

ELK HERD UNIT MANAGEMENT PLAN
Elk Herd Unit #21
FILLMORE
2023

BOUNDARY DESCRIPTION

Juab, Millard and Sevier counties--Boundary begins at SR-132 and SR-125 (300 E in Leamington); west on SR-132 to US-6; south on US-6 to SR-257; south on SR-257 to the Black Rock road; east on this road to I-15; south on I-15 to I-70; east and north on I-70 to US-89; north on US-89 to US-50 in Salina; north on US-50 to I-15 near Scipio; south on I-15 to Exit 178 and US-50; south on US-50 to Whiskey Creek Road; north on this road to McCormick Road (CR-4549); north on this road to SR-125; north on SR-125 to SR-132 in Leamington. EXCLUDES ALL NATIVE AMERICAN TRUST LANDS WITHIN THIS BOUNDARY. Excludes all CWMUs.

Any Bull Elk Unit Boundary

Fillmore, Oak Creek South (West of I-15) - Juab and Millard counties--Boundary begins at I-15 (Exit-207) and the Mills road; west on this road to the railroad tracks; west on these tracks to the Sevier River; north along this river to SR-132; west on SR-132 to US-50; west on US-50 to SR-257; south on SR-257 to the Black Rock road; east on this road to I-15; north on I-15 to Exit 207 and the Mills road. EXCLUDES ALL NATIVE AMERICAN TRUST LANDS WITHIN THIS BOUNDARY. Excludes all CWMUs.

Limited Entry Bull Elk Unit Boundary

Fillmore, Pahvant (East of I-15) - Millard and Sevier counties—Boundary begins at I-70 and I-15; north on I-15 to US-50 at Scipio; southeast on US-50 to Salina and US-89; south on US-89 to I-70; southwest on I-70 to I-15.. EXCLUDES ALL NATIVE AMERICAN TRUST LANDS WITHIN THIS BOUNDARY. Excludes all CWMUs.

UNIT MANAGEMENT GOALS

- Manage for a population of healthy animals capable of providing a broad range of recreational opportunities including hunting and viewing
- Consider impacts of the elk herd on other land uses and public interests including private property rights, agricultural crops, private development rights, and local economies
- Maintain the population at a level that is within the long-term capability of the available habitat to support

UNIT MANAGEMENT OBJECTIVES

Habitat - Maintain and/or enhance forage production through direct range improvements throughout the unit to achieve population management objectives. Projects that remove decadent conifer stands and promote aspen re-generation are a top priority for the unit. Work with private and federal agencies to maintain and protect critical and existing winter range from future losses. Provide improved habitat security and escapement opportunities for elk. Provide as much opportunity as possible for elk to navigate roadways safely. Utilize GPS technology to learn more about elk movement on the unit as funding and workloads allow.

Population - The target population objective will range from 1,300 to 1,600 elk (modeled estimate) on the Fillmore, Pahvant portion of the unit (East side of I-15). DWR will manage towards the top or bottom of the range depending on forage availability. DWR will communicate annually with land management agencies regarding forage conditions. If livestock permittees are forced to limit use on public land due to poor forage conditions caused by drought, DWR will manage towards the lower end of the population objective. The target population objective on the Fillmore, Oak Creek South portion of the unit (West side of I-15) is 150 elk. Previously, the population objective was static at 1600 total elk on both portions of the unit.

Bull Elk Harvest Objectives - Maintain a 3-year average bull harvest age of 6.5-7.0 years on the Fillmore, Pahvant limited entry unit. Age structure will not be monitored on the Fillmore Oak Creek South (west of I-15) unit (General Season Any Bull) per the Statewide Elk Plan. Utilize public hunting as much as possible to manage elk on the unit. Provide antlerless, general season spike-only, limited entry bull, and general any-bull hunting opportunities.

CURRENT STATUS OF ELK MANAGEMENT

Habitat -

Range Area and Approximate Ownership

Fillmore, Oak Creek South						
	Year-long Range		Winter Range		TOTAL	
Ownership	Area (Acres)	%	Area (Acres)	%	Area (Acres)	%
BLM	1431	4	49006	74	50437	49
DNR	38	0		0	38	0
Private	995	3	9953	15	10948	11
SITLA		0	3303	5	3303	3
Tribal		0	221	0	221	0
UDOT		0		0		0
USFS	33510	93	3523	5	37033	36
	35974		66006		101980	

Fillmore, Pahvant								
	Summer Range		Winter Range		Transition		TOTAL	
Ownership	Area (Acres)	%	Area (Acres)	%	Area (Acres)	%	Area (Acres)	%
BLM		0	8081	4			8081	2
DNR	386	0	14102	8			14488	4
Private	13724	8	48063	27			61787	17
SITLA		0	118	0			118	0
Tribal		0	1419	1			1419	0
UDOT		0	22	0			22	0
USFS	165710	92	109205	60	12007	10	286922	80
	179820		181010		12007		360830	

Habitat Projects Completed 2016 - 2023

Title	Acres
Watts Mountain Pipeline Project	
Mortensen Creek Chain Harrow	129
Hans Pumpnickle Habitat Restoration Shared Stewardship	1717
Raspberry Canyon Habitat Restoration Project	131
Church Hills Pipeline and Water Enhancement Project	
Red Canyon Habitat Restoration Project Phase I	1224
White Sage Flat Habitat Restoration Project Phase I	3178
Church Hills/Little Long Canyon Bullhog Maintenance Project	3838
SR Mule Deer Winter Range Bitterbrush Enhancement FY20	1740
Long Canyon Water Enhancement Project Phase II	
Lower Ebbs Fire Restoration and Stabilization Project	3838
Cottonwood Trail Fire Rehab Project	1215
Canal Fire Rehabilitation Project	15514
Baker Canyon Fire Rehab Project	389
Wide Canyon Water Enhancement Project Phase I	
Central Utah Chaining Maintenance Project Phase II -	5220
Long Knoll Chaining and Restoration Project	607
Joseph Habitat Restoration Project WRI/Shared Stewardship	6614
Nixon WMA/Wide Canyon Phase III Project	
Central Utah Chaining Maintenance Project Phase I	2891
Quarry Springs Water Enhancement Project	
Meadow Canyon Fire Rehab Project	89
Meadow Creek Fire Rehabilitation and Stabilization Project	3428
Long Canyon Water Enhancement Project	
FFO Meadow Phase 3	208
East Fork Eight Mile Lop and Scatter/Water Development Project Phase I	687
West Bench Lop and Scatter Project	942
North Canyon Revegetation Project	474
Little Valley Habitat Restoration	1000
Solitude Fire Revegetation Project	651
Whiskey Creek Water Enhancement Project	
Dry Creek Meadow Canyon Phase II Restoration Project	2346
Wide Canyon Water Enhancement Project Phase II	
Watts Mountain Wildlife Habitat Improvement Project	5696
Halfway Hill Fire Rehabilitation and Stabilization Project	5278

Population - As of 2023, the elk population on this unit is estimated to be under the previous objective of 1,600 elk. An aerial survey was conducted on this unit in February 2022. During this flight 1,012 elk were counted, giving a population estimate of 1,350 animals. The average age of harvested bulls in 2022 was above objective at 8.7, with the three-year average at 8.3. Permit numbers for bulls remained relatively stable from 2016-2022 with 47 permits being offered in 2022. The Statewide elk plan decreased the age objective ½ year to 6.5-7.0 in 2022 which resulted in a significant increase of 20 permits for the 2023 hunting season to a total of 67.

BARRIERS TO ACHIEVING UNIT MANAGEMENT OBJECTIVES

Habitat - Invasion by spruce-fir and pinyon-juniper has reduced the productivity of much of the summer and winter ranges for elk. Heavy human activity along the Paiute ATV trail may also be responsible for reducing elk use of traditional calving areas and increasing use of posted private land and roadless areas on the forest. The fencing of I-15 and I-70 has limited elk migration to important winter habitat in the Church Hills and Cove Fort areas. Winter range damage on the east side of I-15 could become a potential problem if elk populations become too large. DWR may apply liberal antlerless elk hunting strategies to areas with large elk densities on winter range to prevent range damage.

Population - Crop depredation near Fillmore, Holden, Scipio, and Kanosh present barriers to increasing elk numbers in these areas. Steps to minimize depredation as prescribed by state law and DWR policy will be implemented as needed. I-70 and I-15 have been a heavy source of highway mortality for elk. North and South lane fencing on I-70 and portions of I-15 have been completed which significantly decreased ungulate mortality. Additional fencing of I-15 between Cove Fort and Kanosh has been planned and is being discussed and would reduce highway mortality in that area. Highway 50 has also been a source of mortality for elk.

STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT MANAGEMENT OBJECTIVES

Fillmore Elk Committee Input

- In May 2023, the Fillmore elk committee met to discuss the elk management plan. We discussed many items including the following: changes in the statewide elk plan, current population objective, past population estimates, elk distribution, production rates, private land conflicts, forage competition between elk and cattle, etc. Below is a brief synopsis of the major decisions and discussion: Much of the discussion centered on the population objective and why elk numbers have not reached it in recent years. Antlerless elk permit numbers have remained relatively low over the past few years which should have allowed for the population to rise and meet the objective. Other ongoing research efforts throughout the state suggest that pregnancy rates may not be as predictable as previously thought. The age structure of the population may play a larger role in production than we have considered in the past. The elk committee wants more research completed on the Pahvant side in order to understand if an older age structure is influencing production rates.

The previous population objective for the Fillmore unit included both the Pahvant side and the Oak Creek and was set at 1600 total elk, with 150 of the 1600 being on the Oak Creek side. The committee didn't push for a major increase in the objective but did want to see more flexibility at the local level by giving a range on the Pahvant side. Previously, the objective for the Pahvant side was static at 1450. The committee instead recommended a target range of 1300 to 1600 for the Pahvant. On the Oak Creek portion of the Fillmore unit, the committee recommended remaining at 150 elk.

Habitat - The 2023 Fillmore Elk Plan Committee requests an increased focus on higher elevation (>8,000 ft) habitat improvement projects. The committee especially had a lot of discussion about improvements that can be done on the Eastern portion of the unit above Joseph, Richfield, and Scipio Lake. Recent elk surveys show an absence of elk on the East side of the unit. Habitat and areas of refuge exist there and the elk committee would like to see more elk distributed on the East side. The committee also supports continued efforts on the winter range to increase native shrub and grass communities. Any efforts to suppress non-native, invasive weeds such as cheatgrass and bulbous bluegrass are especially encouraged.

- Range Improvements: Maintain and/or enhance forage production on elk summer and winter range throughout the Fillmore Unit. Coordinate with the Fillmore Ranger District and BLM to complete projects designed to improve forage production for both elk and cattle and to improve elk distribution across the unit. Support federal land management agencies in managing vehicle access in order to provide and maintain refuge areas for elk.
- Winter Range: Continue to monitor the permanent range trend studies located throughout the winter range. When helpful, conduct annual spring range rides to assess winter habitat with the land management agencies and the public.
- Corridors: Cooperate with land management agencies and private landowners to identify crucial areas of elk habitat and work together to maintain and enhance elk habitat corridors. Work with UDOT to maintain and enhance signing, wildlife ramps, over/underpasses, and other wildlife crossing structures.

Population -

- Monitoring: Utilize harvest data, aerial trend counts, and preseason classification data to estimate the wintering elk population on the unit. Monitor the age class structure of the bull population through the use of check stations, uniform harvest surveys, field bag checks, preseason classification, tooth age data, and aerial classification. Age class will not be monitored on the general season portion of the unit.
- Aerial and/or ground classification will be conducted annually to determine population status, calf recruitment, calf/cow ratios, and range distribution.
- Harvest: The primary means of monitoring harvest will be through the statewide uniform harvest survey, check stations, and field bag checks. The target population size will be achieved through antlerless harvest using a variety of harvest methods and seasons.
- Distribution: DWR may hold targeted cow elk hunts when it is necessary for private land conflicts, and range health on public land. Ideas discussed by the committee include public antlerless hunts, and quicker reaction efforts like depredation hunter pool hunts. These tools allow DWR to have hunters on the ground quickly pressure elk in small, isolated areas. DWR will also continue to be aggressive with issuing mitigation permits, doing DWR removals, and holding depredation hunts when private land conflicts occur on the Fillmore unit.

Duration of This Management Plan - This Unit Management Plan was revised in 2023 following the revision of the Statewide Elk Management Plan. This Unit Management Plan will be revised after the next Statewide Elk Management Plan revision to ensure all current management tools are being used. CWMU operators and landowners requested a mid-plan review and revisions may take place when improved data or management tools become available, or to address future issues. Unit elk plan goals, objectives, and strategies are constrained within the sideboards set in the Statewide Elk Plan, which supersedes unit plans. It is possible that changes to the Statewide Elk Plan may affect unit plans. Additionally, changes to Utah State Code and/or Administrative Rule may also affect elk unit plans.

APPENDIX

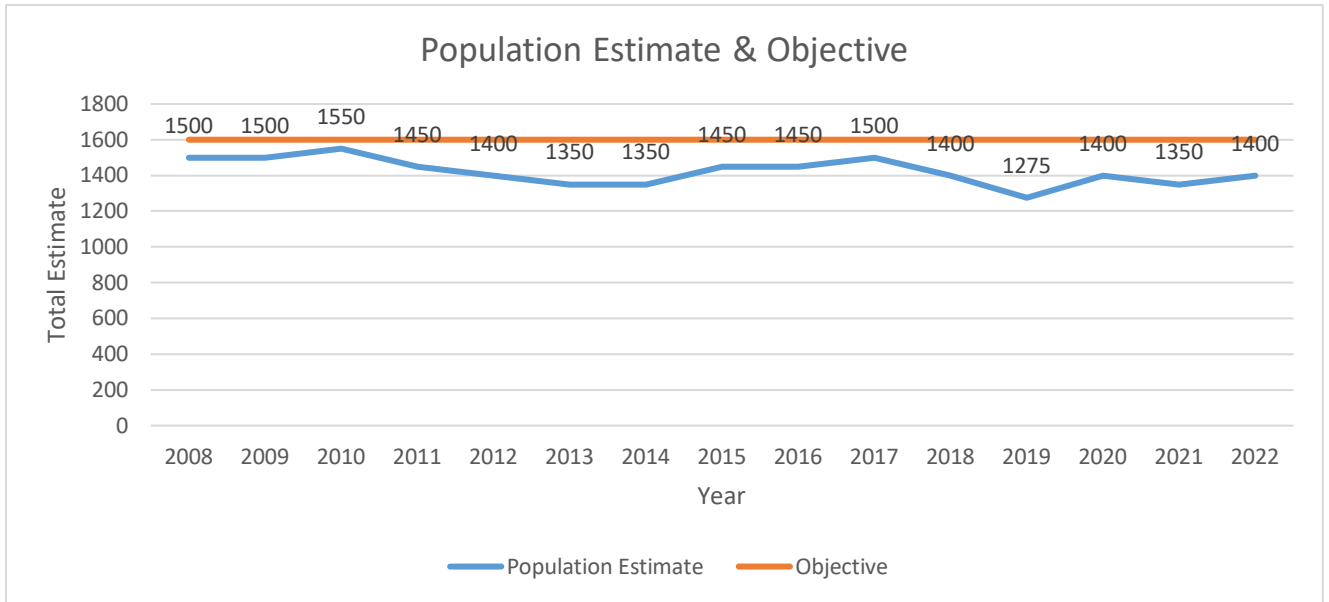


Figure 1. Fillmore Unit elk population trends, Utah 2008 - 2022.

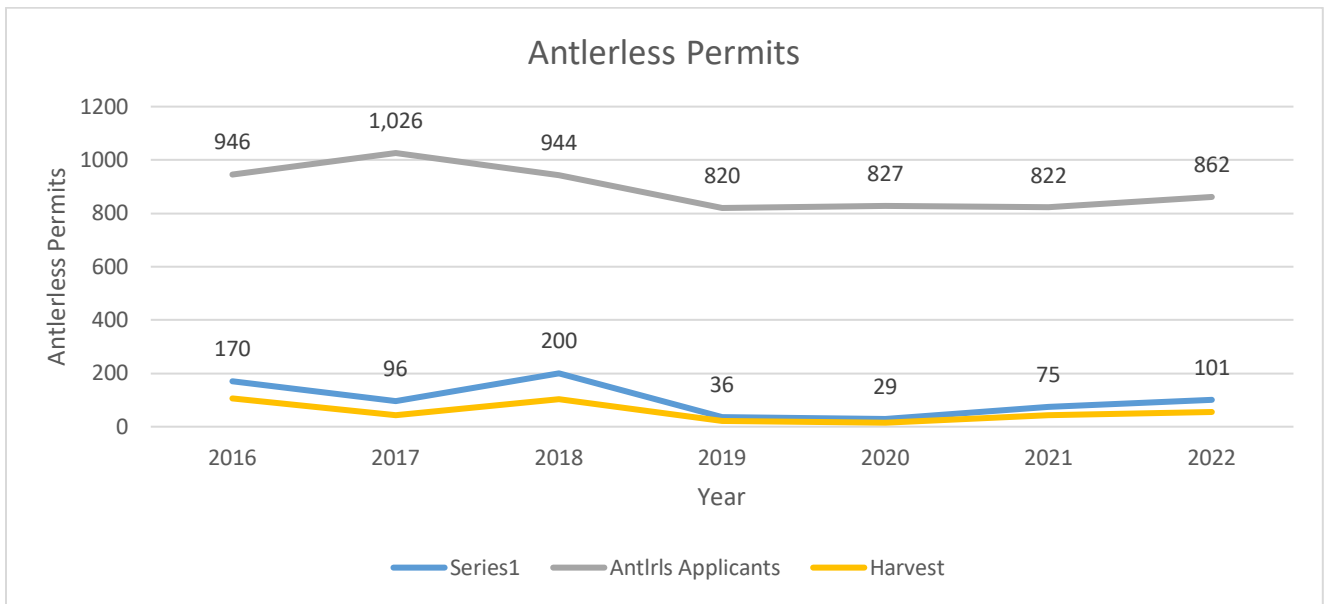


Figure 2. General season antlerless elk permits issued on the Fillmore unit. 2016-2022.

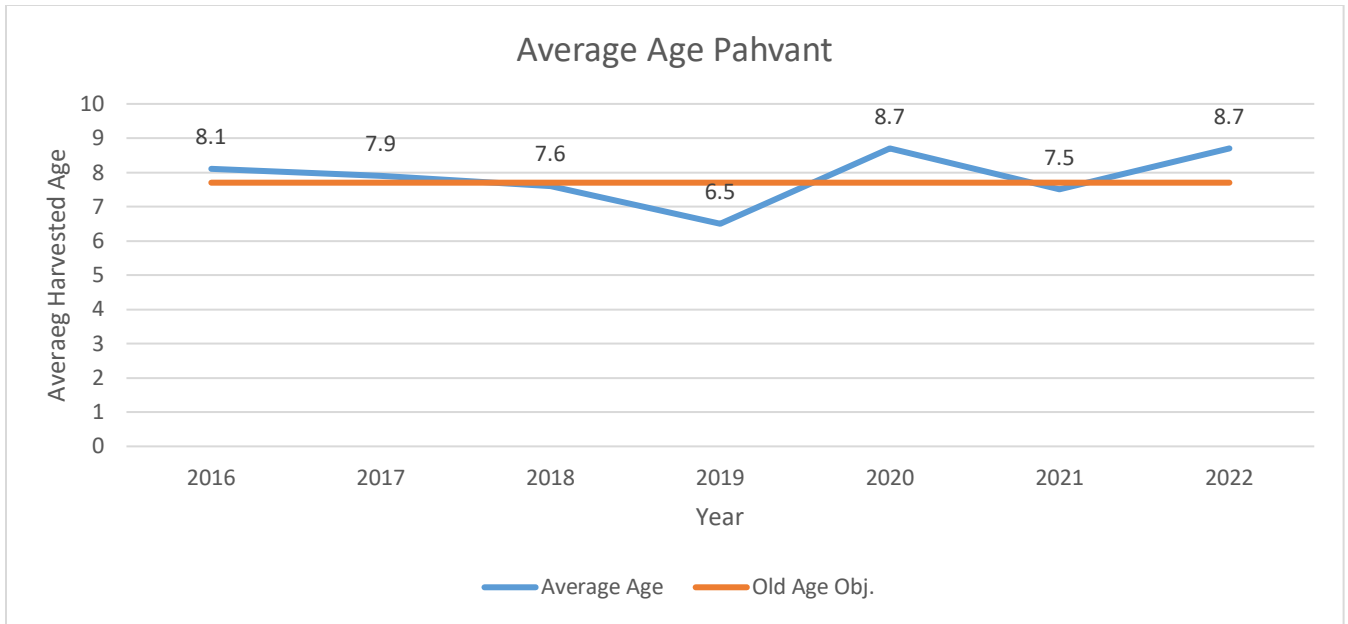


Figure 3. Average age of harvested bulls and permit numbers for the Fillmore, Pahvant Unit. 2016-2022

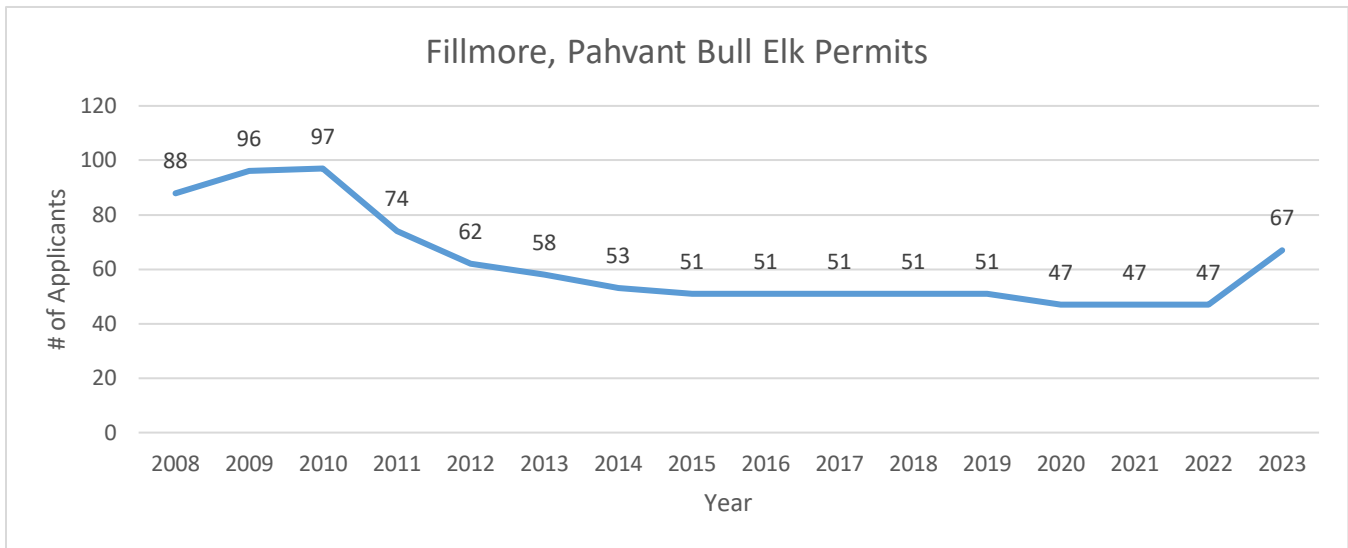


Figure 4. Limited entry bull elk permits issued on the Fillmore, Pahvant. 2008-2023

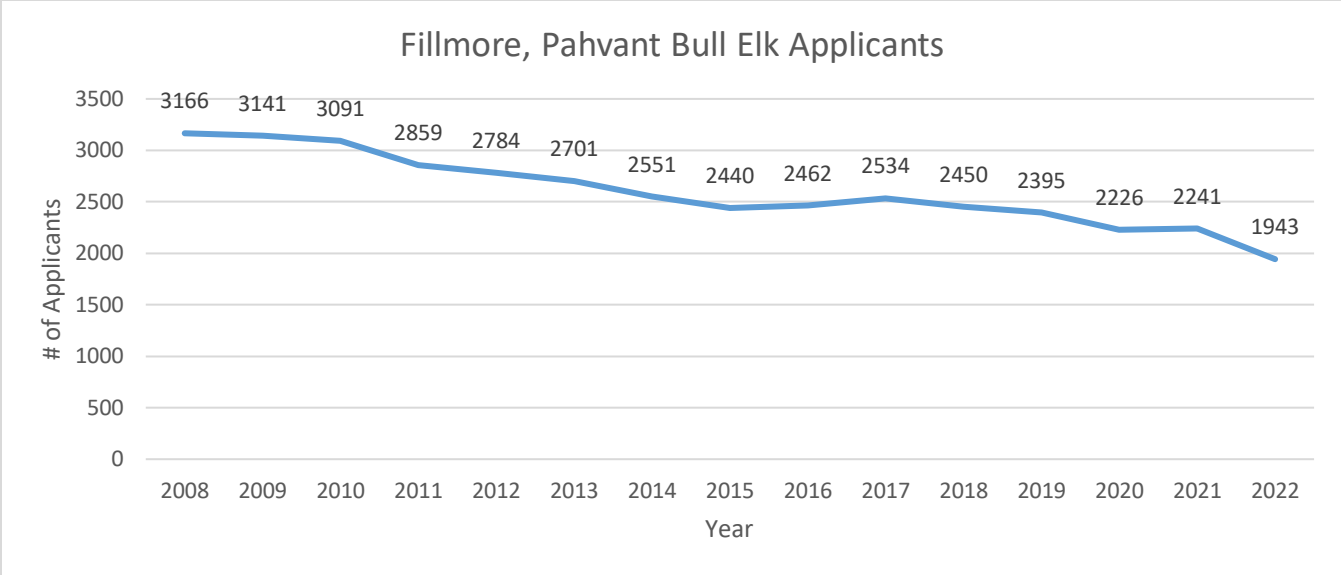


Figure 5. Total number of permit applicants for limited entry bull elk on Fillmore, Pahvant. 2008-2022