildlife resources. The Legislative Assembly of the Territory of Washington enacted the first laws concerning wild animals within the territory in 1863. The first game species law allowed the "county commissioners of each and every county authority, if they think proper, to offer a bounty for killing wild animals." Although a few early laws were passed to preserve and protect game, they were largely ineffective and not enforced. In 1890, the Governor was given authority by the Legislature to appoint game wardens in each county.

In 1901, the State Legislature passed the first hunting license requirement allowing counties to issues licenses with a fee of \$1.00 for residents and \$10.00 for non-residents. In addition, any

person killing a male elk was required to pay an additional sum of \$20. Thus, game management in Washington entered the twentieth century with the beginnings of a user-fee hunting program to be administered by the county.

The passage of the Pittman-Robertson Federal Aid in Wildlife Restoration Act specified that an eleven percent excise tax on sporting arms and ammunition must be maintained in a separate fund in the Treasury and allocated annually to the states. In order for the states to participate, each state was required to pass enabling legislation and adhere to the provisions of the Act. This required all hunting license fees be dedicated to use by the state game department. The enabling legislation was passed by Washington State Legislature and signed into law in 1939. This was the beginning of modern wildlife management.

The Natural Environment

Washington has a rich diversity of flora. Forests cover about half of the state's land area. The Olympic Peninsula supports a temperate rain forest consisting of spruce, cedar, and hemlock, with an understory of ferns and mosses. The areas surrounding the Puget Sound and the western slopes of the Cascade Range are forested, consisting mostly of cedar, hemlock, and douglas fir, with an understory of shrubs. On the eastern slopes of the Cascades and in the Blue Mountains of southeastern Washington ponderosa pine, douglas fir, grand fir, western hemlock, and sub alpine fir are the major conifer species. The forests in these areas are more open, with an understory of grasses and shrubs, especially at the lower elevations. Across the northeast region of the state, the forest is dominated by douglas fir, western red cedar, western hemlock, and sub-alpine fir. The forests of the state have been intensively logged and contain second and third growth forest plantations of mostly douglas fir (Access Washington 2002).

In the Columbia Basin, the native vegetation is drastically different from the forested lands of the state, due to the dryer and hotter climate of the region. The pristine vegetation consisted of shrubs and grass (shrub steppe). With the introduction of agriculture and livestock grazing in the mid-1800s the vegetative character of the land took on a new look. Overgrazing by sheep, cattle, and horses was evident by 1885. Lands were cleared for intensive farming, both dry land and irrigated. On the prairies of the Palouse, the conversion of all arable land was nearly complete by 1910. Other lands are continuing to be converted to the growing of agricultural crops or converted to urban uses (Access Washington 2002).

The introduction of non-native weed species by imported livestock, contaminated commercial seeds, and other sources have resulted in a dramatic change in the landscape and the productivity of the land for commercial use, as well as intrinsic values. In Washington, invading weeds have adversely impacted native wildlife habitat and domestic livestock rangelands (Access Washington 2002).

The Social Environment

The evolution of the human social environment and its impact on the natural environment has been dramatic from pre-settlement to the present. Some game species have benefited from this transition while others have not.

Between 1950 and 1960, 60% of Washington's human population resided in incorporated areas. In 1990, only 52% live in incorporated areas (Access Washington 2002). This movement of people into rural and formerly undeveloped lands had significant impacts on wildlife habitat and abundance.

Washington has the second largest human population of the western contiguous states, but is the smallest in size. In 2010, the population was estimated at 6,724,540 compared to 5,974,900 in 2001 making it the 13th most populous state in the union. The long-term outlook in human population for the state of Washington is continued growth reaching the 7 million mark in 2015, with ever increasing impacts to the natural resources of the state.

The ten largest cities are almost exclusively on the west side of the state, with Spokane and Yakima the two representatives from the east side. The US Interstate 5 Highway corridor is the area of highest human population and where the greatest changes to the natural environment have taken place. Seattle is the largest city in the state with over a half million people. The cities of Spokane, Tacoma, Vancouver, Bellevue, and Everett are all over 100,000 in population.

Industry

Before settlement, the Pacific Northwest region was important for its fur-trapping industry. With the completion of the Northern Pacific Railroad in 1886 and Great Northern Railroad in 1893, Washington's economy grew. Agriculture and the lumber industry developed in western Washington and eventually to the east. A transportation network was a key to the growth of the state's economy (Access Washington 2002).

During the twentieth century, the construction of dams on the Columbia and Snake rivers provided abundant, cheap electrical power, resulting in the rapid growth of manufacturing. Dams for agricultural irrigation also advanced farming in the dryer Columbia Basin. Farms in western Washington are small, and dairy products, poultry, and berries are the primary commodities produced. The eastern side of the Cascade Range has larger farms, and potatoes, fruit, vegetables, and small grains such as wheat and barley are the primary crops.

According to the Economic Research Service of the U.S. Department of Agriculture, the 2007 Census of Agriculture showed that Washington farmland acreage totaled 14.9 million or about 35% of the total land area. Farmlands are highly valued wildlife habitats for which the landowner is not often recognized. Game species such as pheasants, quail, deer, elk, and waterfowl are attracted to private lands for their abundance of food and water.

Recent changes in natural resource policies, implementation of new ecosystem management strategies, as well as changing silvicultural practices on private forest lands have affected the timber industry, the people of Washington, and the Northwest. The timber harvest changes in Washington between 1989 and 2012 have been substantial (Table 2), (DNR 2012). The changes in forestry practices are necessary for the survival of many species that require older, more ecologically complex forests. However, there may be serious impacts to the future amount and quality of deer and elk forage and population numbers due to the lack of robust early-successional habitats over the long term.

Table 2. Timber harvest changes in Washington between 1989 and 2012.

Ownership	1989 harvest ^a	2012 harvest ^a	Percent Decrease
Private	4,027,278	2,182,159	-45.8
Public	1,929,039	33,260	-98.3
Total	5,956,317	2,217,431	-62.8

^a in thousand board feet

Land Use and Ownership

The total land area of the state is 45.9 million acres. Out of this total, 2.6 million acres are aquatic lands and 43.3 million acres are uplands. The public land ownership and principal uses in the state are found in the publication Interagency Committee for Outdoor Recreation 2001.

Public lands make up about 52% of the state. The U.S. Forest Service, representing about 41% of public lands, manages the greatest amount of public land. The total of all federal ownership in Washington represents about 58% of public lands. State lands represent about 27% of public lands. The Department of Natural Resources is the largest manager of state lands. Local and tribal lands make up the rest.

Public lands are not evenly distributed across the state, because of the historical pattern of settlement and development. The largest concentrations of public lands are at the higher elevations, while the lowlands and lands associated with waterways are mostly private. The Columbia Basin in eastern Washington and the Puget Trough region on the west side are mostly in private ownership.

Washington Hunters

The number of licensed hunters in the state of Washington grew rapidly since the 1930's with the increase in leisure time and availability of game. Historical records of hunting license sales by the counties are not readily available from 1901 to 1933. From 1933 to 1953, hunting license sales increased, peaking in 1953 at approximately 445,000 state and county hunting and fishing combination licenses sold (Figure 1). The growth in hunting license sales was particularly steep following World War II.

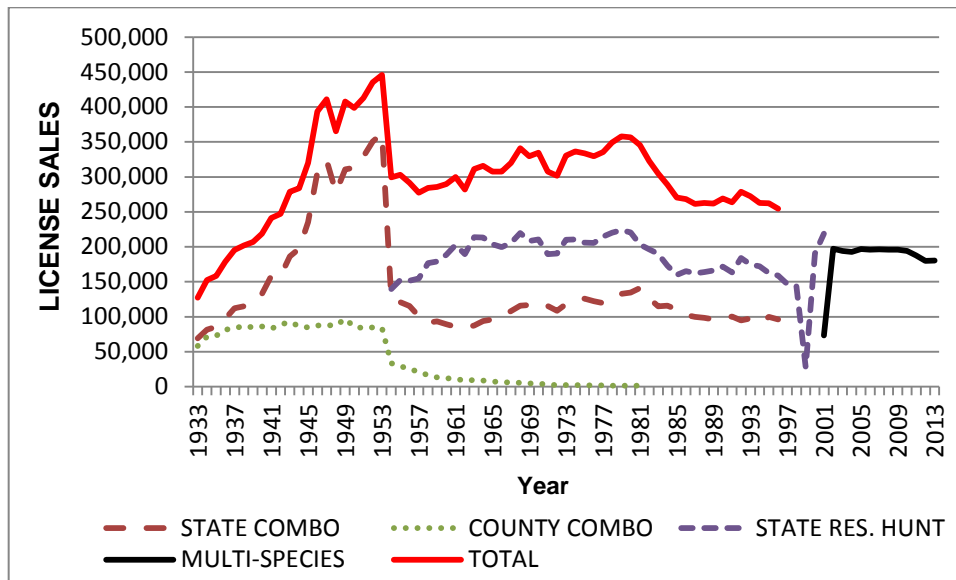


Figure 1. Washington hunting license sales and numbers, 1933-2012. In 1999, WDFW changed the type of license sold from a “state residential hunt” license to big game and small game licenses.

In 1954, a separate resident hunting license was introduced resulting in a substantial drop in total licenses sold. This drop most likely reflected the number of fishers who chose not to purchase a state hunting license rather than the hunting/fishing combination license because they had no intention of hunting. If this is true, then the increasing trend in hunters actually peaked quite a few years later in 1979 with about 358,000 hunting licenses sold. Thereafter, sales declined through 1989, when 261,907 licenses were sold. After 1989, hunter numbers slowly but consistently declined; at the same time the state’s human population increased substantially.

A discussion of trends in hunting participation by Brown et al. (2000) suggests that the trend of stable to decreasing numbers of hunters continues. They predict managing wildlife damage through hunting will be increasingly challenging because of declining recruitment of hunters and declining social support for hunting. In Washington, an analysis of general season deer hunter trends shows a slow decline. Since 1984, deer hunting participation rates have been highly variable from one year to the next but generally declining (Figure 2).

Washington hunter characteristics in 2011 were very different from a century ago. In 2012, Washington hunters were mostly well educated: Overall, 83% of Washington hunters had graduated from high school (or equivalent). In addition, many Washington hunters had obtained additional higher education, including some additional college or trade school training (39% of hunters), college degree (19%), and post-graduate or professional degrees (9%) (Responsive Management 2008). In 2008, Washington hunters were mostly 35 years old or older, with over half being 45 or older (Responsive Management 2008). In comparing an older demographic study of Washington hunters (Johnson 1973) to recent data (*National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*, U.S. Fish and Wildlife Service 2011), there has been little change in male dominance (94% males and 6% females) in the intervening 31 years. Age distributions of hunters in 1972 and 2008 are not directly comparable between the two studies. However, it is apparent that the majority of hunters in 1972 were less than 29 years of age compared to 2012 data where age of respondents were predominantly 35 years of age and older (70%) (Responsive Management 2008).

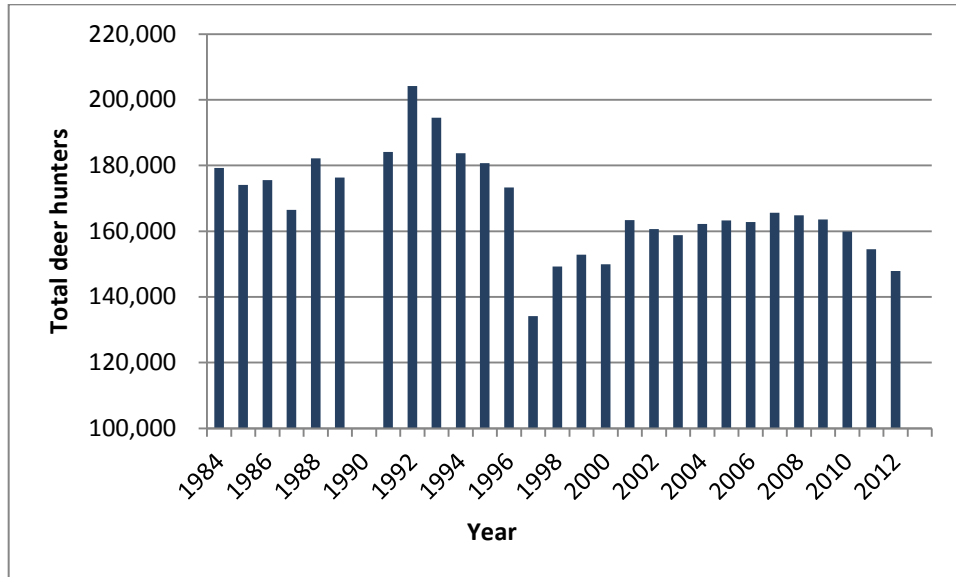


Figure 2. Washington deer hunting participation, 1984-2012.

Resource Allocation

During the 1970s, big game hunter numbers in Washington were at an all-time high. Hunter crowding, competition among hunters, and the declining quality of the hunting experience resulted in significant hunter dissatisfaction. As a result, many hunters changed from the use of modern firearms to primitive archery equipment and black powder muzzle loading rifles to take advantage of less-crowded hunting conditions. In 1982, the Department formed a Big Game Ad Hoc Committee to address the problems facing hunters in Washington and developed a plan of fair allocation of hunting opportunity. The committee identified three major goals as follows:

1. Reduce crowding in the more popular modern firearm hunting seasons.
2. Provide quality-hunting opportunity.
3. Provide early primitive weapon opportunity.

Following extensive debate and public involvement in 1984, the Fish and Wildlife Commission adopted a major change in deer and elk hunting. This new rule required all deer and elk hunters to select one type of gear for hunting (modern firearm, archery or muzzleloading rifle). In addition, all elk hunters continued to be restricted to an elk tag area.

Since 1984, modern firearm deer hunters have continued to represent the majority (over 70%) of active hunters. Archery deer hunter numbers increased to about 19% of deer hunters then stabilized. The number of muzzleloader deer hunters has shown a more protracted incline but appear to have stabilized, representing about 6% of the deer hunters.

On the other hand, elk hunter numbers have shown a more pronounced change in user group size. In 1984, modern firearm hunters represented 88% of all elk hunters, archery hunters 9.5%, and muzzleloader hunters 2.4%. In 1999, the modern firearm hunter represented just 68% of the total, archery hunter numbers doubled in percentage, and muzzleloader hunters increased six-fold (Johnson 1999). Since about 1994, the proportion of each user group (modern firearm, archery and muzzleloader elk hunter) has stabilized at about 69%, 17% and 14% respectively.

Separating hunters by hunting method has successfully distributed hunting pressure, relieved congestion, and increased primitive weapon opportunity. However, the quality of hunting opportunity has been more difficult to assess.

Resource allocation continues to be a contentious issue with hunters. A few of the more hotly contested issues include:

- Which group gets to hunt first?
- How should timing of various hunting seasons between user groups be fairly established?
- Should fairness be related to equal opportunity (days) or equal success?
- How primitive should “primitive weapon” hunting seasons remain?
- How should quality opportunity be addressed?

Hunter Education/Safety Training

Hunter education programs are in place in all 50 states, reaching about 650,000 hunters annually (Duda et al. 2010). In Washington, all individuals born after January 1, 1972, must show proof that they have completed a hunter education course before purchasing a hunting license.

The former Washington Department of Game first offered hunter education in 1955 on a voluntary basis. In 1957, it became mandatory for all juveniles less than 18 years of age. In 1995, all individuals born after January 1, 1972 were required to successfully complete a hunter education class. Washington currently certifies approximately 13,000 Hunter Education students each year.

Hunter Access

As early as 1875, the Legislative Assembly of the Territory of Washington passed a law that prohibited persons from entering upon private lands (enclosed premises) without permission from the landowner for the purpose of hunting grouse during the open season. This law demonstrates the early roots of conflict between hunters and landowners. Hunter access onto private lands and through private lands to public lands is a continuing issue.

WDFW has placed considerable emphasis over the years on obtaining access to lands for the enjoyment of hunting. Currently, there are several programs promoting hunter access. For decades the WDFW Private Lands Program has provided incentives to private landowners through technical assistance, implementation of habitat enhancement strategies, and hunter management assistance. Landowners agree to open their lands for recreational opportunity in exchange for materials and help planting and developing habitat. Over the past decade WDFW has also begun to offer cash incentives on either a per-acre or per-site basis in limited high priority focus areas where access has been difficult to secure. The Department provides free signs and assists the landowner in posting their lands as “feel free to hunt,” “register to hunt,” “hunt by written permission”, or “hunt by reservation only.” “Hunt by reservation” is the newest option and was first used in 2013 to provide quality hunting opportunities and give landowners another option to meet their needs. There are over 1 million acres and over 500 landowners in Washington under cooperative agreement.

The Private Lands Wildlife Management Area (PLWMA) program was developed and initiated on a trial basis in 1993. This program was designed to enhance wildlife habitat on private lands and encourage public access opportunities. Two PLWMAs were authorized in 1993, 201-Wilson

Creek and 401-Champion's Kapowsin Tree Farm. A third PLWMA 600-Pysht was added in 1997. A common criticism of this program from hunters was that public access was not adequately addressed and wildlife habitat enhancements may have been driven by incentives, rationale, or regulations outside of the PLWMA program. In 2006, the Fish and Wildlife Commission revised the state policy for the private lands program. As part of the revision, the PLWMA program was terminated and the Landowner Hunting Permit (LHP) program was developed. The major change included the provision of public hunting benefits. There are currently six cooperators in the LHP program, all located in eastern Washington.

There are many benefits for market-based (economically beneficial) programs on private lands for both the public and the private landowner. The major benefits are opening closed private lands to public access, protection and enhancement of wildlife habitat, and economic benefit to private landowner and local economies. On the other hand, major impediments include the concern for loss of control by state agencies, potential for over-harvest of the wildlife resource, and a potential for forced decline in hunter participation rates because of escalating costs (Duda et al. 2010).

A survey of Washington hunters was conducted (Duda 2002b) to determine opinions about private land access and other private land programs. A strong majority of hunters felt that private lands were very important to wildlife and for outdoor recreation. All hunter groups surveyed felt that private land programs should provide incentives to landowners for improved wildlife habitat and allowing access onto their lands. The majority of all hunters agreed that access to private lands for hunting is important even if an access fee is charged. A 2009 survey (Duda et. al) found that 58% of hunters felt that lack of access had affected their hunting activity over the previous five years.

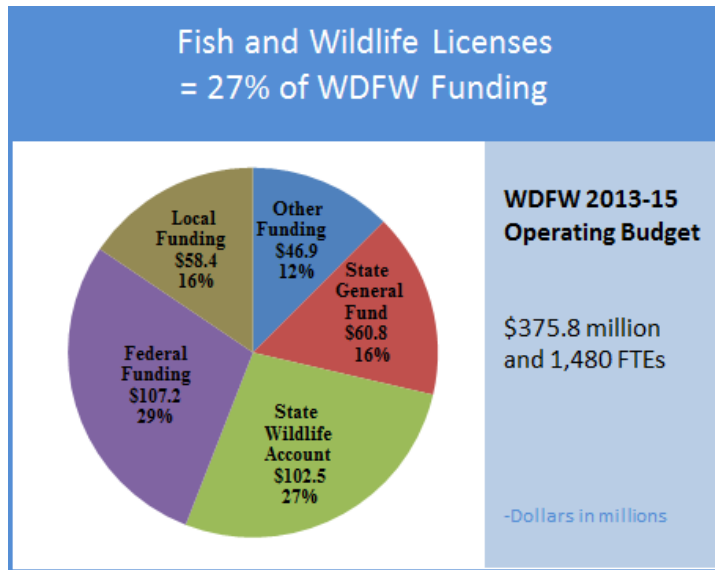
Hunters are feeling the "crunch" in available hunting areas. Private lands have always been recognized as important to the future of hunting, especially upland game bird and waterfowl hunting. More recently, access restrictions and landowners charging fees on large tracts of commercial timberlands has become a major concern. By the end of 2014, over a quarter of Washington's private industrial timberland may be in some form of a fee access system with some of those landowners limiting the number of hunters well below historical levels. Maintaining hunting opportunities on these lands is becoming increasingly difficult and may lead to further crowding on public lands. The hunter's willingness to pay landowners for hunting opportunity is a significant change from attitudes of the past.

Economics

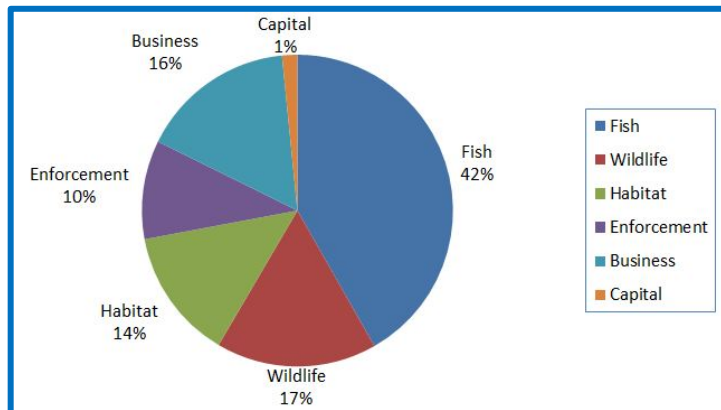
In 2011, Washington hunters spent \$356 million for trip related expenses, equipment, and other expenditures primarily for hunting (U.S. Dept. of Interior et al. 2011). About 46% of their expenditures were for food, lodging, and transportation; 44% for hunting equipment (guns, ammunition, camping); and 10% for the purchase of magazines, membership dues, land leasing, and licenses and permits.

The national survey reported that there were 219,000 resident and nonresident hunters 16 years of age or older who hunted in Washington. These hunters spent 2.5 million days hunting in the state. Expenditures per hunter were \$1,421 or \$64 per day per hunter.

Resources provided to the Department during the 2013-15 biennium were \$375.8 million. Funding came from a variety of state, federal, and private/local sources. The chart below shows relative proportions of those funds.



There are six programs within WDFW. Each program’s proportion of the operating budget is shown in the chart below:



The Game Division is one of six divisions in the Wildlife Program. The 2013-15 biennial budget for the Game Division is about \$19 million. Of that total, over \$5.5 million is dedicated to specific activities. The dedicated fund sources are from auction and raffle sales (\$1.3 million), migratory bird permit sales (\$639,000), turkey tag sales (\$331,000), background license plate sales (\$572,000), the eastern Washington pheasant enhancement program (\$879,000), and wolf management (\$1.8 million). The remaining funds come from the general fund (\$60,000), revenue from license sales or the wildlife fund (\$5.1 million), and federal funds (\$8.7 million), which is mostly from the Pittman-Robertson Act (excise tax on sporting equipment and ammunition).

This \$19 million is the base funding for most of the activities identified in this plan except for research, hunter education, and law enforcement. These activities are funded from other divisions

or programs within WDFW. Implementation of new activities in this plan will be dependent on additional funding, grants, and partnerships.

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CHAPTER 2

General Game Management Issues

The process of developing a non-project EIS allowed WDFW to use an iterative process. Essentially the number of alternative strategies is not limited, and the strategies are developed in concert with the public through a scoping and development process and multiple comment periods. The original 2003-09 plan was updated for 2009-15, and is now being updated for 2015-2021.

During the original 2003-09 public involvement process, issues were identified in nine categories for WDFW to address in the plan. The major categories included: scientific/professional management, public support for hunting as a management tool, hunter ethics and fair chase, private lands programs and hunter access, tribal hunting, predator management, hunting season regulations, and game damage and nuisance. The final category, which centered around species-specific management issues is addressed in this document. The issues, objectives, and strategies contained within this plan are the preferred alternatives.

Scientific/Professional Management of Hunted Wildlife

The concept of scientific management is very important to the public. The use of scientific information and the judgment of professionals in management decisions were rated very high (>90%) by both the general public and hunters. Next came economic (>68%) and social concerns (>54%), followed by political concerns (<25%), which received low ratings.

Issue Statement

WDFW wildlife managers and biologists have developed goals, objectives, and strategies in this plan to ensure long-term sustainability of all wildlife. The best available science will be the basis for the maintenance of all endemic wildlife populations. Strategies for hunted wildlife will not have significant negative impacts on the sustainability of other wildlife or their habitats. None of the strategies, subsequent hunting season recommendations, or implementation of activities will deviate from these fundamental principles. Science is the core of wildlife management, the basis for achieving the agency's mandate, and the foundation of this plan.

Objective 1:

Game Division Section Managers, Regional Wildlife Program Managers, District Wildlife Biologists, and field biologists should each attend at least one professional seminar/workshop each year that is relevant to their job.

Strategies:

- a. Agency staff will maintain regular contact with peer scientists and wildlife managers by attending Wildlife Society, Western Association of Fish and Wildlife Agencies, and Technical Group meetings including the annual Game Division workshop or other professional workshops.
- b. Significant impacts and the scientific basis for recommended actions will be "peer reviewed" by scientists outside WDFW when determined necessary by WDFW biologists and managers.

Issue Statement

While science and professional opinion form the foundation of wildlife management, social and economic issues often strongly affect public opinion, and influence management strategies and regulations. An easily accessible public involvement process is necessary to facilitate broad public involvement in developing and implementing management alternatives. The key is to develop programs that both achieve key biological objectives and are supported by the public.

Objective 2:

Provide multiple opportunities for stakeholders and the interested public to participate in development of three-year regulation packages, collection of biological information, and in planning efforts for game species.

Strategies:

- a. Maintain citizen advisory councils and seek their input at least twice during the process of developing plans and regulation packages, and post the dates of those meetings on the WDFW web page.
- b. Use the WDFW Web page to encourage public comment and ideas for regulations and priorities.
- c. Conduct a minimum of one public meeting in each WDFW region for statewide issues, two per WDFW region for more local issues, and provide other routine opportunities for the public to interact with WDFW staff regarding plans and three-year regulation packages.
- d. Conduct a public opinion survey at least once every six years to monitor support for agency programs, planned activities, and regulations.
- e. Publicize and maintain an email list of citizens interested in receiving copies of plans and regulations and notify those on the list as plans and season recommendations are developed.
- f. Encourage public participation and comment during the Fish and Wildlife Commission meeting process.
- g. Use webinars or other interactive forums to workshop with stakeholders, interested public, and organizations.

Predator/Prey Interactions

This section does not include gray wolf management; they are addressed in the Wolf Conservation and Management Plan. Predator populations (especially black bears and cougars) have increased to long-term sustainable levels in Washington over the past 30 to 40 years. While the public generally views their increase positively from an ecological perspective, managing carnivores in the smallest state in the west with the second highest human population presents many challenges. One of those challenges is addressing potential predator effects on prey species.

WDFW must effectively manage wildlife to meet population objectives in balance with citizen tolerance and support. The management goals for black bear, cougar, bobcat, and coyote will ensure managing statewide predator populations for healthy, long-term viable population levels and be consistent with achieving ungulate population objectives.

Issue Statement

The Department has developed management guidelines for when black bear, cougar, bobcat, or coyote management actions would be recommended as a means to achieve ungulate population objectives using the best appropriate science. WDFW recognizes that predator management can be a viable population management tool to achieve prey population objectives (hereafter referred to as predator-prey management). The Department also recognizes that societal values are often polarized regarding predator management.

Objective 3:

Implement the following guidelines for predator-prey management.

GUIDING PRINCIPLES

WDFW will consider predator-prey management actions using the following guiding principles:

- 1) Predator and prey populations are managed to ensure the long-term perpetuation of each species while attaining individual species population objectives.
- 2) Management of predators to benefit prey populations will be considered when there is evidence that predation is a significant factor inhibiting the ability of a prey population to attain population management objectives. For example, when a prey population is below population objective and other actions to increase prey numbers such as hunting reductions or other actions to achieve ungulate population objectives have already been implemented, and predation continues to be a limiting factor. In these cases, predator management actions would be directed at individuals or populations depending on scientific evidence and would include assessments of population levels, habitat factors, disease, etc.
- 3) Affected co-managers and stakeholders should be consulted prior to taking significant actions.
- 4) Conservation, ecological, economic, recreational, and societal values will be considered.
- 5) Any proposed management action must be consistent with federal and state law.
- 6) Decisions will be based on scientific principles and evaluated by WDFW and when determined necessary by the Department, an external scientific review panel of experts in predator-prey ecology will review the relative risk to all affected wildlife species and habitats.
- 7) Public education will be incorporated with any predator-prey management actions.

ACTION CONSIDERATION

When the Department decides to take an action, management will be directed at either individual predators or populations and would be primarily managed through:

- a. Recreational hunting seasons,
- b. Predator removal via:
 1. Specific actions to remove individuals or reduce populations of predators, using licensed hunters/trappers,
 2. Professional contractors such as USDA Wildlife Services (monitored and supervised by WDFW),
 3. Department staff.

ASSUMPTIONS

Certain assumptions apply when considering predator-prey management:

- a. The scientific information points to predators having an effect on prey population levels that ultimately impacts attainment of a population management objective.
- b. The term “management objective” means a population or management objective identified in a planning document or commonly accepted and used by WDFW for management of that species. The basis for population objectives (outside of a listing status) are assumed to include viable and productive population levels and are often developed in consideration of: current population estimates; harvest history; current harvest levels; currently occupied summer and winter ranges; condition of available forage and other habitat; land use practices; volume and distribution of property damage complaints; landowner tolerance; and public satisfaction.
- c. Implementation can apply across a continuum of predator management strategies, ranging from removal of individual or small numbers of animals to population level management across a broad spectrum of geographic scales (from site management to a larger landscape or region). Individual and local population management actions will be addressed as a priority, with ‘population level’ actions considered only when wide scale actions are deemed necessary to attain prey population objectives.
- d. Implementation has a reasonable likelihood of attaining the intended management outcome.

Strategies:

Implementation of Predator Management Actions

When WDFW considers predator management actions, the following information would be documented:

- a) Define the problem and rationale for a proposed action.
 1. Articulate the biological status (e.g., productivity, survival, population trend) of the predator and prey populations.
 2. Assess the evidence that prey population objectives are not being met due to predation.
 3. Assess the ecological factors other than predation (e.g., winter severity, habitat, disease, etc.) that affect prey populations.
 4. Determine whether population or individual level management actions are appropriate to achieve the intended outcome.
- b) Risk assessment – Assess the effect of proposed management actions on:
 1. Predator populations
 2. Prey populations
 - i. Level of acceptable predation.
 3. Other species (e.g., trophic cascades)
 4. Habitat
 5. Recreational opportunity
 6. Landowners
 7. Stakeholders who might be for or against actions.
- c) Proposed Action:
 1. Define geographical boundaries.
 2. Identify which predator species are affected.
 3. Identify prey or other species that may be affected by the proposed action.

4. Describe the predator removal methods to be used.
 5. Project the expected outcome/objective.
 - i. Include scientific information that addresses the expected effectiveness/success of predator control actions.
 - ii. Likelihood of successfully achieving objectives and how success is measured.
 6. Develop a monitoring plan to evaluate effectiveness prior to and following the control actions.
 7. Define a timeline for evaluating action.
- d) Public Review:
1. Stakeholder discussions as appropriate
 2. SEPA/NEPA review when appropriate
 3. Commission action when appropriate

Wolf Recovery

Wolf recovery will continue to be managed under the Washington's Wolf Conservation and Management Plan (Wolf Plan) that was adopted by the Fish and Wildlife Commission in December of 2011. The Wolf Plan lays out the recovery objectives of at least fifteen successful breeding pairs of wolves for three years distributed across the state in three recovery zones, or eighteen successful breeding pairs distributed across the state in three recovery zones in one year.

Key issues such as wolf-livestock conflict and wolf impacts on ungulate populations are addressed in the Wolf Plan and will continue to be implemented consistent with that plan. The 2009-15 Game Management Plan identified wolf recovery as an important issue for management of game species with strategies associated with completion and implementation of the Wolf Plan and monitoring impacts to ungulate species. The wolf population in Washington has grown since the first pack was documented in 2008. The number of packs, successful breeding pairs, and the minimum number counted each year has increased substantially between 2008 and 2013. Currently, there are thirteen documented packs and five breeding pairs which are established in two of the three recovery regions identified in the Wolf Plan. With the rate of wolf re-colonization observed to date in Washington, the Department is anticipating that recovery objectives may be reached during the term of this plan.

Issue Statement

Once wolf delisting objectives have been achieved, wolves can be considered for down listing or delisting. A population model developed by Maletzke et al. in (in press) has been tracking well with Washington's wolf population growth and predicts that recovery objectives will be reached by 2021. The Department is currently accepting information for a pending status review for wolves and, subsequent to that review, will continue to conduct reviews of wolf status at least every five years. These reviews shall include an update of the species status report to determine whether the status of the species warrants its current listing status or deserves reclassification. All status reviews will be consistent with WAC 232-12-297 and the State Environmental Policy Act (SEPA).

Once wolves have achieved the recovery objectives in the Wolf Plan, a status review (as noted on page 68 of the Wolf Plan) will be prepared for the Fish and Wildlife Commission and it will

possibly include a recommendation for a change in status. If the recommendation was to de-list, then the Commission will be asked to consider classification of wolves as either:

1. *Protected*: Meaning they would not be hunted, but could be killed if causing property damage issues.
2. *Game animal*: Meaning they can only be hunted under rules created by the Commission, and they could also be killed if causing property damage.
3. *Un-classified*: They could leave wolves un-classified which would mean they are not protected.

The inclusion of wolf management strategies in this Game Management Plan does not pre-suppose classification status of wolves after they are delisted. Although the Wolf Conservation and Management Plan states (page 70) that "...it is anticipated that the WDFW would recommend listing as a game species". It is also stated that "Proposals to hunt wolves following delisting would go through a public process with the Fish and Wildlife Commission. This process would address the diverse public values regarding the hunting of wolves."

This series of decisions by the Commission will likely be very contentious. Even with a majority of Washington citizens expressing support of hunting of wolves to maintain population objectives, reduce depredation of livestock, and address ungulate declines, there is substantial opposition to hunting of wolves (Duda, 2014).

The only objective for wolf management identified in this Game Management Plan is to implement the Wolf Conservation and Management Plan. Several key strategies are listed including initiation of a post-delisting management plan for wolves. With the continued controversy anticipated with wolf management after they have reached the recovery objectives identified in the Wolf Plan and the fact that the Wolf Conservation and Management Plan took five years to complete (2007 to 2011), it is apparent that planning efforts for when wolves have met delisting objectives need to be initiated. The Fish and Wildlife Commission stated the need for a post-delisting plan to begin immediately in their wolf management policy statement issued in 2012. Again, this does not pre-suppose the outcome, only identifies the planning process that would be implemented.

Objective 4:

Implement Washington's Wolf Conservation and Management Plan.

Strategies:

- a. Monitor wolf population status and trend annually and provide a status report each March.
- b. Manage wolf-livestock conflicts to minimize impacts to producers and wolf recovery.
- c. Manage ungulate populations to maintain prey populations and harvest opportunities.
- d. Develop and implement a comprehensive outreach program.
- e. Draft an independent plan by 2018 for how wolves will be managed after recovery objectives have been achieved.
 1. Utilize the Wolf Advisory Group to guide the Department's development of a post delisting management plan. At a minimum the post delisting management plan will include:
 - i. Management Goals and Objectives
 - ii. A description of how wolves will be monitored
 - iii. Wolf-livestock conflict management

- iv. Wolf-ungulate population management
2. The post delisting management plan development will go through the State Environmental Policy Act (SEPA) process and will encourage public involvement including:
 - i. A public scoping survey
 - ii. Conducting a random public opinion survey
 - iii. Public meetings
 - iv. Public review and comment of the draft plan
3. The Fish and Wildlife Commission will be asked to consider adoption of a post delisting wolf management plan through a public hearing process.

Recruitment and Retention of Hunters

This issue is becoming one of the most important issues for Fish and Wildlife Management Agencies across the country. In the past couple of years, there has been a slight resurgence in the number of hunters participating in hunting nationwide. In Washington, the number of deer hunters was maintained for a period; however declines have occurred during the past few years. Elk license sales have been at an all-time high over the past ten years, while those who actually participate have remained stable. The greatest declines in hunter numbers have been among small game hunters. In particular, the numbers of waterfowl, forest grouse, and pheasant hunters have dramatically declined over the past thirty years.

Issue Statement

In recent times, adjustments to license types and fees as well as increases in funds from the federal excise taxes on sporting arms and equipment have generated significant revenue for the Department's conservation and management actions. This has occurred even though the number of individuals purchasing hunting licenses each year has been decreasing. This revenue stream has allowed the expansion of access and wildlife conflict programs in recent years as well as significant improvements in research, annual surveys, and monitoring of game species, which in turn, increases opportunity for hunters. However, fee increases may also result in declines in hunter numbers. To maintain hunter numbers and revenue for the conservation of wildlife, current hunters must be encouraged to participate more frequently and hunters who have quit hunting must be encouraged to return, and efforts to recruit new hunters must be expanded.

Objective 5:

Increase the number of hunters who hunt each year rather than every couple of years, and create incentives for those who have stopped hunting to participate once again. Increase the number of hunters participating for the first time in Washington.

Strategies:

- a. Develop a stakeholder group to advise the Department on ways to recruit, retain, and re-activate hunters.
- b. Develop a plan that (at a minimum) includes:
 1. A summary of research into the reasons hunters quit and why hunting is less popular than in past years.

2. Survey intermittent hunters to understand why they only hunt every few years; hunters who stopped hunting within the past few years; and hunter education class graduates to see why they do not decide to hunt.
 3. Techniques employed by other states to recruit and retain hunters. Survey of general residents and/or other outdoor recreationists to identify demographic groups that are willing to participate in hunting but have never purchased a license.
 - i. Identify barriers to hunting participation by potential participants.
 4. Incentives to encourage participation from:
 - i. Seniors
 - ii. Hunters with disabilities
 - iii. First time hunters
 - iv. Female hunters
 5. Key actions or strategies that Washington should implement to be effective in recruiting and retaining hunters.
- c. Implement the actions and strategies in the plan.
 - d. Monitor the effectiveness of the actions.

Hunter Ethics and Fair Chase

This issue is related to improving the public perception of hunters and support for hunting as a wildlife management tool. This is a very significant issue to hunters, as identified during the 2002 public involvement process. Different people define fair chase in different ways.

Issue Statement

Many hunters think that the latitude to determine what constitutes fair chase belongs to the individual. They feel that others should not determine what fair chase is for someone else. Other hunters are concerned that the image and standard of ethics for hunting may be compromised, particularly with the expanding use of technology for hunting. This is especially evident with equipment technology.

Objective 6:

During each three-year hunting package, facilitate public debate of regulations for use of electronic equipment and baiting of wildlife for purposes of hunting.

Strategies:

- a. Conduct public outreach and consider restricting new electronic devices or baiting of wildlife.
- b. Develop effective regulations regarding fair chase that are understandable and enforceable.
- c. Consider exceptions to new equipment regulations to accommodate the needs of hunters with disabilities.

Hunter Behavior/Ethics

Another significant issue for hunters identified during the public involvement process is illegal activity and a desire for greater enforcement presence in the field.

Issue Statement

A majority of the general public believes that many hunters violate hunting laws (Duda 2002a). They feel that hunting without a license and poaching are the major violations, and shooting game

out of season and hunting over the bag limit are also common violations. Hunters cite these same concerns with the addition of shooting from a vehicle. The public also indicated, they developed their opinions from direct observation, physical evidence, and from talking with others. In addition, they support hunter refresher courses and feel that an additional training requirement will improve their opinion of hunters.

Objective 7:

Improve compliance rates for common violations.

Strategies:

- a. Emphasize the importance of hunter compliance with regulations and public opinion of hunters in hunter education classes, hunting pamphlets, and other information provided to hunters.
- b. Concentrate enforcement efforts on improving compliance for the most common violations.
- c. Review and simplify, clarify, or eliminate regulations that are dubious, ambiguous, or confusing.
- d. Reduce the number of violations for the top violations over the term of this plan.

Non-toxic Ammunition

Concerns continue to be expressed regarding the use of lead ammunition since it is known to be a toxic substance, and there is documented ingestion of spent ammunition and ammunition fragments by many wild birds and mammals. Impacts to wild birds from lead poisoning tend to be much more severe than mammals; however, population level impacts to wildlife other than California Condors have not been well documented. There have also been concerns expressed about potential impacts to hunters and their families from eating game harvested by lead ammunition. Most recently, the state of California passed a law that will phase out the use of lead ammunition for hunting by 2017.

The Washington Department of Fish and Wildlife Commission has a history of addressing concerns with the use of toxic shot when population level impacts can be documented and in areas where deposition or use of lead is likely to be problematic. Lead shot use and possession has been prohibited for all waterfowl hunting in Washington since a nationwide phase-in of nontoxic shot was implemented in 1986-1991. Beginning in 2000 and phased in through 2009, the Commission expanded nontoxic shot requirements for hunting all upland birds, doves, and band-tailed pigeons on all pheasant release sites. The Commission has also regulated the use of lead sinkers for fishing in lakes used by loons. A continuing problem in Washington is the poisoning of swans that consume lead shot deposited before it was banned for waterfowl hunting.

While alternatives have been developed for many of the popular types of shot and bullets, there have been concerns expressed about the limited quantities available; concerns that ammunition for some of the smaller calibers have not been extensively produced yet and that the availability of small shot sizes is limited; concerns that the non-lead alternatives are more expensive than some of the more common ammunition used for hunting and shooting; and there continue to be concerns expressed about damage to older types of firearms.

Issue Statement

A wide variety of birds may consume spent lead shot, resulting in increased mortalities and sublethal effects. Birds of prey may ingest lead as they scavenge animals (e.g., deer) taken during hunting seasons. In Washington, there is increasing evidence of lead consumption by golden eagles, a species of concern with low population levels (see http://wdfw.wa.gov/conservation/research/projects/raptor/golden_eagle_ecology/). However, some sportsmen are concerned that the added expense of purchasing non-toxic ammunition is not justified with population-level impacts and may further reduce hunter recruitment and retention.

Objective 8:

Reduce the availability and use of lead ammunition where lead poisoning of wild birds is problematic.

Strategies:

- a. Survey Washington hunters regarding their ammunition preferences; concerns for both lead and non-toxic ammunition; relative knowledge of the issues; and their levels of support for the development of mechanisms to reduce the use of lead ammunition.
- b. Survey Washington's general public to better understand their relative knowledge of the issues; their levels of support for the continued use of lead ammunition; and the development of voluntary programs and/or regulatory mechanisms to eliminate use of lead ammunition.
- c. Develop voluntary programs to encourage hunters to utilize lead alternatives.
- d. Develop an outreach plan that helps hunters understand the lead ammunition issues and gain support for reducing the use of lead for hunting.
- e. Work with hunters to develop restrictions that are supported and effective at reducing lead poisoning of wildlife.
- f. Promote use of non-toxic ammunition for department activities, where applicable.

Tribal Hunting

Native people have their own unique tradition, culture, and values related to hunting game and gathering traditional foods and medicines. Many tribes also have reserved rights to hunting and gathering in the language of the treaties signed with the United States. These rights allow tribes to manage their hunters, often with different seasons and rules than non-tribal hunters. This has led to frustration, anger, and misunderstanding on the parts of both tribal and non-tribal citizens. At the same time, limited state-tribal coordination has made it difficult for tribal and non-tribal wildlife managers to do their jobs of managing harvest and protecting game populations.

Issue Statement

Non-Indian hunters often do not understand the treaty hunting rights issues, leading to anger and frustration.

Objective 9:

Increase public understanding and acceptance of treaty hunting rights.

Strategies:

- a. Develop an outreach package that can be sent to citizens concerned about tribal hunting.

- b. Develop cooperative management programs that demonstrate state and tribal management programs.
- c. Link the WDFW website to tribal websites with information on tribal harvest statistics.
- d. Continue to include a segment on tribal hunting rights and tribal management activities as part of the Hunter Education Program.

Issue Statement:

Improve coordination of treaty and non-treaty hunting and wildlife management.

Objective 10:

Complete additional coordinated tribal/state harvest management plans for species such as deer, elk, mountain goat, bighorn, and/or cougar populations subject to both tribal and non-tribal hunting.

Strategies:

- a. Use existing herd plans to develop coordinated harvest management plans or MOUs for elk herds or other game species. The MOUs should include harvest objectives that are sustainable and meet the needs of both state and tribal hunters; result in sharing of harvest information and hunting regulations; encourage cooperative research and population monitoring; and supports both party's interests in gaining access to lands for hunting.
- b. Based on tribal interest and availability, pick key populations in each treaty ceded area as a starting place to build working arrangements and processes for developing coordinated harvest management plans.

Hunting Season Regulations

The Washington State Legislature provides the directive: *“The commission shall attempt to maximize the public recreational game fishing and hunting opportunities of all citizens, including juvenile, disabled, and senior citizens.”* (RCW 77.04.012).

In hunter opinion surveys, most hunters expressed general satisfaction with their hunting experience. Harvesting an animal (hunter success) and seeing plenty of game were the main factors driving hunter satisfaction. It is fairly clear that harvest success plays a significant role in hunter satisfaction.

Issue Statement

Hunters feel that seasons are still too crowded and regulations too confining. In addition, they say that seasons are too short for their group or too long for others, success rates are too low, antler restrictions on deer and elk are too onerous, and overall, there is not enough game.

Objective 11:

Maintain hunter satisfaction and participation at or above 2014 levels for the life of this plan.

Strategies:

- a. Consistent with population goals and objectives, conservation principles, and social constraints, develop and maintain a variety of deer and elk hunting season opportunities within each administrative district of WDFW:

1. Provide sufficient hunting opportunities for archers, muzzleloaders, and modern firearm hunters to approach average statewide participation rates and seek to generally equalize success rates where possible. Address additional “fairness” issues between users through the Allocation Committee of the Game Management Advisory Council and recommend changes supported by the Council. Provide general season antlerless harvest opportunities approximately equal to recruitment in Population Management Units (PMUs) (these are combinations of GMUs) meeting population objectives. Provide harvest opportunities that exceed recruitment in populations that are above objectives.
 - i. Provide general antlerless opportunity to users in the following order of priority:
 - Youth hunters
 - Hunter’s with disabilities
 - Senior hunters
 2. Provide antlerless opportunity to archery or muzzleloader hunters if needed to equalize success rates with modern firearm hunters, or equally between weapon types if success rates are nearly equal.
 3. Support the Master Hunter program by providing members primary consideration in hunting efforts designed to resolve private land and sensitive damage issues.
- b. Districts should retain general season opportunity whenever possible. Use other techniques to manage harvest rates within a population management unit before considering permit only restrictions.
- c. While striving to achieve population goals, maintain season length as a second priority to maintaining general seasons. Use other techniques to manage harvest rates, such as timing, antler points, etc.

Urban Hunting Issues

Since early in the history of Washington, wildlife management has focused on hunting as the primary means of managing wildlife population levels and for funding wildlife conservation. As the human population grows and expands or dominates the landscape, this traditional wildlife management technique is being challenged. Increasingly, the demand for resolution of wildlife population problems also includes the constraint that hunting is a less acceptable method of alleviating conflicts. Unfortunately, the concept of general public responsibility for wildlife problem resolution has not risen to a level of political support that results in adequate funding from general taxpayers.

Issue Statement

As the number of people in the state increase, citizen demands for resolution of conflicts with wildlife are expanding. At the same time, constraints to address perceived safety issues, noise levels, and the nuisance associated with hunter management results in significant challenges.

Objective 12:

Develop at least five local level plans or significant actions designed to resolve wildlife/human problems.

Strategies:

- a. Assist local governments in identifying current and potential issues for wildlife/human conflicts.
- b. Support conflict resolution that includes hunting as a principal means of state funded resolution.
- c. Recommend alternative conflict resolution techniques for local government consideration and funding.
- d. Develop model ordinance language for local governments that supports hunting as the primary wildlife population management resolution provided by the state.

Communication Issues

Communication between the Department and the public was a very consistent and important issue to the public that was identified in the 2008 opinion survey.

Objective 13:

Improve the Department's rating on game management communication by 2021.

Strategies:

- a. Expand the use of email to communicate with those directly affected by game management decisions.
- b. Expand the use of the Department's website to explain game management policy and direction and the rationale behind decisions related to game management.
- c. Continue the use of news releases (magazines and newspaper) to facilitate media coverage of important game issues.
- d. Expand the use of the hunting regulation pamphlets to provide information regarding game management.
- e. Hire a consultant to conduct a comprehensive review of game management communications to improve effectiveness, credibility, and public support by 2016, including emerging technologies and social media.
- f. Conduct a public opinion survey in 2020 to determine how the Department rates on game management communication.

Plan Monitoring

In order to clearly identify accomplishment of the objectives identified throughout this plan, a "report card" will be prepared by the Game Division. This list of accomplishments will clearly demonstrate public accountability associated with implementation of the Game Management Plan.

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PRIVATE LANDS HUNTING ACCESS

I. HUNTING ACCESS STATUS AND TREND

The state of Washington has had agreements or contracts with private landowners to improve habitat or provide hunting access almost since the initial formation of the Department of Game in the early 1900s. Since approximately half of the state is in private ownership, private lands represent a vital component of habitat for wildlife species and outdoor recreation. Historically, hunter access programs in Washington have resulted in response to landowners charging fees for hunting or otherwise limiting or closing access.

In 2012, WDFW had agreements with 513 landowners which provided hunting access to over 1,000,000 acres. Most of this contracted acreage is in eastern Washington and associated with agricultural lands. A smaller number of formal agreements also exist in western Washington, especially for waterfowl hunting. Less formal relationships fostering hunting access have occurred throughout the state, but have been especially important on industrial timberland in western Washington.

Recent trends in the amount of private land available for public hunting have become a cause of concern among hunters and the Department. There has been an overall decline in contracted acreage as well as a proliferation of fee access programs by major landowners that limit hunter numbers. Historically, common landowner concerns have included liability, property damage, and safety. While “hunt clubs” have been on the agricultural landscape for years, deriving income from recreation has become a more recent landowner objective with large corporate landowners. WDFW has responded by offering landowners cash incentives in localized high priority areas, but addressing large acreages in this manner on a statewide basis is beyond what existing budget resources can support.

II. RECREATIONAL OPPORTUNITY

A 2009 survey of hunters (Duda et al., 2009) regarding access indicated that over half of the hunters surveyed either strongly (41%) or moderately (17%) agreed that lack of access had affected their hunting. Approximately 47% of hunters in the same survey indicated that they spend about half or more of their time hunting on private lands. The importance of access to hunters is obvious and the declining trend is a cause for concern.

WDFW has five program types for landowners who participate in agreements to provide hunting access as follows:

- **Feel Free to Hunt** – Is the least restrictive for hunters who can simply go to a site and hunt without registering or needing to make any kind of advance arrangement.
- **Register to Hunt** – Is similar, but requires that hunters complete an onsite registration form before hunting and sometimes submit a daily report of harvest before leaving the site. The number of hunters allowed at any one time is sometimes limited by designating a limited number of parking spaces which when full; indicates that no more hunters are allowed.

- **Hunt by Written Permission** – Requires hunters to obtain a written permission form from the landowner before hunting. The landowner’s contact information is included on signs posted around the property.
- **Hunt by Reservation System** – First used in 2013, is the newest option and has been well received by landowners and many hunters. This option requires that hunters make an advance reservation through a self-service online system before arriving at the site to hunt. Landowners have an online portal that they can use to view the reservations made and the names of hunters who will be on their property. The reservation system gives both WDFW and landowners a high degree of control in tailoring how hunts are managed on each site by allowing for rest periods and limited group sizes.
- **Landowner Hunting Permit** – This program is used where WDFW has negotiated access to unique or high quality hunting opportunities. It also provides for the flexibility of customized seasons managed with special permits.

III. DATA COLLECTION

On an annual basis, WDFW compiles and summarizes basic information related to landowner contracts. Acreages are totaled by county for the various types of access programs and included in the annual Game Status and Trend Report. Many other landowners certainly allow access outside of WDFW programs, but these opportunities are not closely monitored. WDFW has also conducted surveys of landowners and hunters to help identify concerns and set priorities for the program. In 2013, program staff began an inventory of private industrial timberland that was in fee access programs in western Washington. Based on this inventory, WDFW anticipates that at least a quarter of the state’s private industrial timberland could be in some type of landowner fee permit system by the 2014 hunting season.

IV. MANAGEMENT GOALS

The statewide goals for private lands are:

1. Engage landowners, provide technical advice, and encourage them to maintain and enhance habitats to sustain healthy and productive wildlife populations.
2. Engage landowners and provide them support and resources to increase the availability of private lands to the public for recreation to include: Hunting, fishing, and wildlife viewing.
3. Address costs associated with providing recreation and the economic needs of landowners, while striving to minimize direct costs to recreational users.

V. ISSUE STATEMENTS, OBJECTIVES, AND STRATEGIES

Habitat Management

Issue Statement

WDFW has a long history of working with landowners to improve a wide range of wildlife habitats. One of the keys to landowner participation in WDFW’s access programs is the technical support provided by field staff to assist landowners with meeting the requirements of the federal farm bill conservation programs. Cuts to these federal programs have affected landowner participation, but newer programs have offered new opportunities through grants to states.

Objective 14:

Maintain a strong team of thirteen private lands biologists statewide to assist landowners with habitat enhancements and provide recreational access. Utilize Farm Bill and state fund sources to enhance habitat under a minimum of 400 landowner agreements by 2021. Submit at least one proposal for permanent additional funding for habitat and access incentives.

Strategies:

- a. Provide information to elected officials outlining the public benefits of existing programs and support any new federal legislation that would fund habitat or access incentives.
- b. Continue to utilize state migratory bird stamp, eastern Washington pheasant enhancement, and turkey tag revenue to offer landowner incentives for enhancing habitat and public access.
- c. Develop at least one state legislative proposal to increase funding for landowner incentives.
- d. Where landowners have elected to charge fees to hunters, encourage use of the permit income for habitat enhancement.

Population Management

Issue Statement

Hunting can be an important mechanism to alleviate damage caused by wildlife on private lands. Landowners who incur damage caused by game animals must allow public hunting access in some form to be eligible for some types of assistance from WDFW. A variety of options exist depending on the specific situation and location. Refer to the Wildlife Conflict Chapter for more information on conflict management.

Objective 15:

Evaluate the suite of hunting options to address wildlife conflict situations and adapt as needed to best meet landowner needs and maximize opportunities for hunters. Require a close working relationship within the Wildlife Program at all levels (between private lands, wildlife conflict, and district wildlife biologists). By 2017, improve information available to hunters to help them locate areas where damage by game animals is occurring.

Strategies:

- a. Identify areas with chronic wildlife conflict issues.
- b. Improve coordination between district biologists, private lands biologists and conflict staff, to enhance landowner relationships and provide public access in chronic conflict areas.
- c. Develop a method for hunters to locate damage areas where landowners may need hunters to address damage caused by game on their property.

Recreation Management

Issue Statement

The availability of private lands for hunting has become more limited or restrictive in recent years and is affecting overall recreational opportunity. Historically, WDFW and hunters have competed with organized hunt clubs or other types of exclusive leases for hunting access on agricultural lands or smaller ownerships. Until very recently, general limitations on hunter numbers or fees by corporations on vast ownerships, was not common. As of 2014, WDFW staff compiled a list of

over 1.3 million acres of private industrial timberlands in western Washington that had implemented fee access permit or lease programs that also capped hunter numbers. This represents over one quarter of the state's private industrial timberland. Washington law (RCW 4.24.210) has limited the liability of landowners who allow recreational access without charging a fee. Landowners who charge fees must purchase insurance to protect themselves from lawsuits by their permittees. A change to this law is currently under consideration, which would allow landowners to charge limited fees as long as they do not limit the number of users allowed. This proposal recognizes that landowners often incur costs associated with allowing recreation on their land and would allow them to recoup those costs.

In some cases, access to public lands has been affected by private land closures or limitations. Access for the public on some public lands is not secured and recreation is in effect controlled by private landowners where public right of way is not established.

WDFW increased field staffing levels in all regions to work with private landowners to expand public access. Generally, the strategies used have centered on reducing landowner costs associated with allowing access. These kinds of measures have included providing signage, monitoring public use, enforcement, and other incentives. In recent years, WDFW has begun to use cash incentives to increase landowner interest in localized priority areas, but funding limits currently preclude using this approach on a larger scale.

Objective 16:

Continue to utilize available resources and foster the development of new incentives to increase landowner participation in WDFW access programs and increase acreage enrolled to 1.3 million acres.

Strategies:

- a. Continue to work closely with landowners to mitigate their costs, and provide traditional incentives to facilitate recreational access on private lands.
- b. Seek and review other plans and efforts to improve outdoor recreational access and take advantage of opportunities to combine resources to maximize potential benefits.
- c. Develop new materials that inform landowners about the programs and services offered and make available on the Department's website and other formats.
- d. Where possible, encourage landowners who feel they must charge fees to keep costs low and not limit the number of individuals who may obtain a permit.
- e. Within available budgets, continue to utilize monetary incentives in high priority areas where this approach is already in use.
- f. Develop criteria to evaluate and prioritize where cash incentives to facilitate access are most needed and would have the greatest benefit.
- g. Seek or leverage funding from other sources to increase the capacity to offer incentives to landowners. Submit proposals that may increase permanent funding.
- h. Request or support legislation that encourages landowners to allow free access or low-cost permit programs that do not limit participation.
- i. Develop other methods beyond enrolled acreage to measure success of the private lands program such as hunter days provided and hunter harvest.
- j. Encourage landowners to make accommodations for disabled hunters, and provide hunters with information about where these opportunities exist.

- k. Continue to review requirements for public hunting access in situations where WDFW provides assistance with wildlife damage, and look for ways to leverage or require general season hunting access as a condition of that assistance.

Objective 17:

Complete an inventory of public lands by 2016. Evaluate situations where access is closed, impaired, or at-risk of closure by private landowners not allowing access, and develop a strategy to address these issues.

Strategies:

- a. Develop a system to inventory where private ownership is restricting access to public lands in Washington. Classify land blocks as secure, closed, impaired, or at-risk of a reduction in public access.
- b. Prioritize areas and work with landowners and other agencies to secure or improve access through private land to public land.
- c. Seek funding in cooperation with other public landowners to secure easements or fund agreements that provide public access to public land.
- d. Monitor exchanges or sales of public lands to identify situations where transactions could limit or otherwise affect recreational access.
- e. Develop informational materials that convey the status of public land access and the need to address access to landlocked parcels.

Issue Statement

WDFW launched a new access program in 2013 that allows hunters to make advance reservations to hunt on selected properties enrolled in hunting access agreements. The current Hunt by Reservation System is considered an interim solution and does not include all of the desired features. The system appears to be popular with the hunters who use it and the landowners in the program, but surveys to measure satisfaction and opinions have not been conducted since the program began. The current reservation system operates strictly on a first-come, first-served basis with all reservations becoming available with the same lead time. While this has been acceptable for some properties, it has been a point of dissatisfaction among some users.

Objective 18:

By 2016, make improvements to the current reservation system that allow drawings for some reservations and adds flexibility as to when reservations first become available to the public. Add other features to meet the needs of hunters and landowners, and make the program more efficient to administer.

Strategies:

- a. Conduct surveys of system users to measure satisfaction with the program and seek suggestions for improvements.
- b. Add the ability to conduct drawings to the current system.
- c. Improve the system to help better inform users of program rules, such as listing all hunting partners on the permit.
- d. Explore options to develop a fully automated system that meets all of the desired system improvements; is funded by users; and linked to the WDFW license system.
- e. Include an automated approval and update process for sites in the program to make the information available to users more quickly.

Issue Statement

Improving the availability of information about the location and features of lands providing public hunting access is frequently cited as a desire of hunters. Information on private lands in agreements with WDFW was improved during the development of the interim reservation system, but not all sites currently have this improved information available.

Objective 19:

By the beginning of 2015, assure that all landowner access agreements are included in the private lands database, and add the ability for hunters to locate properties meeting their needs on the WDFW website by adding a search tool. Improve and update information about access opportunities included in written materials and hunting pamphlets.

Strategies:

- a. Enter site data and information for all landowner agreements and update annually as appropriate.
- b. Improve the ability of users to search for sites offering opportunities by species, ADA accessibility, and other features.
- c. Link hunting access information to pages with information on the various game species and seasonal hunting prospects.
- d. Consider development of a phone application that would assist hunters with identifying access opportunities while in the field.
- e. Continue to use signage around sites as a primary method of identifying lands that are available for recreation. Assure that signs are posted prominently and at frequent intervals. Improve information regarding the Private Lands Access Program in hunting pamphlets, and develop other written materials for hunters and landowners. Include educational materials that encourage hunters to respect the landowner and their property.
- f. Make contact information for private lands staff available on the agency website as a resource for hunters looking for access opportunities.

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WILDLIFE CONFLICT

I. CONFLICT STATUS AND TREND

Human-wildlife interactions will likely continue to increase over time as Washington's human population expands. In addition, there is increasing public demand for recreational use of Washington's wildlands, which brings more people into contact with wildlife. Maintaining healthy wildlife populations while minimizing negative human-wildlife interactions will increasingly rely on informing and assisting the public to employ proactive measures and providing quick effective response once conflicts and property damage occur (Conover 2001).

A 2014 opinion survey indicates that more than a quarter of the Washington public (29%) has experienced negative situations or problems associated with wildlife (Duda et al. 2014). Deer and raccoons were the most commonly named species that had caused problems (35% of those who said they had problems cited deer, 25% cited raccoons), followed by bear (14%), geese (13%), and coyotes (10%) (Duda et al. 2014).

Conflict issues with small game, furbearers, and unclassified species (raccoons, beavers, coyotes) are typically handled using one of three methods:

1. Self-assistance; using "Living with Wildlife" information on WDFW web site <http://www.wdfw.wa.gov/living/>.
2. Wildlife Control Operator (WCO); landowner can select and hire a WCO from a list of certified individuals.
3. USDA Wildlife Services; landowner can contract USDA to resolve the human-wildlife conflict situation.

Conflict issues involving public safety with bear, cougar, moose, and wolves are generally resolved by WDFW Law Enforcement. Unfortunately, many of these situations require the use of lethal control measures to remove the offending animal through agency kill authority. In 2013, many wildlife conflict responsibilities were transferred from WDFW Law Enforcement to WDFW Wildlife Program. Presently, non-public safety related conflict issues with deer, elk, turkey, bear (timber damage), and wolf are resolved through the Wildlife Program while Enforcement continues to resolve dangerous wildlife conflicts.

A primary objective of WDFW is to minimize conflict and assist landowners with prevention, mitigation, and when necessary compensation for property damage or loss (as provided by law). An effective strategy for managing negative human-wildlife interaction is to allow staff a degree of flexibility to test and implement new techniques while perfecting existing mitigation tools. WDFW staff will assess each scenario on a case-specific basis and use their professional judgment to determine the best course of action for conflict resolution.

II. RECREATIONAL OPPORTUNITY

In Washington, human-wildlife conflict resolution is a management necessity that at times cannot be resolved using traditional recreational harvest strategies. WDFW has utilized hunters to assist with deer and elk conflict issues and houndsmen and hunters to assist with bear and cougar

depredation events. In each case, there are criteria that must be met and restrictions in some cases that prohibit the hunter or houndsmen from keeping the animal harvested. Licensed hunters may be issued a damage prevention permit through a Wildlife Conflict Specialist and purchase a Damage Tag to participate in a deer or elk damage resolution hunt and retain the deer or elk. Additionally, Washington allows trappers to become certified as Wildlife Control Operators who then may operate a business to remove nuisance wildlife and be compensated by individual landowners for their efforts.

III. DATA COLLECTION

The WDFW Law Enforcement Program documents human-wildlife conflict complaints that result in an officer responding to an incident. Historically, most complaints called into Law Enforcement involve conflict with cougar, bear, deer, and elk. In 2013, WDFW transferred most wildlife conflict activities from Law Enforcement to the Wildlife Program. The Wildlife Program now handles deer and elk damage permits and damage claims and Law Enforcement continues to log reports of dangerous wildlife situations, per RCW 77.12.885.

IV. WILDLIFE CONFLICT MANAGEMENT GOALS

The statewide management goals for wildlife conflict management are:

1. Improve our understanding and ability to predict human-wildlife conflict issues.
2. Enhance proactive measures to prevent conflict and improve Department response to wildlife conflict events.
3. Minimize, mitigate, and manage wildlife conflict events to maintain human tolerance and perpetuate healthy and productive wildlife populations.

V. ISSUE STATEMENTS, OBJECTIVES AND STRATEGIES

Deer and Elk Damage to Commercial Agriculture

Issue Statement

Farming is a vital part of the Washington's economy. The lands that support this industry also provide wildlife habitat and forage opportunities for deer and elk, which may result in crop damage. Landowner tolerance for deer and elk damage depends on how quickly and effectively the Department responds to mitigate damage (Washington Department of Fish and Wildlife 2008). The Department is committed to providing technical assistance for minimizing and mitigating damage. Damage resolution may be achieved through use of non-lethal or lethal measures. Whereas the Department generally promotes the use of non-lethal measures prior to lethal action, there are occasions where lethal removal may be necessary. Washington residents historically have supported the use of hunting as a tool for damage prevention and mitigation (Duda et al. 2008a, Washington Department of Fish and Wildlife 2008, Dietsch et al. 2011, Duda et al. 2014). Majorities of Washington residents support hunting for the following reasons: To address nuisance animals (73% of Washington residents strongly or moderately support hunting for this reason), to address human-wildlife conflicts (67%), and to control wildlife damage to private property (62%) (Duda et al. 2014).

Objective 20:

Respond to wildlife damage complaints to private agricultural crop lands within 72 hours, and increase the number of WDFW agreements used to mitigate deer and elk damage issues by 10% during the period 2015-2021.

Strategies:

1. Provide agriculture producers with information materials to proactively address deer and elk damage issues and to improve the Department's ability to respond to agriculture crop damage from deer and elk.
2. Promote the use of WDFW agreements to commercial landowners and lessees, and encourage non-commercial agriculture landowners to use non-lethal conflict prevention measures identified on a prevention measures checklist.
3. Promote participation in conflict prevention/resolution by Treaty Tribes.
4. Use hazing and other non-lethal measures to resolve damage; with emphasis placed in areas where the feasibility of lethal action is limited or ungulate populations are below management goals.
5. Encourage recreational harvest in areas with chronic crop damage.
6. Implement actions to encourage private land owners to consider, purchase, and use deer/elk fencing as part of their new and long-term business practices.
7. Expand the use of cooperative fencing projects in chronic damage areas with emphasis on high-value crops.
8. Facilitate the deer/elk depredation program (including agreements, permits, and claims process) to improve WDFW's response to landowners experiencing agriculture damage.
9. Assess the feasibility of using partnerships and cooperators to assist with crop damage issues.
10. Increase the number and accessibility of crop assessors on contract statewide.
11. Utilize agency kill authority and depredation permits for problem crop damage areas.

Carnivore (bear, cougar, wolf) Depredation on Livestock

Issue Statement

Livestock production, similar to farming, is an essential component of Washington's economy. In addition to minimizing loss and injury of livestock and maintaining landowner tolerance of carnivore species there is increased concern for public safety. Protecting people from dangerous wildlife while maintaining sustainable wildlife populations, is a primary objective of the Department. The Department utilizes both non-lethal and lethal techniques to provide landowners with assistance for minimizing livestock loss or injury caused by carnivores. Washington residents historically have supported the use of hunting to address human safety and prevent loss of livestock (Washington Department of Fish and Wildlife 2008, Dietsch et al. 2011 and Duda et al. 2014).

Objective 21:

Maintain or decrease livestock depredation levels over the period 2015-2021.

Strategies:

- a. Provide livestock producers and owners with printed information materials to minimize conflict with carnivores.

- b. Promote the use of WDFW agreements for livestock to commercial livestock producers, and encourage the use of a non-lethal prevention measures checklist.
- c. Promote the use of non-lethal conflict prevention measures and a prevention measures checklist to non-commercial producers.
- d. Develop response protocols for carnivore depredation on livestock.
- e. Use hazing and other non-lethal prevention measures to minimize potential loss or injury.
- f. Encourage recreational harvest (black bear and cougar), where feasible, in areas with chronic depredation events.
- g. Review and improve the techniques used for lethal removal of offending animal(s).
- h. Utilize agency kill authority and depredation permits, when feasible, for carnivore depredations on livestock, consistent with state and federal law.

Urban Wildlife Conflict

Issue Statement

Urban wildlife is a valuable natural resource; providing the public with opportunities to observe and experience wildlife. However, sometimes wildlife can damage property or threaten human safety. Rather than immediately resorting to removal of a species, deploying proactive prevention methods can deter human-wildlife conflict issues within urban areas. Public tolerance and appreciation of wildlife species is an important component of human-wildlife conflict management (Conover 2001). While it is impossible to eliminate human-wildlife conflict, many human-wildlife conflict situations in urban areas can be avoided through the use of exclusion techniques, removal of unnatural food resources, and education about of wild animals and their living requirements.

Objective 22:

Decrease or minimize the number of urban human-wildlife conflict calls requiring WDFW response so that the number of calls is constant or declining over the period 2015-2021.

Strategies:

- a. Develop a program to track the number of calls requiring WDFW response.
- b. Distribute informational materials to increase public awareness about ways citizens can better coexist, through use of preemptive actions, and respond to wildlife in urban areas.
- c. Develop and promote activities and programs (e.g., volunteer hazing to scare animals away) that reduce the likelihood of human-wildlife conflict in urban areas.
- d. Promote the development of local ordinances, rules, and regulations (e.g., fines, prohibiting feeding, etc.) which local governments can utilize to minimize human-wildlife conflict.
- e. Promote collaboration with local governments to co-manage conflict issues with select species in urban areas.
- f. Identify priority areas where changes to wildlife conflict management response may be necessary.

Black Bear Tree Depredation on Commercial Timberlands

Issue Statement

During the spring, when black bears are emerging from dens, high nutritional value food resources are limited. Bears will often seek sapwood as a preferred food resource because of its high sugar content. Trees with high growth rates, typically found on commercial timberlands, contain the

highest sugar content and therefore are the most vulnerable to depredation. Damage to commercial timberlands can, at times, exceed one-third of the trees in a given stand; resulting in economic losses for landowners (Washington Department of Fish and Wildlife 2008).

Objective 23:

Improve and expand WDFW's black bear tree damage program, by incorporating alternate strategies beyond existing techniques, which will result in an overall 10% reduction in the number of permits requested to lethally remove black bears for timber damage while maintaining or decreasing the amount of bear caused timber damage over the period 2015-2021.

Strategies:

- a. Conduct a review of existing data and current processes to understand the current level of complaints and response; and identify and prioritize areas that may need management improvements.
- b. Develop a black bear timber depredation program that includes proactive non-lethal prevention measures, methods to validate damage, options for lethal removal prevention (during and post damage seasons), collaboration with other entities for testing and evaluating damage and prevention techniques, and methods to evaluate the efficacy of the program.
- c. Provide information to landowners on damage prevention tools and promote the use of non-lethal measures; where feasible.
- d. Develop protocols to assist landowners in assessing bear damage over time.
- e. Improve opportunities for recreational bear harvest to minimize potential timber damage.
- f. Facilitate the black bear timber depredation program (including applications, permits, and actions) to improve WDFW's response to landowners experiencing timber damage.
- g. Evaluate the potential to use a variety of methods for lethally removing black bears to address timber damage.
- h. Provide Department-coordinated lethal removal to mitigate timber damage by bears.

Communication and Outreach

Issue Statement

Communication between the Department and constituents on human-wildlife conflict prevention and resolution is paramount to increasing the public's ability to resolve problems with wildlife and to maintain support for wildlife in Washington.

Objective 24:

Reproduce and/or update existing conflict prevention outreach materials and create two (2) new conflict prevention publications by 2021.

Strategies:

- a. Use the top five consumer rated media (e.g., direct mail, internet, newspaper, television, and email) to disseminate information.
- b. Develop printed conflict resolution information for distribution to landowners.
- c. Improve the WDFW web page to include a "communication matrix" that directs the public to the appropriate point of contact (i.e., WDFW staff, Wildlife Control Operator, other resources) to resolve the wildlife conflict problem.
- d. Develop fact pages to clarify rules and regulations related to human-wildlife conflict resolution.

- e. Provide continual updates to the WDFW web page regarding rules, regulations, and procedures.
- f. Develop educational partnerships for informing the public on how to minimize human-wildlife conflict issues.

Data Collection

Issue Statement

Lethal removal, through hunting and trapping, of game species (deer, elk, bear, and cougar) and furbearer species is an effective tool for mitigating human-wildlife conflict. It is important to account for removals due to conflict issues when assessing population-level impact and viability of game and furbearer species.

Objective 25:

Develop a standardized data collection system for recording complaints and lethal removal of game and furbearer species; searchable by species, location, and resolution.

Strategies:

- a. Identify areas where changes to conflict management approaches may be needed, e.g., increase recreational harvest.

Issue Statement

Measuring the effectiveness of programs and actions taken by WDFW to minimize human-wildlife conflict is essential to providing appropriate response to landowners and maintaining support for wildlife populations statewide.

Objective 26:

Conduct a survey of complainants who filed deer, elk, bear, cougar, and wolf complaints to determine the level of satisfaction with WDFW actions for resolving their wildlife conflict complaint during the period 2015-2021.

Strategies:

- a. Capture complainant contact information when responding to conflict calls.
- b. Identify and work with a data collection team to conduct a survey.
- c. Evaluate results to develop strategies for addressing human-wildlife conflicts.
- d. Implement the strategies identified and use stakeholder groups where necessary.

Techniques and Tools

Issue Statement

Human-wildlife conflict will likely continue to increase as human populations increase. Although it is unrealistic to expect elimination of conflict issues, there are numerous ways to minimize human-wildlife conflict. Tools and techniques to resolve human-wildlife conflict continue to improve, and new innovative ideas are frequently introduced. To properly manage wildlife conflict issues, the Department must utilize a full spectrum of techniques. Both lethal and non-lethal measures are necessary to provide adequate response to problems and maintain public

tolerance of wildlife. Because wildlife conflict resolution is dynamic and evolving it is imperative that WDFW remain flexible, adaptive, and up-to-date on resolution techniques.

Objective 27:

Develop a minimum of two projects to expand, improve, or develop the use of non-lethal harassment, deterrent, or long-term mitigation measures to minimize negative human-wildlife interactions; particularly in: 1) urban areas, 2) areas where species populations are below management objectives, or 3) areas where species are under federal protection during the period 2015-2021.

Strategies:

- a. Identify, explore, and test the use of new non-lethal deterrent measures for wildlife conflict issues, e.g., using dogs to move turkeys from an urban area.
- b. Provide opportunities for volunteers to assist in wildlife conflict resolution activities.
- c. Provide opportunities for testing new techniques through pilot studies and collaborative research projects.
- d. Encourage WDFW staff to engage in activities and programs that may reduce the likelihood of human-wildlife conflict.
- e. Support collaborative research opportunities that test, assess, and evaluate existing and new conflict prevention and mitigation techniques.
- f. Use contracts and agreements with landowners to try new techniques, engage in proactive prevention tools, and mitigate potential for compensation associated with human-wildlife conflict.
- g. Develop new options for providing compensation to landowners outside of annual cash payments.

Issue Statement

Wildlife Control Operators (WCO) have an essential role in responding to nuisance wildlife complaints. They assist landowners by providing quick action to resolve conflict issues with small game, furbearers, and unclassified wildlife. Because wildlife conflict issues will continue to rise as human populations increase, WDFW can utilize the WCO in an adaptive management approach to address a variety of human-wildlife conflict issues.

Objective 28:

Expand and improve the existing wildlife control operator program to ensure statewide coverage in each county and include comprehensive training and accountability.

Strategies:

- a. Revise the existing wildlife control operator program to include a training program for certification and recertification requirements; including fees.
- b. Improve the certification process to include more opportunities for certification and a more comprehensive and interactive training program.
- c. Develop a plan to broaden the type and extent of work in which wildlife control operators can participate to allow more flexibility of their use by WDFW for conflict resolution under WDFW guidance.
- d. Develop web based or electronic based reporting system for special trapping permits and wildlife control operators to improve customer service and conflict tracking.
- e. Provide a mechanism for collecting data on non-target species.

Issue Statement

Compensation for property loss and damage can be an effective tool for mitigating human-wildlife conflict events. When proactive measures fail, compensation programs help maintain public support and landowner tolerance for wildlife. These programs must be designed to provide the landowner with a relatively simple process and reasonable reimbursement for their loss.

Objective 29:

Revise statewide standardized compensation programs for crop and livestock loss.

Strategies:

- a. Clarify criteria for each claims process.
- b. Evaluate and refine existing compensation programs to facilitate a streamlined claims process.
- c. Review and consider other methods to provide compensation or resolution for crop or livestock loss as a result of human-wildlife conflict.

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SMALL GAME, FURBEARERS, AND UNCLASSIFIED SPECIES

I. CLASSIFICATION

In Washington, there are approximately 31 mid-to-small sized mammals or mammal groups that can be hunted or trapped (Table 1). Of these, 5 species are classified as game species (including 3 cross-classified as furbearers) that can be hunted (RCW 77.12.020; WAC 232-12-007). Eleven of the 31 species or groups are classified as furbearers (indicating that their hide has a commercial value in the fur industry). These 11 species can be trapped but not hunted unless seasons have been established (i.e., 3 species cross-classified as game species). The remaining species or species groups are “unclassified,” and can be trapped or hunted year-around.

Table 1. Mid-to-small sized mammals that can be hunted or trapped in Washington.

Species	Genus species	Classification	Trapped	Hunted
Cottontail rabbits	<i>Sylvilagus spp.</i>	Game animal		X
Snowshoe hare	<i>Lepus americanus</i>	Game animal		X
Bobcat	<i>Lynx rufus</i>	Game animal & furbearer	X	X
Raccoon	<i>Procyon lotor</i>	Game animal & furbearer	X	X
Red fox	<i>Vulpes vulpes</i>	Game animal & furbearer	X	X
American beaver	<i>Castor canadensis</i>	Furbearer	X	
American badger	<i>Taxidea taxus</i>	Furbearer	X	
Ermine	<i>Mustela erminea</i>	Furbearer	X	
Long-tailed weasel	<i>Mustela frenata</i>	Furbearer	X	
Marten	<i>Martes americana</i>	Furbearer	X	
Mink	<i>Mustela vison</i>	Furbearer	X	
Mountain beaver	<i>Aplodontia rufa</i>	Unclassified	X	X
Muskrat	<i>Ondatra zibethicus</i>	Furbearer	X	
River otter	<i>Lutra canadensis</i>	Furbearer	X	
Coyote	<i>Canis latrans</i>	Unclassified	X	X
European rabbit	<i>Oryctolagus spp.</i>	Unclassified	X	X
Gophers ^c	<i>Thomomys spp.</i>	Unclassified	X	X
Gray and fox squirrels ^a	<i>Sciurus spp.</i>	Unclassified	X	X
Ground squirrels ^b	<i>Uroditellus, Otospermophilus Callospermophilus spp.</i>	Unclassified	X	X
Mice	<i>Mus, Onychomys, Reithrodontomys, Peromyscus, Perognathus, Zapus spp.</i>	Unclassified	X	X
Moles	<i>Scapanus spp.</i>	Unclassified	X	X
Nutria	<i>Myocastor coypus</i>	Unclassified	X	X
Virginia opossum	<i>Didelphis virginiana</i>	Unclassified	X	X
Porcupine	<i>Erethizon dorsatum</i>	Unclassified	X	X
Rats	<i>Dipodomys, Neotoma, Rattus spp.</i>	Unclassified	X	X
Shrews	<i>Sorex, Neurotrichus spp.</i>	Unclassified	X	X
Spotted skunk	<i>Spilogale gracilis</i>	Unclassified	X	X
Striped skunk	<i>Mephitis mephitis</i>	Unclassified	X	X
Voles	<i>Clethrionomys, Lemmings, Microtus, Phenacomys spp.</i>	Unclassified	X	X

Table 1. Mid-to-small sized mammals that can be hunted or trapped in Washington. (Continued)

Yellow-bellied marmot	<i>Marmota flaviventris</i>	Unclassified	X	X
^a Except western gray squirrels (<i>S. griseus</i>) are protected and cannot be hunted or trapped. ^b Except golden-mantled ground squirrels (<i>S. saturatus</i> and <i>S. lateralis</i>) and Washington ground squirrels (<i>S. washingtoni</i>) are protected and cannot be hunted or trapped. ^c Except mazama pocket gophers (<i>T. mazama</i>) are protected and cannot be hunted or trapped.				

II. POPULATION STATUS AND TREND

The abundance of individual small game animals, furbearers, and unclassified wildlife is largely unknown. However, because these animals typically have high population growth rates and often experience compensatory mortality, the risk of over-exploitation is low. Biological data on individual species populations are limited and concern with regard to harvest effects on some populations exists. With changes that occurred to Washington’s trapping regulations in 2000 that made harvest of some furbearers impractical or difficult, harvest numbers which were the primary indicator of population trends became less useful.

While statewide population of the animals listed in Table 1 are not believed to be at risk, declines or extirpations may have occurred in some geographic areas. Examples include marten in the Coast Range and Olympics and river otter in parts of eastern Washington. Further monitoring or data collection may be needed to better assess the status of some species.

III. RECREATIONAL OPPORTUNITY

A combination of hunting and trapping seasons are provided for small game and furbearing animals, respectively. Hunting seasons for small game animals typically extend from September to early spring of the following year. In 2012, approximately 7,070 snowshoe hares and cottontail rabbits were harvested by hunters. Hunter harvest of bobcat has not been estimated recently. However, bobcat was added to the statewide small game survey in 2013 and a reorganization of the CITES tagging program should provide better insight to bobcat harvest by hunters.

The trapping season for furbearers occurs during the winter months. There are currently about 400 fur trappers licensed in the state each year. In 2009, the total harvest of furbearers totaled 3,180 with beaver comprising most of the harvest. These figures represent a substantial decrease from the 1999 level of 12,116 animals taken when body gripping traps were still in general use. More recent harvest figures have not been fully summarized although staff has been working to correct this issue.

Unclassified wildlife can be hunted or trapped year-around (with appropriate license), and no bag limits are set. Harvest pressure is low for the majority of these animals, as there is little to no documented harvest for 12 of the 16 species or groups. Those that are harvested or trapped are often associated with human-wildlife conflict and lethal take is a mitigating tool for property damage or nuisance activities. Coyotes may be the most hunted unclassified species and much of this harvest is with the intention of harvesting fur. Coyotes were also added to the small game survey in 2013 in an effort to obtain a better idea of harvest levels.

IV. DATA COLLECTION

There are no formal population surveys for small game mammals, furbearers, or unclassified wildlife. Trends in total harvest and catch-per-unit-effort, which are collected annually using a hunter questionnaire or mandatory “Trapper’s Report of Catch” form are used as a general indicator of population status and trend for some species. Factors such as fur prices and changes in allowed trapping methods, such as occurred in 2000, should be considered when comparing harvest from different years.

A system is under development to collect data related to wildlife conflict with humans. Once in place, this information will be useful in expanding knowledge of some species of furbearer and unclassified species abundance and range. Over time, it may also be used to help assess trends in wildlife populations and identify species distributions at the local scale.

V. ALL GAME, FURBEARERS, AND UNCLASSIFIED WILDLIFE MANAGEMENT GOALS

1. Preserve, protect, perpetuate, and manage species and their habitats to ensure healthy, productive populations.
2. Manage wildlife species for a variety of recreational, educational and aesthetic purposes including hunting, trapping, scientific study, cultural and ceremonial uses by Native Americans, wildlife viewing, and photography.
3. Manage statewide populations for a sustained yield.

VI. ISSUE STATEMENTS, OBJECTIVES, AND STRATEGIES

Population Management

Issue Statement

There is little documentation on the current distribution and relative densities of individual small game and furbearer species in Washington. In some instances, more detailed information is needed to assess population status on a local or regional basis.

Objective 137:

Revise the distribution maps for select small game and furbearer species by 2017.

Strategies:

- a. Revise the distribution maps from harvest and trapping data, citizen observations, and regional biologist interpretations.
- b. Verify distribution as necessary from survey and ground truthing activities.
- c. Evaluate the relative abundance and distribution of River Otter in eastern Washington to evaluate whether current harvest closures and limits are still necessary.
- d. Consider restrictions on harvest in areas where declines in a species have been documented.
- e. If harvest or other information indicates a substantial decline in furbearing species, initiate or propose studies to determine causes of decline.

Issue Statement

In 2011, the State Legislature created a program that directs WDFW to permit the relocation of beaver to areas in eastern Washington with the goal of deriving ecosystem benefits such as water storage, suspended sediment reduction, and improved fish habitat. The Department may condition or decline to permit releases in areas where there may be threats to property, habitat conditions are not suitable, or other issues may exist. Once reduced to very low population levels, beaver have reestablished across much of their former range where suitable habitat is present. Habitat changes in some areas may be limiting the reestablishment of beaver populations. Proponents of beaver relocation have suggested that beaver trapping for fur harvest could compromise their goals but this has not been verified.

Objective 138:

Current criteria for evaluating beaver release locations are mostly subjective. The documentation of beaver presence/absence prior to release and post release monitoring varies widely among projects. Develop stronger science based criteria for assessment of release sites and begin utilizing citizen observations of beaver activity to assess where projects are appropriate by 2016.

Strategies:

- a. Review pertinent literature and develop enhanced guidelines relating to habitat for release evaluation.
- b. Encourage monitoring of released animals and their effect on ecosystems.
- c. Include beaver in a program-wide citizen wildlife reporting system.
- d. Monitor beaver harvest at a more local scale where beaver introductions are occurring.
- e. Provide information to trappers about reestablishment efforts and areas.
- f. Encourage habitat enhancement as a primary mechanism to attract beaver back into historically occupied habitat.

Recreation Management

Issue Statement

Currently, there is no harvest reporting mechanism for unclassified wildlife, except those that are reported as non-target or nuisance captures on trapper's report of catch forms. An online system for reporting trapping harvest was developed but due to programming issues no longer functions. Moreover, the trapper report of catch forms have been problematic in terms of ease of reporting and data entry. Information for persons interested in trapping in Washington is currently difficult to obtain. Concerns have arisen that misidentification by hunters could result in harvest of protected species, particularly wolves being mistaken for coyotes.

Objective 139:

Develop an improved web based reporting system for harvest of furbearers and unclassified wildlife and improve the availability and applicability of information available to trappers and persons interested in becoming trappers by 2016. Improve and provide identification information to avoid accidental harvest of protected species.

Strategies:

- a. Develop a new interim solution, but pursue a long-term option of including trapper reporting in the WDFW license system by 2018.

- b. Attempt to spatially enable the reporting system to expand the ability to evaluate species range and presence at a local scale.
- c. Provide a mechanism for reporting capture of non-target species.
- d. Evaluate mechanisms to document and monitor harvest of bobcat, coyote, and several other unclassified species by hunters and depredation control activities.
- e. Develop new webpages related to trapping laws, methods, and techniques by 2016.
- f. By 2016, improve materials to aid and educate hunters on how to distinguish coyotes from wolves and provide on the agency website, in hunting pamphlets, and in written materials distributed to hunters.

Conflict Management

Issue Statement

A 2014 survey found that more than a quarter of Washingtonians (29%) had experienced problems with wild animals or birds during the previous 2-year period. Raccoons were among the top two species cited as causing problems (deer was the top species cited). A small but substantial percentage of residents (10%) also indicated that coyotes cause problems (Responsive Management 2014). This means that an estimated 1.5 million Washington residents experience negative interactions with wildlife every two years (Responsive Management 2014; U.S. Census Bureau 2014).

Objective 140:

Improve information and strategies to reduce wildlife conflict related to small game, furbearers, and unclassified wildlife by 2017, and reduce the need for lethal removal of native species and leave animals in place when possible.

Strategies:

- a. Increase legal harvest (trapping and hunting) in areas prone to furbearer and unclassified wildlife complaints by providing complaint information to hunters and trappers, and work with landowners to allow hunting or trapping. Use harvest during the trapping season as the preferred method of removing animals where conflicts exist.
- b. Develop training materials describing long-term avoidance measures dealing with issues related to beaver dams and foraging activity for distribution to road management agencies, forest owners and other landowners. Train WDFW staff who work with landowners in these situations on the application of these measures to facilitate appropriate recommendations to landowners.
- c. Work with other WDFW programs and other agencies to facilitate timely or streamlined processes to permit installation of in-water devices, where they are not likely to compromise other species needs such as fish passage to avoid the need to remove beaver to mitigate conflict situations.

VII. LITERATURE CITED

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DISTRIBUTION LIST

This document was sent to all counties, tribes, and other interested parties in Washington State.