



# North Cascades Elk Herd Management Summary

## Actions Summary – June 2022

For many years, the Washington Department of Fish and Wildlife (WDFW) has contributed significant effort and resources to assist property owners with managing and preventing human-wildlife conflict issues. In areas the North Cascades elk herd frequents, WDFW staff have partnered with local landowners, Tribal Co-managers, non-governmental organizations, and others to mitigate human-elk conflicts in the Skagit Valley and nearby areas. Our objective is to reduce negative impacts and costs landowners, agriculture, and local communities incur, while respecting that elk are native to the North Cascades region including the Skagit and Nooksack watersheds, naturally inhabit valley bottoms during portions of the year, and are of significant value for hunters, wildlife enthusiasts, Tribal Co-managers, and many other Washingtonians.

WDFW has funded full-time wildlife conflict staff to provide expert support and field assistance, assist landowners with fencing materials and installation, reimburse commercial producers for the costs of fertilizer, seed, and noxious weed control in areas disturbed by elk, offer hazing and other deterrents, deploy Master Hunters to properties where elk damage is greatest, and provide landowners with authority to remove elk using Damage and Kill Permits. We continually seek the appropriate balance between elk conflict management and conservation and are committed to working collaboratively with landowners, Tribal Co-managers, and others in this community.

*For more information, please contact Fenner Yarborough, WDFW North Puget Sound Region Wildlife Program Manager, at [fenner.yarborough@dfw.wa.gov](mailto:fenner.yarborough@dfw.wa.gov).*

## Background

The North Cascades elk (*Cervus canadensis*) herd (NCEH) is the smallest of ten herds formally recognized and managed by the Washington Department of Fish and Wildlife (WDFW) and is the northernmost elk herd in western Washington. The herd is co-managed with the Point Elliott Treaty Tribes. Despite the herd's relatively small size, it is an important resource providing recreational, aesthetic, and economic benefits to Washington citizens. While hunting can be very challenging due to access constraints, special permit hunting opportunities in Game Management Units (GMU) 418 and 437 are prized by recreational hunters, typically requiring many years of application to draw. Tribal Co-managers value this elk herd as a significant cultural, subsistence, and ceremonial resource.

## Washington Laws and Rules Governing Elk Damage Management

WDFW addresses elk damage conflict within the constraints of applicable Revised Codes of Washington (RCW) and Washington Administrative Codes (WAC). These laws and rules dictate, among other things, who is eligible to file a crop damage claim, how a claim is assessed and processed, the conditions required before a landowner can kill an elk causing property damage, and who can receive Damage Prevention Permits. Key RCWs and WACs are listed below. Click on the RCW or WAC number to review the original document.

### RCWs:

[RCW 77.12.240](#) – Authority to take wildlife—Disposition

[RCW 77.36.010](#) – Definitions

[RCW 77.36.030](#) – Trapping or killing wildlife threatening human safety or causing property damage—Limitations and conditions—Rules

[RCW 77.36.070](#) – Limit on total claims from the fish, wildlife, and conservation account per fiscal year

[RCW 77.36.080](#) – Limit on total claims from general fund per fiscal year—Emergency exceptions

[RCW 77.36.100](#) – Payment of claims for damage to commercial crops or livestock—Noncash compensation—Offer of materials or services to offset or prevent wildlife interactions—Appeal of decisions—Adoption of rules

[RCW 77.36.110](#) – Eligibility for compensation under this chapter—Adoption of rules

[RCW 77.36.120](#) – Department's duties

[RCW 77.36.130](#) – Limit on cash compensation—Burden of proof

[RCW 77.36.140](#) – Chapter represents exclusive remedy

[RCW 82.08.855](#) – Exemptions—Replacement parts for qualifying farm machinery and equipment. Includes definition of “eligible farmer.”

### WACs:

[WAC 220-101-020](#) – Department description and authority

[WAC 220-440-010](#) – Wildlife Management and wildlife interaction

[WAC 220-440-020](#) – Definitions. Includes definitions to key terms, including “claim”, “claimant”, “commercial crop”, and “eligible farmer.”

[WAC 220-440-040](#) – Wildlife/human interaction and conflict resolution for private property damage

[WAC 220-440-060](#) – Killing wildlife causing private property damage

[WAC 220-440-130](#) – Limitations to managing damage caused by big game on private property

[WAC 220-440-140](#) – Payment for commercial crop damage—Limitations

[WAC 220-440-150](#) – Application for cash compensation for commercial crop damage—procedure

[WAC 220-440-160](#) – Valuation methods for crop damage assessment

[WAC 220-440-190](#) – Public hunting requirements

[WAC 220-440-200](#) – Damage prevention permit hunts—Deer, elk, and turkey.

[WAC 220-440-230](#) – Commercial crop or livestock damage claim—Dispute resolution

**WAC 220-440-240** – Unlawful taking or possession of wildlife for personal safety or causing property damage—Penalties

**WAC 220-440-250** – Failure to comply with the conditions of permits, provide completed forms, or submit required documents or reports for the purposes of this chapter

### NCEH Population Surveys

The Point Elliott Treaty Tribes and WDFW typically conduct an annual aerial survey in the core area of the NCEH. Surveys are either a single survey, involving one survey of the core area, or a replicate survey, involving two surveys of the core area approximately one to two weeks apart. Replicate surveys are more accurate, but also more expensive. Within the past six years, replicate surveys were completed in 2016, 2019, and 2021 (Table 1). WDFW and Tribal Co-managers believe that an additional 200–300 elk may reside outside the surveyed core area.

**Table 1. Population estimates by survey type for the North Cascades elk herd within the core survey area, 2016–2021.**

Year	Population Estimate	Survey Type
2021	1,194	Replicate
2020	1,339	Single
2019	1,493	Replicate
2018	1,593	Single
2017	1,163	Single
2016	1,257	Replicate

### WDFW Recreational and Damage Harvest

**Table 2. Recreational and damage harvest of elk in all GMUs comprising the North Cascades elk herd, 2016–2020 hunting seasons.**

State	2016–17		2017–18		2018–19		2019–20		2020–21	
	Bulls	Cows	Bulls	Cows	Bulls	Cows	Bulls	Cows	Bulls	Cows
407	7	3	8	0	2	10	10	12	9	2
418	19	0	18	0	16	0	20	0	24	0
437	0	0	0	0	0	0	0	0	0	0
448	0	0	2	2	2	2	0	0	0	0
4941 <sup>a</sup>	16	0	14	1	13	8	11	10	14	8
Damage <sup>b</sup>	4	20	5	40	11	37	10	39	8	34
<b>Total</b>	<b>46</b>	<b>23</b>	<b>47</b>	<b>43</b>	<b>44</b>	<b>57</b>	<b>51</b>	<b>61</b>	<b>55</b>	<b>44</b>
<b>Grand Total</b>	<b>69</b>		<b>90</b>		<b>101</b>		<b>112</b>		<b>99</b>	

<sup>a</sup> Elk Area 4941 was a Skagit Valley elk conflict management zone within GMU 437, and the only part of GMU 437 where recreational hunters could hunt elk with a special permit. As of the 2021-22 hunting season, hunters drawing a GMU 437 special permit can hunt the entirety of the GMU.

<sup>b</sup> Harvests from landowner permits and Master Hunter Special Permits in GMUs 407, 418, and 437 and Elk Area 4941.

### Damage Complaints and Crop Damage Claims

**Table 3. Elk damage complaints, commercial crop claims, and Kill and Damage Prevention Permits and harvest for the North Cascades elk herd, 2015 – 2021.**

Year (July 1 – March 31)	Total of all Damage Complaints	Complaints by Commercial Producers	Complaints Eligible for a Claim	Claims Submitted by Producers to WDFW	Total Kill and Damage Prevention Permits Issued to Landowners	Total Elk Harvested with Landowner Permits
2015-16	48	19	1	1	30	25
2016-17	64	24	2	0	40	24
2017-18	78	31	2	0	52	34
2018-19	63	23	1	0	66	30
2019-20	68	25	1	0	66	40
2020-21	36	22	1	1	62	35

### Skagit Valley Elk-Damage Mitigation Funds

The Washington State Legislature periodically appropriates funds for use by WDFW to mitigate elk damage to private properties in Skagit Valley. These funding efforts by the Legislature recognize the valuable contribution farmers make to the State of Washington and the negative impacts that elk foraging can have on commercial crops, including pasture and hay fields used to feed commercial livestock. Expenditure of funds is governed by the language drafted by the State Legislature, known as provisos. Key proviso grants appropriated in recent years include:

- **FY16 – FY18 – WDFW and Stillaguamish Tribe Cooperative Fencing Project:** The total grant amount was \$300,000. WDFW received \$54,000 to fund a technician to build fence, and the Stillaguamish Tribe of Indians received \$36,900 in indirect costs, leaving over \$209,000 for cooperative fencing projects. WDFW, Stakeholders, and the Stillaguamish Tribe made 50 individual purchases of fencing materials, providing materials to a total of 31 landowners

from December 2015 to September 2017. Participating landowners received a total of 85,794 linear feet of fencing materials.

- **FY20 – FY21 – General Elk Damage Management:** The Legislature appropriated about \$340,000 in funds for the biennium that allowed WDFW to address different elk damage management needs in Skagit Valley. To assist commercial livestock producers who were experiencing damage to pasture and hay fields, WDFW established a Crop Mitigation Program, which used part of the proviso funding to establish contracts with qualifying producers and reimburse them with a maximum of \$2,500 annually for commercially purchased fertilizer or grass-type seed and/or noxious weed control to offset elk forage loss of orchard type grasses. During the biennium, 25 Skagit Elk Mitigation contracts were signed by commercial producers (23 producers provided receipts by payment deadline), with payments totaling \$100,000. Additionally, WDFW used funds from this Proviso to pay for a technician to help with elk damage issues, buy elk fence materials, and purchase and deploy 9 GPS satellite collars on cow elk in Skagit Valley. Fence materials purchased with this Proviso grant provided several more thousand linear feet of fence for Skagit Valley landowners.
- **FY22 – Landowner and School Fencing Project:** The Legislature appropriated funds to provide fencing to one or more landowners along State Route 20, as well as a school district to address elk damage to athletic fields. More than \$400,000 of this Proviso Fund is being used by the Concrete School District. One landowner with a 30-acre hay field off Wilde Rd will be provided approximately 4,700 linear feet of fencing materials at a cost of approximately \$25,000.
- **FY23 – Skagit Elk Fencing.** During the most recent supplemental session, the Legislature appropriated \$75,000 for elk fencing projects in Skagit Valley.

**Photos of elk fencing, Skagit Valley lands**



***Figure 1. Hay field in Day Creek that was cut early after being fertilized with funding from the Crop Mitigation Program***



***Figure 2. Completed woven wire fencing on property adjacent to SR20. To date, no elk intrusions have occurred on the property since installation of the fence.***



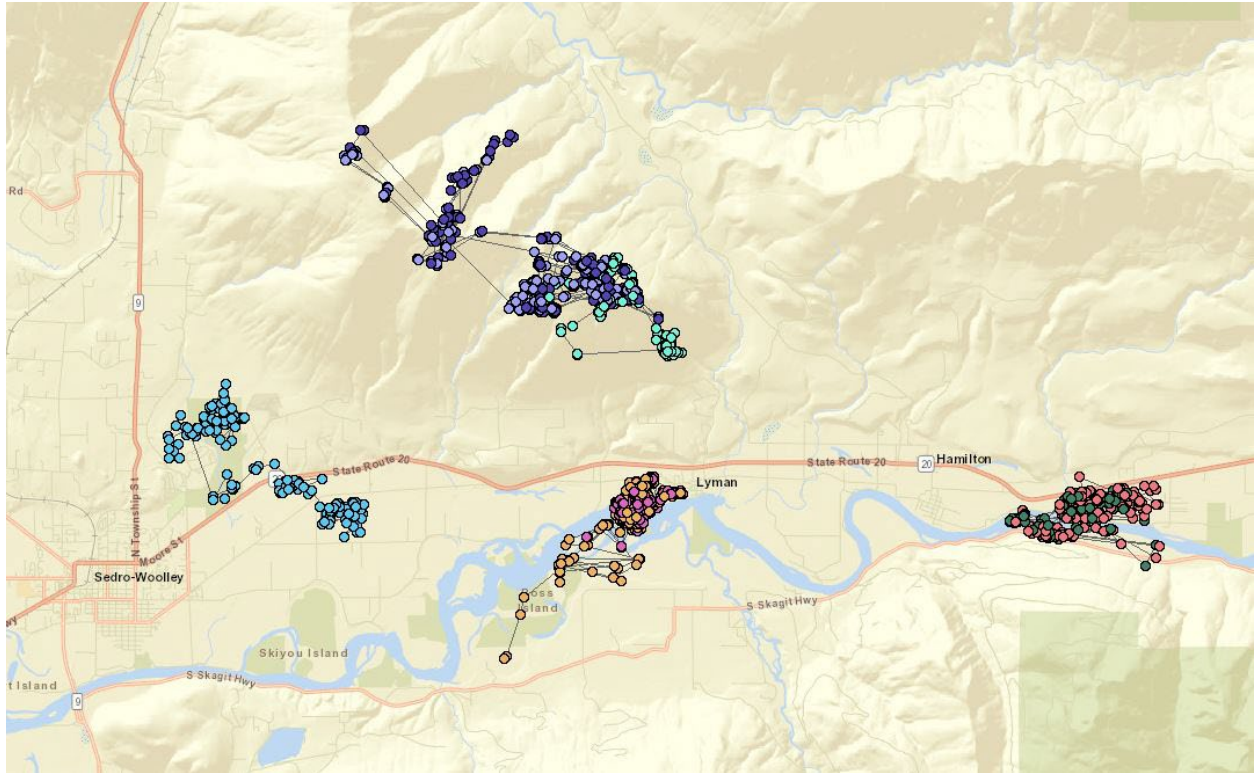
*Figure 3. Fencing project in Day Creek*

### **Treponeme-Associated Hoof Disease (TAHD)**

WDFW responds to reports of limping elk and removes the elk, when feasible, or coordinates removal efforts with each landowner where the report originates. WDFW provides some landowners Damage Prevention Permits with the stipulation that they only harvest a limping elk. In 2017, the Washington State Legislature mandated Washington State University’s College of Veterinary Medicine (hereafter, WSU) as the state lead in developing a program to monitor and assess causes of and potential solutions for elk hoof disease. An initial \$1.5 million biennial budget was allocated to the college to begin addressing this issue on July 1, 2017. WDFW assists with this elk hoof disease study, led by Dr. Margaret Wild, by providing hooves from WDFW, landowner, or hunter-killed limping elk, as requested. These hoof samples aid in disease surveillance and provide the WSU research facility with research samples. More information is available on the [WDFW TAHD webpage](#) and [WSU TAHD webpage](#).

### **WDFW and Co-Manager Elk Captures**

Tribal Co-managers and WDFW have collared and currently monitor more than 60 elk within GMUs 418 and 437. Collared elk provide movement and home range information and are a necessity for the survey method used by WDFW and Co-managers. In 2021, WDFW fitted nine (9) cow elk in Skagit Valley (included in number above) with GPS satellite collars to better understand movements and home range of elk within the main elk-human conflict zone. One cow died of unknown causes in July 2021. Biologists follow movements and monitor the collared elk using software on the manufacturer’s website (Figure 4).



**Figure 4. Locations for 8 collared elk along SR 20 over a 30-day period, Skagit County, WA, July – August 2021.**