



Washington Department of  
**FISH and WILDLIFE**



WAC #220-415-100

Cougar Hunting Seasons and  
Regulations

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# Cougar Game Mgt. Plan Objectives

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- Manage for a stable cougar population in each PMU.
- Provide recreational harvest opportunity at a 12-16% annual harvest rate of the cougar population, excluding kittens in each PMU.

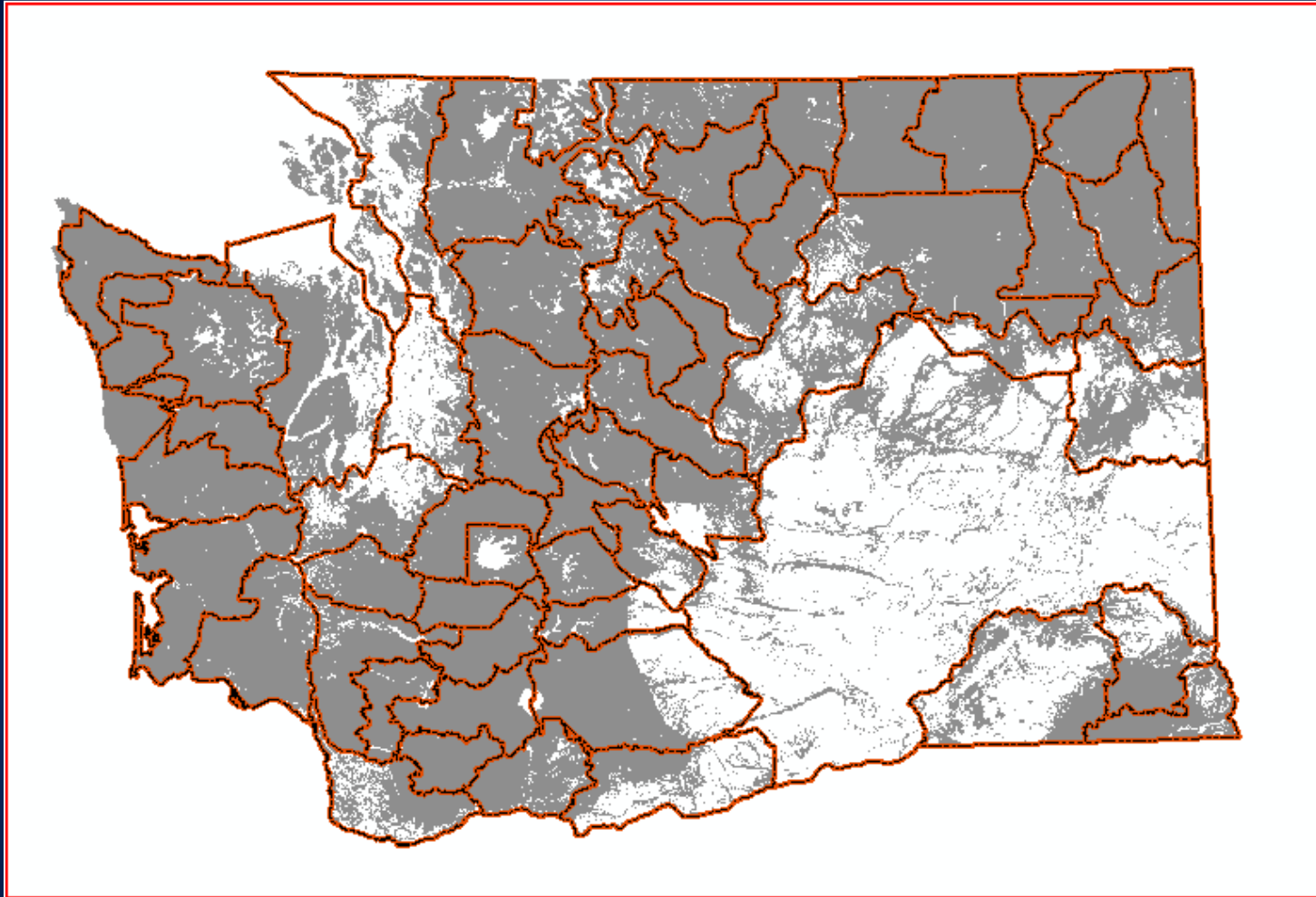


# Current Season Structure

- Early season Sept 1 – Dec 31.
- Late season Jan 1 – April 30.
- Any legal weapon in both seasons.
- Each hunt area (PMU) has a harvest guideline corresponding to 12-16% of cougar population (excluding kittens).
- Starting Jan 1, the Director may close hunt areas that meet or exceed the harvest guideline.
- Only recreational harvest count towards the guidelines.

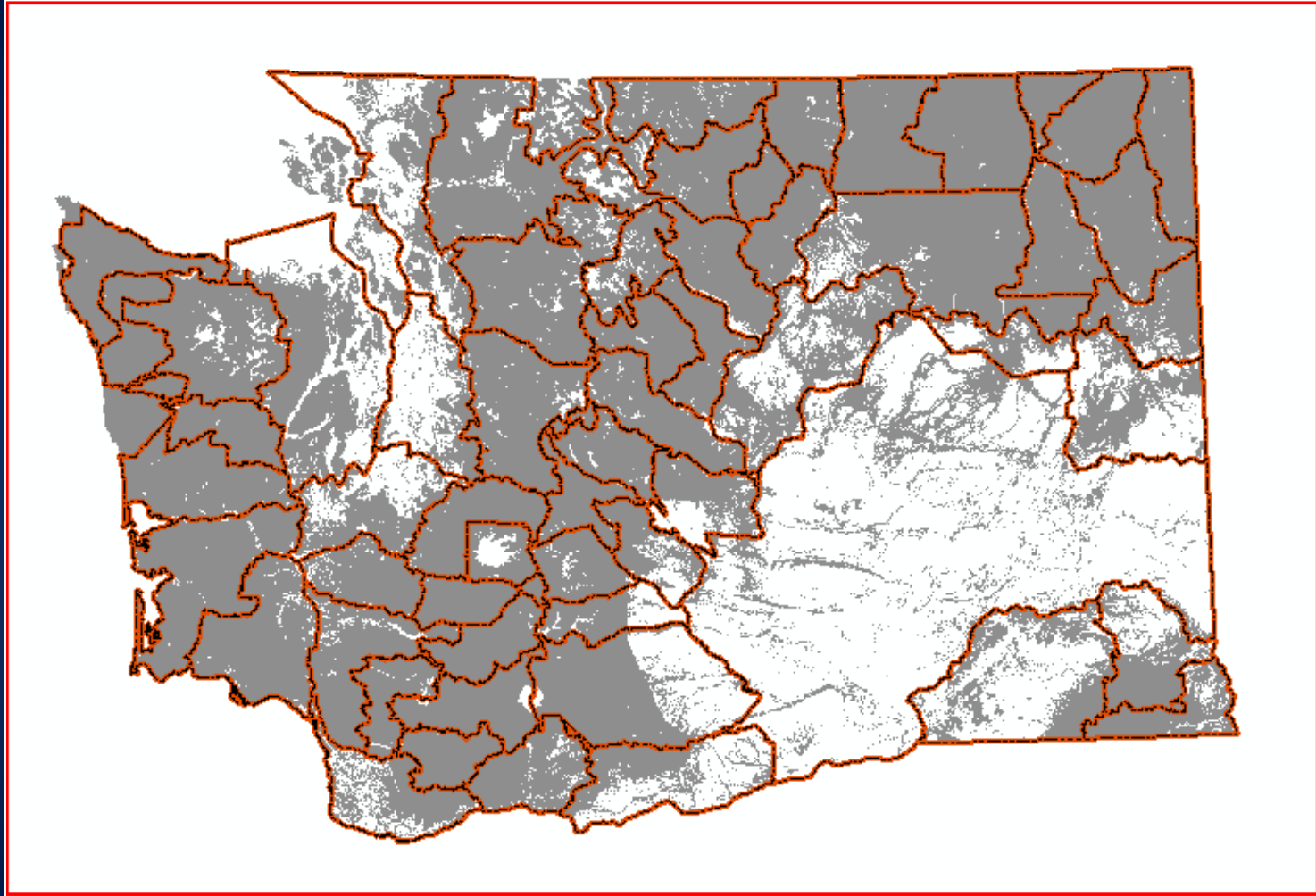
# Cougar Season Structure

## 50 Hunt Areas or PMUs



Each PMU has a harvest guideline based on the amount of habitat

# Population Estimate And Harvest Guidelines



Density X Habitat = population est.  
Population X 12-16% = Guidelines

# Cougar Harvest 1979-2018



# Recommended options

- No change in season dates – Early general season Sept. 1 – Dec. 31, late general season Jan. 1 – April 30 for all options.
- **Option 1:** Status quo with one caveat, the density we used to set the guideline is the median of 5 research projects (2.34) that were conducted in Washington.
- The median is a better measure because it is not affected by outliers in the data.
- In the past we used the mean (2.2). Using the median adds 32 cougars to the statewide guideline.

# Option 1

	2019 (Mean)	Option 1 Median density	Difference
Hunt Area	Harvest Guideline	Harvest Guideline	
GMU 101	7-9	8-10	1
GMU 105	2	2-3	1
GMUs 108, 111	5-6	5-7	1
GMU 113	5-6	5-7	1
GMU 117	6-8	6-8	0
GMU 121	5-6	5-7	1
GMUs 124, 127, 130	7-9	7-10	1
GMUs 149, 154, 162, 163	4-5	4-6	1
GMUs 145, 166, 175, 178	3-4	3-4	0
GMUs 169, 172, 181, 186	3	3-4	1
GMU 203	5	5-6	1
GMU 204	6-8	7-9	1
GMUs 209, 215	4	4-5	1
GMUs 218, 231	5-6	5-6	0
GMU 224	2	2-3	1
GMUs 233, 239	4	3-5	1
GMUs 242, 243	5-6	5-6	0
GMUs 244, 246, 247	5-6	5-7	1
GMUs 245, 250	5-6	5-7	1
GMUs 249, 251	5-6	5-7	1
GMUs 328, 329, 335	6-7	6-8	1
GMUs 336, 340, 342, 346	5-6	5-7	1
GMUs 352, 356, 360, 364, 368	5-6	5-7	1
GMUs 382, 388	3-4	3-4	0



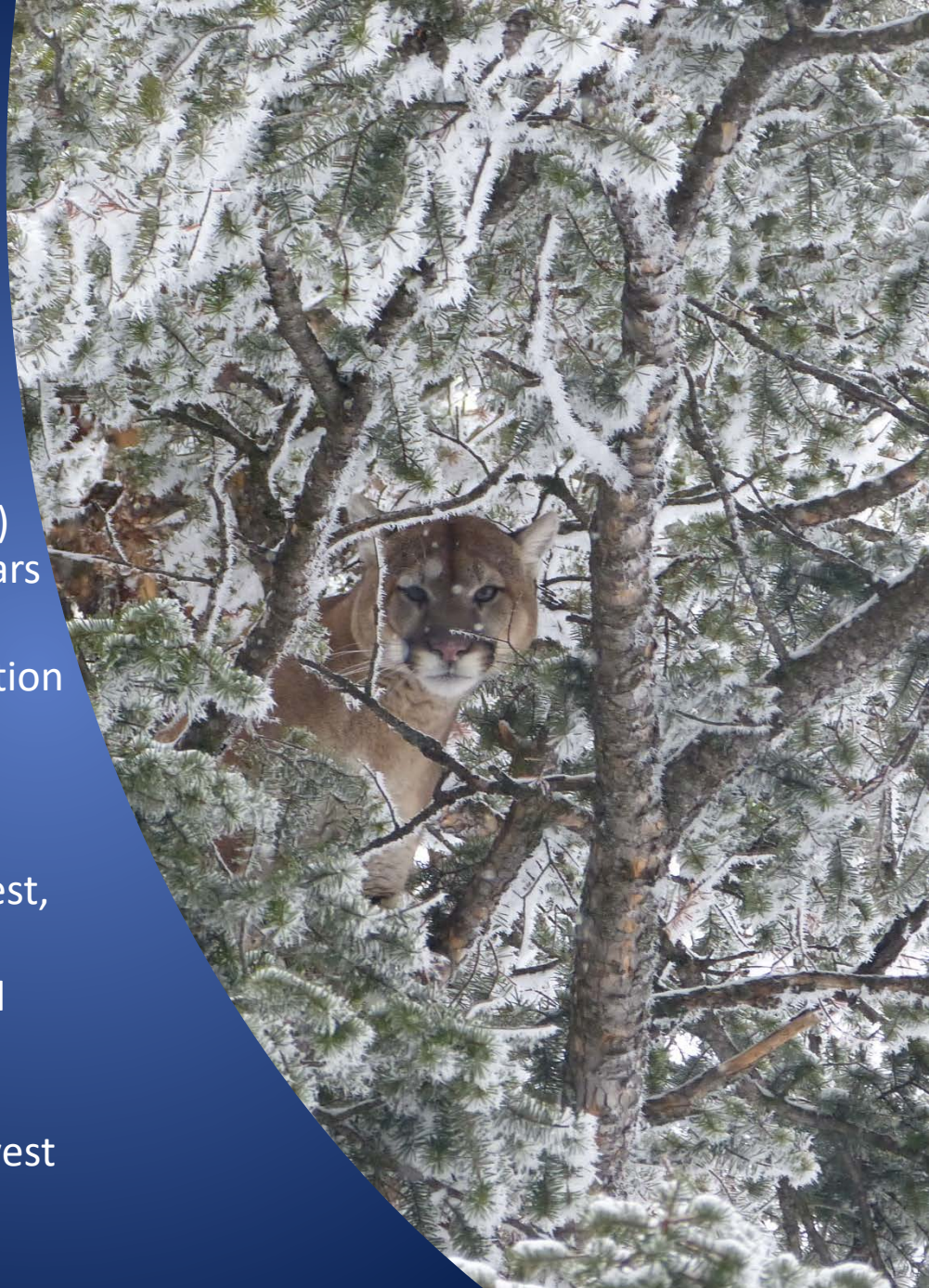
# Option1

	2019 (Mean)	Option 1 Median density	Difference
Hunt Area	Harvest Guideline	Harvest Guideline	
GMUs 418, 426, 437	11-15	12-16	1
GMUs 448, 450	10-13	10-13	0
GMU 460	5-6	5-7	1
GMUs 466, 485, 490	3	3	0
GMUs 501, 504, 506, 530	8-10	8-11	1
GMUs 503, 505, 520, 550	6-8	6-8	0
GMUs 510, 513	3-4	3-4	0
GMU 516	4	4-5	1
GMUs 522,524, 554, 556	3	3-4	1
GMU 560	5-6	5-6	0
GMU 564	1	1	0
GMU 568	2	2-3	1
GMU 572	3	3-4	1
GMUs 574, 578	4	4-5	1
GMUs 601, 602, 603, 612	5-7	5-7	0
GMUs 607, 615	4	4-5	1
GMUs 618, 636, 638	4-5	4-6	1
GMUs 642, 648, 651	6-8	7-9	1
GMUs 653, 654	5	5-6	1
GMUs 658, 660, 663, 672, 673, 681, 684, 699	9-12	10-13	1
GMU 667	3-4	3-4	0
<b>Total</b>			<b>+32</b>

# Recommended options

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- **Option 2:** Uses a median density (1.91) and is calculated using only adult cougars (24+ months).
- When compared with the 2019 this option reduces the guideline by 19.
- When compared with option 1, this option reduces the guideline by 51.
- This has the potential to increase harvest, because:
  - harvested sub-adult cougars would not count toward the guideline for season closure.
  - about 30% (73) of the current harvest consists of sub-adults .



# Option 2

	Option 1 Median density	Option 2 Median density adult only	Difference
Hunt Area	Harvest Guideline	Harvest Guideline	
GMU 101	8-10	6-8	-2
GMU 105	2-3	2	-1
GMUs 108, 111	5-7	4-6	-1
GMU 113	5-7	4-5	-2
GMU 117	6-8	5-7	-1
GMU 121	5-7	4-6	-1
GMUs 124, 127, 130	7-10	6-8	-2
GMUs 149, 154, 162, 163	4-6	3-5	-1
GMUs 145, 166, 175, 178	3-4	3-4	0
GMUs 169, 172, 181, 186	3-4	2-3	-1
GMU 203	5-6	4-5	-1
GMU 204	7-9	5-7	-2
GMUs 209, 215	4-5	3-4	-1
GMUs 218, 231	5-6	4-5	-1
GMU 224	2-3	2	-1
GMUs 233, 239	3-5	3-4	-1
GMUs 242, 243	5-6	4-5	-1
GMUs 244, 246, 247	5-7	4-6	-1
GMUs 245, 250	5-7	4-6	-1
GMUs 249, 251	5-7	4-6	-1
GMUs 328, 329, 335	6-8	5-7	-1
GMUs 336, 340, 342, 346	5-7	4-6	-1
GMUs 352, 356, 360, 364, 368	5-7	4-6	-1
GMUs 382, 388	3-4	3	-1

# Option2

	Option 1 Median density	Option 2 Median density adult only	Difference
Hunt Area	Harvest Guideline	Harvest Guideline	Harvest Guideline
GMUs 418, 426, 437	12-16	10-13	-3
GMUs 448, 450	10-13	8-11	-2
GMU 460	5-7	4-6	-1
GMUs 466, 485, 490	3	2-3	0
GMUs 501, 504, 506, 530	8-11	6-9	-2
GMUs 503, 505, 520, 550	6-8	5-7	-1
GMUs 510, 513	3-4	3	-1
GMU 516	4-5	3-4	-1
GMUs 522,524, 554, 556	3-4	3	-1
GMU 560	5-6	4-5	-1
GMU 564	1	1	0
GMU 568	2-3	2	-1
GMU 572	3-4	2-3	-1
GMUs 574, 578	4-5	3-4	-1
GMUs 601, 602, 603, 612	5-7	4-6	-1
GMUs 607, 615	4-5	3-4	-1
GMUs 618, 636, 638	4-6	3-5	-1
GMUs 642, 648, 651	7-9	5-7	-2
GMUs 653, 654	5-6	4-5	-1
GMUs 658, 660, 663, 672, 673, 681, 684, 699	10-13	8-11	-2
GMU 667	3-4	3-4	0
Total	293	242	-51

# Recommendation

- **Option3:** Adjusts the guideline upward for 19 units that exceeded the guideline by December 31 at least once in the past 5 years.
- The new guideline is based on the highest harvest in the past 5 years.
- In this option there is the assumption that density is higher in these areas.
- In two PMUs we adjusted the guidelines so they did not exceed an assumed density 4.15 cougars per 100 square kilometers. This was done to keep the density within an acceptable range based on research conducted in the western United States.
- This guideline includes adults and sub-adults.

# 19 PMUs that historically closed on Jan 1

PMU	Harvest Objective	Harvest				
		2014-15	2015-16	2016-17	2017-18	2018-19
101	7-9	10	2	8	9	13
105	2	4	2	5	2	2
108, 111	5-6	7	8	11	12	10
117	6-8	12	10	11	12	14
121	5-6	8	4	17	9	6
124, 127, 130	7-9	8	4	11	11	9
145, 166, 175, 178	3-4	7	3	6	6	7
149, 154, 157, 162, 163	4-6	4	6	12	15	18
169, 172, 181, 186	3-4	1	2	7	3	5
204	6-8	1	7	2	6	10
233, 239	3-4	1	1	6	1	4
242, 243	4-6	3	1	3	2	7
328, 329, 335	6-8	7	8	11	8	8
336, 340, 342, 346	5-7	6	8	6	12	7
352, 356, 360, 364, 368	5-7	6	5	10	7	7
568	2	0	4	1	4	4
574, 578	3-5	4	5	3	5	7
642, 648, 651	6-8	6	3	5	10	10
667	3-4	7	3	5	3	1

# Option 3

	Option 1 Median density	Option 2 Median density adult only	Option 3 Extend season	Difference from Option1
Hunt Area	Harvest Guideline	Harvest Guideline	Harvest Guideline	
GMU 101	8-10	6-8	11-13 (3.03)	3
GMU 105	2-3	2	4-5 (4.15)	2
GMUs 108, 111	5-7	4-6	10-12 (4.06)	5
GMU 117	6-8	5-7	12-14 (4.0)	6
GMU 121	5-7	4-6	10-12 (4.08)	5
GMUs 124, 127, 130	7-10	6-8	8-11 (2.58)	1
GMUs 149, 154, 162, 163	4-6	3-5	8-10 (3.99)	4
GMUs 145, 166, 175, 178	3-4	3-4	6-7 (3.94)	3
GMUs 169, 172, 181, 186	3-4	2-3	6-7 (4.11)	3
GMU 204	7-9	5-7	8-10 (2.6)	1
GMUs 233, 239	3-5	3-4	4-6 (2.85)	1
GMUs 242, 243	5-6	4-5	6-7 (2.71)	1
GMUs 328, 329, 335	6-8	5-7	9-11 (3.22)	3
GMUs 336, 340, 342, 346	5-7	4-6	10-12 (4.04)	5
GMUs 352, 356, 360, 364, 368	5-7	4-6	8-10 (3.33)	3
GMU 568	2-3	2	3-4 (3.17)	1
GMUs 574, 578	4-5	3-4	6-7 (3.25)	2
GMUs 642, 648, 651	7-9	5-7	8-10 (2.61)	1
GMU 667	3-4	3-4	6-7 (3.91)	3
<b>Total</b>	<b>293</b>	<b>242</b>	<b>346</b>	<b>+53</b>

# Recommendation

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- **Option 4:** Like option 3, but calculates the assumed density based on adult cougars and only adult cougars count towards the guideline.





# Option 4

	Option 1 Median density	Option 2 Median density adult only	Option 3 extend season	Option 4 extend season adult only	Difference from Option 2
Hunt Area	Harvest Guideline	Harvest Guideline	Harvest Guideline	Harvest Guideline	
GMU 101	8-10	6-8	11-13 (3.03)	7-11 (2.6)	3
GMU 105	2-3	2	4-5 (4.15)	4 (3.72)	2
GMUs 108, 111	5-7	4-6	10-12 (4.06)	9-11 (3.63)	5
GMU 117	6-8	5-7	12-14 (4.0)	11-13 (3.57)	6
GMU 121	5-7	4-6	10-12 (4.08)	9-11 (3.65)	5
GMUs 124, 127, 130	7-10	6-8	8-11 (2.58)	7-9 (2.15)	1
GMUs 149, 154, 162, 163	4-6	3-5	8-10 (3.99)	7-9 (3.56)	4
GMUs 145, 166, 175, 178	3-4	3-4	6-7 (3.94)	6-7 (3.51)	3
GMUs 169, 172, 181, 186	3-4	2-3	6-7 (4.11)	5-6 (3.68)	3
GMU 204	7-9	5-7	8-10 (2.6)	6-8 (2.17)	1
GMUs 233, 239	3-5	3-4	4-6 (2.85)	4-5 (2.42)	1
GMUs 242, 243	5-6	4-5	6-7 (2.71)	5-6 (2.28)	1
GMUs 328, 329, 335	6-8	5-7	9-11 (3.22)	8-10 (2.79)	3
GMUs 336, 340, 342, 346	5-7	4-6	10-12 (4.04)	9-11 (3.61)	5
GMUs 352, 356, 360, 364, 368	5-7	4-6	8-10 (3.33)	7-9 (2.9)	3
GMU 568	2-3	2	3-4 (3.17)	3 (2.74)	1
GMUs 574, 578	4-5	3-4	6-7 (3.25)	5-6 (2.82)	2
GMUs 642, 648, 651	7-9	5-7	8-10 (2.61)	6-8 (2.18)	1
GMU 667	3-4	3-4	6-7 (3.91)	6-7 (3.48)	3
<b>Total</b>	293	242	346	295	+53

# Option comparison

	Option 1 median density			Option 2 Median density adult only			Option 3 extend season			Option 4 extend season adult only		
Hunt Area	Harvest Guideline		Change from 2019	Harvest Guideline		Change from 2019	Harvest Guideline		Change from 2019	Harvest Guideline		Change from 2019
<b>Total Guideline</b>	220	293	<b>+32</b>	178	242	<b>-19</b>	273	346	<b>+85</b>	229	295	<b>+34</b>
<b>Estimated Harvest</b>	194	<b>259</b>	<b>+15</b>	225	<b>306</b>	<b>+62</b>	241	<b>306</b>	<b>+62</b>	289	<b>373</b>	<b>+129</b>
<b>Statewide % harvest based on statewide median density</b>	9.1	12.1		10.5	14.3		11.3	14.3		13.6	17.5	



# Summary of comments

- We received 177 online comments
  - 52% (89) respondent generally agreed
  - 34% (58) respondents generally disagreed
  - 14% (30) respondents were neutral
- We received 555 emails and 1 letter
  - 532 were a form letter in opposition to predator hunting
  - Eight were in favor of at least one of the proposed options
  - The rest fell into 3 camps
    - No cougar hunting
    - More cougar hunting
    - No change



# Summary of comments

- We received many comments about hound hunting
- Only 33 people picked an option
  - Option 1 – 21% (7)
  - Option 2 – 3% (1)
  - Option 3 – 36% (12)
  - Option 4 – 39% (13)





**Questions?**

