

Cougar Management and Public Safety Briefing



Washington Department of
FISH and WILDLIFE

Eric Gardner – Wildlife Program Director
Anis Aoude – Game Division Manager
Mick Cope – Wildlife Program Deputy Director
Steve Bear – Enforcement Chief



Goal of Presentation

Provide background on cougar management to inform scoping for cougar season setting and public safety

Presentation Road Map

- Overview of issue
- Summary of Commission engagement
- Cougar Management
 - Cougar season framework within scope of Game Management Plan
 - Other States' programs
- Public Safety Programs

Commission and Department Engagement

What we heard (March 1 & 2):

- Increased predator numbers
 - Public safety re: cougar interactions and department response
 - Impacts to ungulates and hunting opportunity

What we've done:

- March 5 – CR 101 black bear and cougar seasons and regulations
- March 15 - confirmed bear season timeline, intent to provide direction
- March 26 – Director's memo re: public safety response
- April 4-6 – confirmed “off-cycle” cougar season/regulation process
- Oct. 18 – additional Commission scoping

Cougar Management

Anis Aoude

Game Population Management Framework

- Game Management Plan (GMP)
 - Overarching SEPA document
 - Goals, Objectives and Strategies for each Game species
 - Usually revised every 6 years
 - Current plan sunsets in 2021 (we are delaying revision until 2023)
- Three year season setting process
 - Rule making process to set hunting seasons for managing game species (guidance from GMP)
 - Annual adjustment to dates and permits are often made

GMP Cougar Goals

1. Preserve, protect, perpetuate, and manage cougar and their habitats to ensure healthy, productive populations.
2. Minimize human/cougar conflict.
3. Manage cougar for a variety of recreational, educational and aesthetic purposes including hunting, scientific study, cultural and ceremonial uses by Native Americans, wildlife viewing, and photography.
4. Manage statewide cougar populations for a sustained yield.
5. Improve our understanding of predator-prey relationships.

Cougar Game Management Plan Objectives for Recreational Hunting

- 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

Cougar Science Informs Management

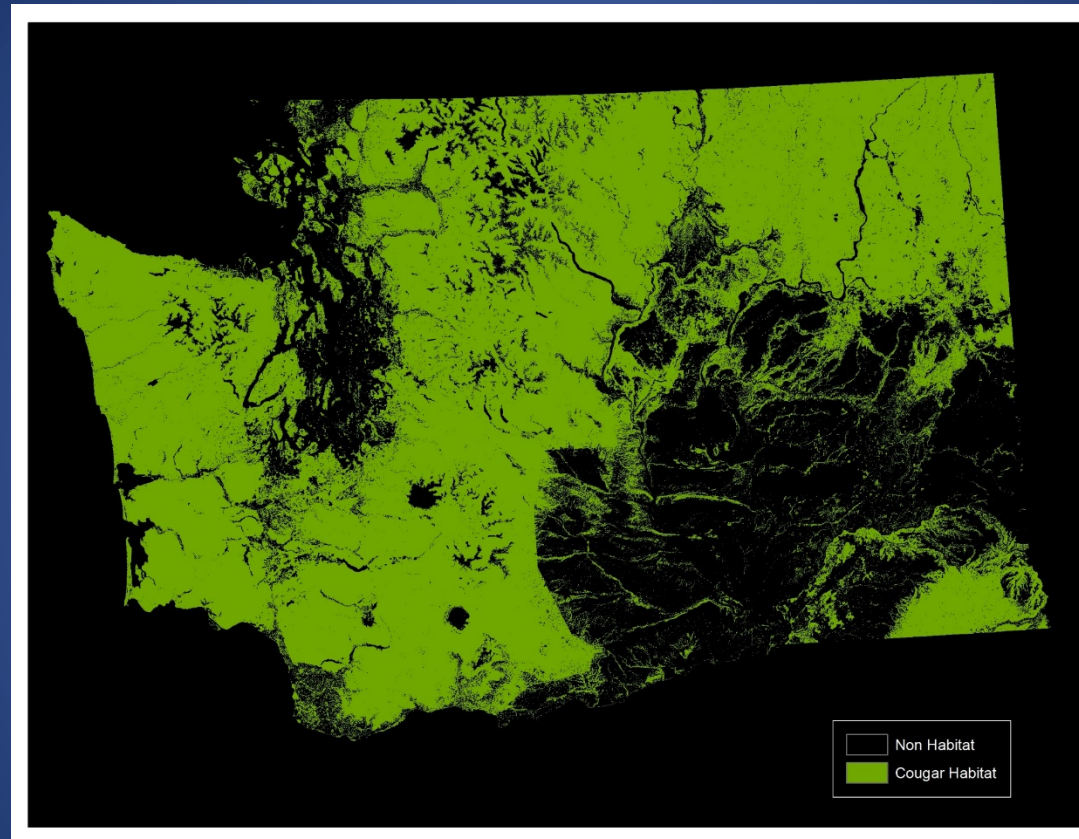
- There are currently two dominant theories
 - Resource limited population
 - Space or territory limited population
- Regardless to what theory you subscribe you need two main parameters to manage cougars
 - Density
 - Reproductive rate (population growth rate)

Washington Research Informs Management

- Research conducted in Washington helps us get a range of densities and population growth rates of cougars in Washington
- These two parameters are important when setting harvest guidelines regardless of harvest objective
- The growth rate parameter (12%-16%) is less variable than density parameter which can be tied to habitat quality and food abundance

Statewide Cougar Habitat

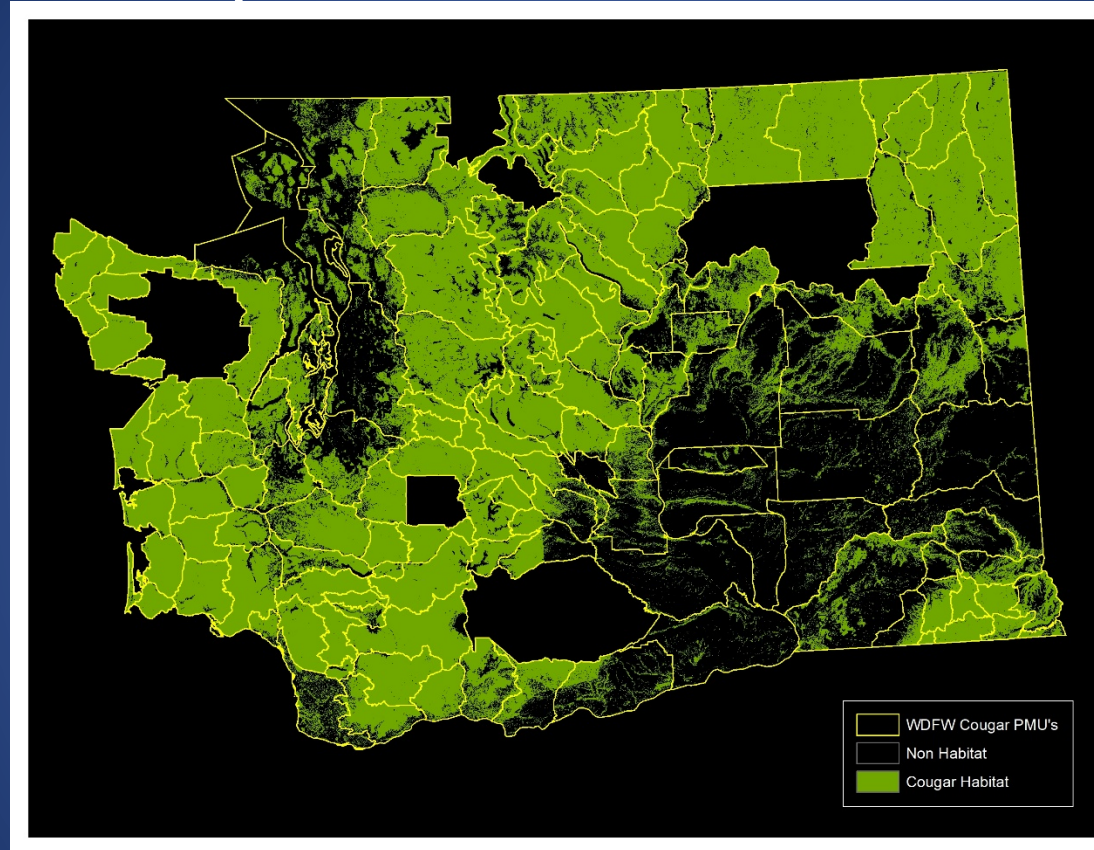
104,788 km² or 25.9 M acres



This translates to roughly 2,300 independent cougars
and 3,350 cougars if we count kittens statewide

Cougar Habitat managed by the state

91,099 km² or 22.5 M acres



This translates to roughly 2,000 independent cougars
and 2,915 cougars if we count kittens statewide

CURRENT MANAGEMENT FRAMEWORK

Manage for stable populations:

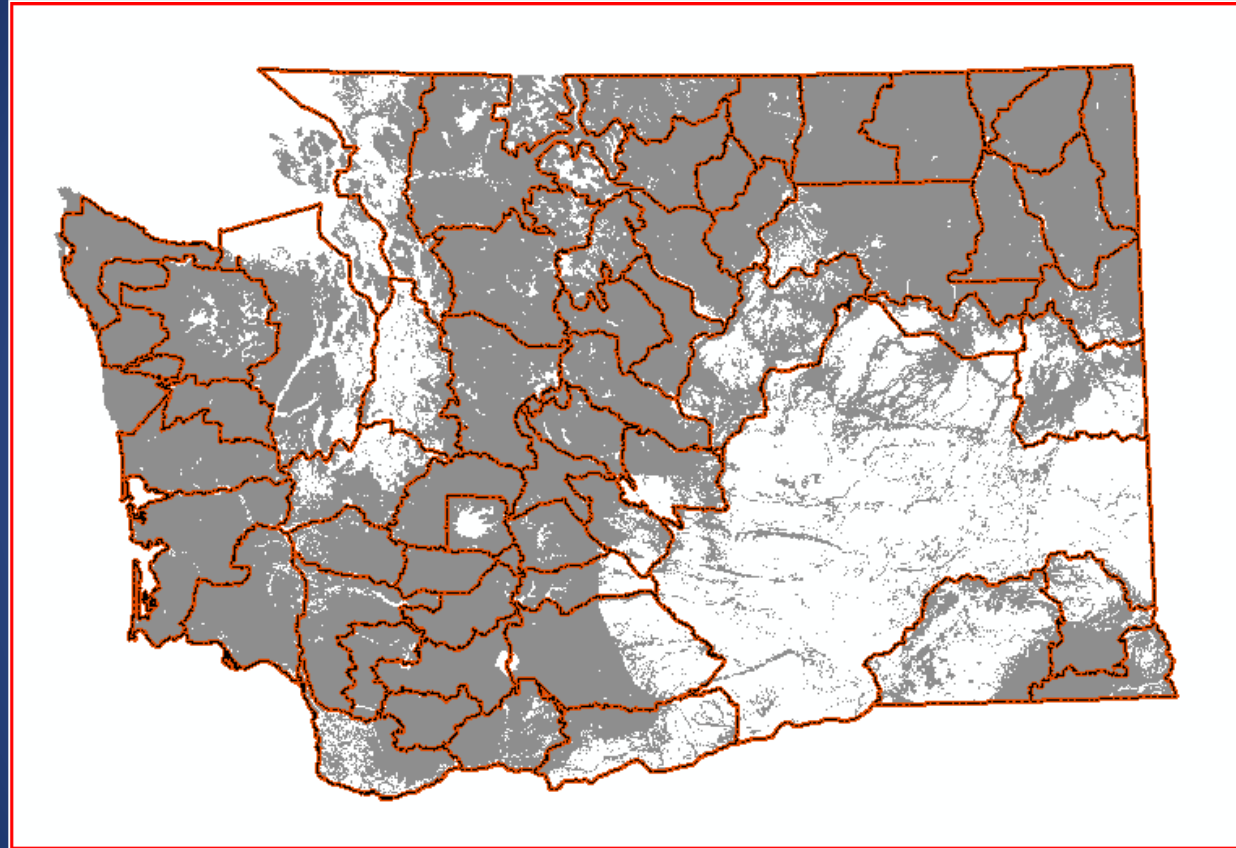
- Growth rate
- Density

Manage harvest within ecologically-based Population Management Unit:

- Limit harvest to 12% – 16% of independent animals:
- Early Season September 1 – December 31
- Late Season January 1 – April 30
- Units that meet or exceed the guideline can close on January 1
- Recreational harvest only - does not include agency removals

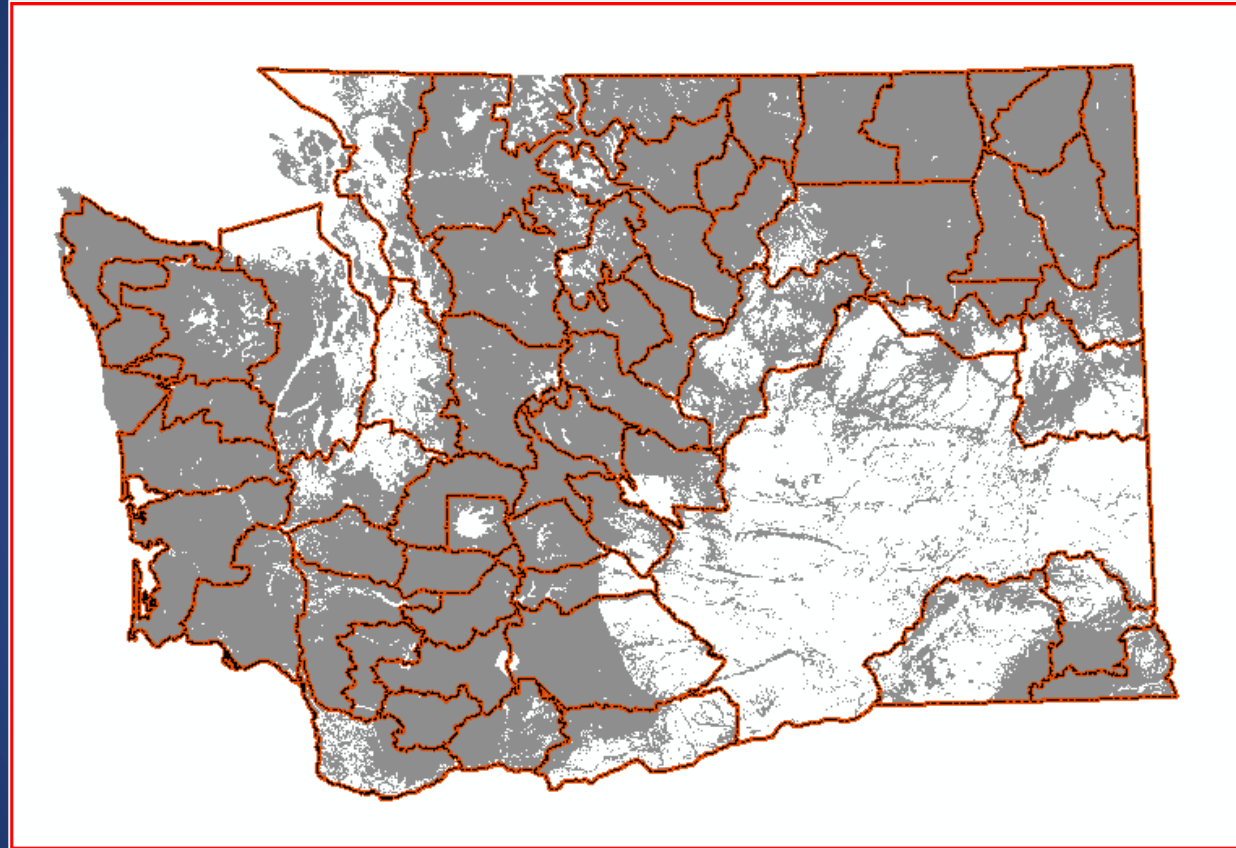
Cougar Season Structure

50 Hunt Areas or PMUs



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

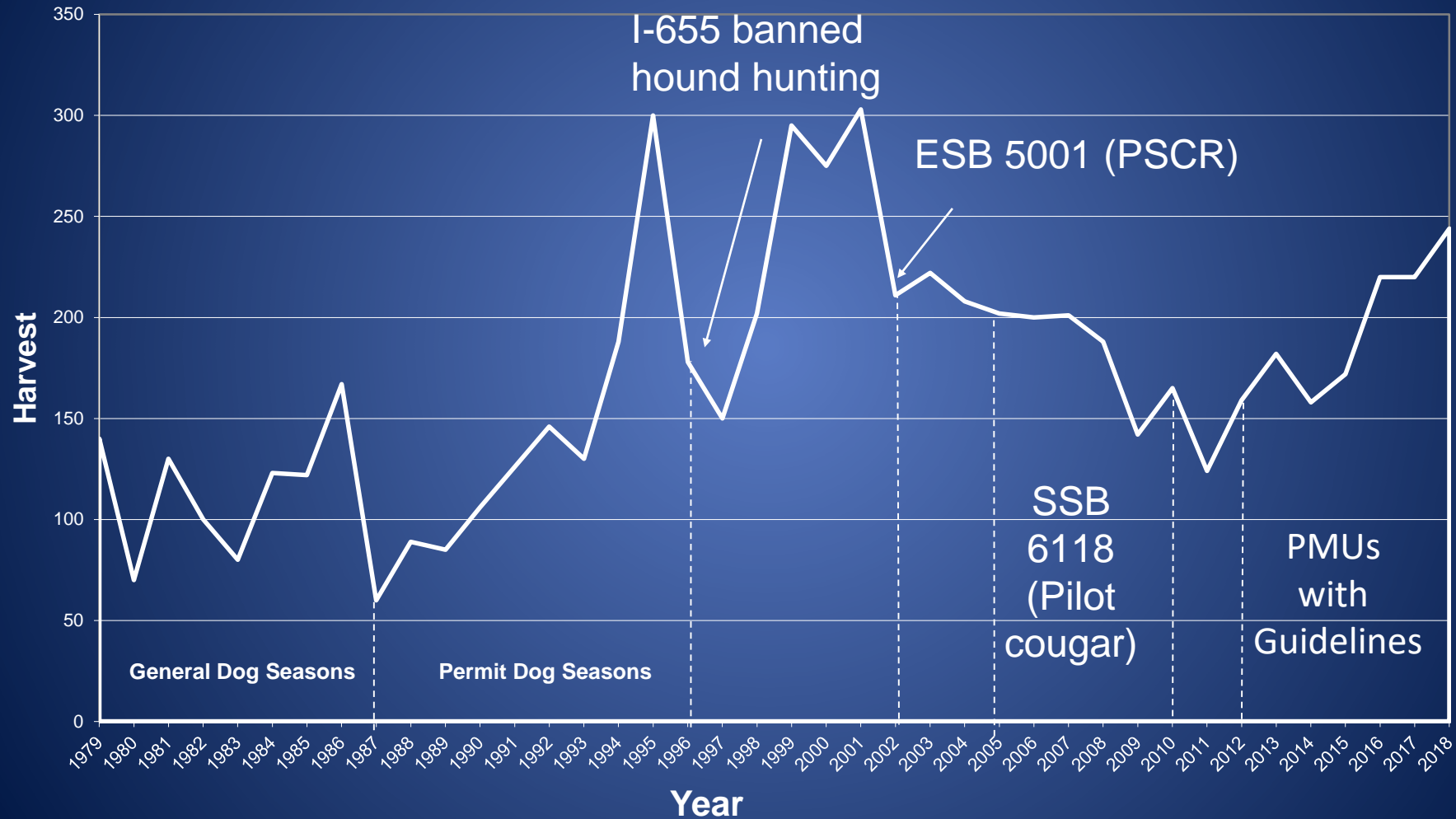
Population Estimate And Harvest Guidelines



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

Cougar Harvest 1979-2018

Including Milestones



Comparison with nearby states

State	Human pop	Cougar Habitat	Cougar Pop	Cougar Density	Hunter Harvest	Conflict Removals	% Hunter harvest	% removed
		km ²		Per 100 km ²	5-year mean	5-year mean	5-year mean	5-year mean
WA	7.5 M	104,788	3,350	3.2	205	53	6.1%	7.7%
OR	4.2 M	186,000	6,400	3.4	300	180	4.7%	7.5%
ID	1.8 M	207,200	6,600	3.2	550	41	8.3%	8.9%
MT	1.1 M	192,000	5,300	2.8	485	43	9.2%	10%
UT	3.1 M	92,700	3,500	3.8	383	49	10.9%	12.3%
NV	3 M	130,000	3,000	2.3	150	25	5%	5.8%
CA	39.5 M	184,200	5,000	2.7	NA	103	NA	2.1%
CO	5.7 M	152,350	5,000	3.3	450	70	9%	10.4%
WY	0.57 M	115,000	Unk	Unk	271	8	NA	NA
AZ	7.2 M	274,166	2,500	0.9	282	32	11.3%	12.6%
NM	2.1 M	186,972	5,500	2.9	270	23	4.9%	5.3%

Focus areas

State	Human pop	Cougar Habitat	Cougar Pop	Cougar Density	Hunter Harvest	Conflict Removals	% Hunter harvest	% removed
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UT	3.1 M	92,700	3,500	3.8	383	49	10.9%	12.3%
CA	39.5 M	184,200	5,000	2.7	NA	103	NA	2.1%

Comparison with nearby states

State	Harvest limit	Sex specific limit	Mandatory inspection	Hounds	Hunt Structure
WA	Yes	No	Yes	No	Intrinsic growth rate 12-16%
OR	Yes	No	Yes	No	Maintain population of > 3,000 cougars statewide
UT	Yes	No	Yes	Yes	Maintain < 40% female & 15-20% > 5 years old
NV	Yes	No	Yes	Yes	Keep adult female (≥ 3 years) harvest < 35% of harvest and total females < 50% of harvest
WY	Yes	No	Yes	Yes	Source sink and stable pop
AZ	Yes	No	Yes	Yes	Keep female (≥ 3 years) harvest < 25% of total take
NM	Yes	Yes	Yes	Yes	% female in harvest

Take home messages

- Many ways to approach cougar management
- All start with management objectives
- Objectives often reflect societal values
- Many require population and/or harvest information
 - demographics, density and growth rate

What Adjustments Should We Make?

- Existing GMP
 - Options in March 2020
 - Propose changes supported by current GMP
 - Nexus to public safety and conflict
 - Adaptively manage by PMU
 - Increased hunting opportunity
- Revised GMP - Consider
 - May require SEPA work
 - Longer timeline
 - Evaluate objectives
 - Stable population, 12-16%
 - Changes to PMUs and related guidelines

Addressing Public Safety Concerns

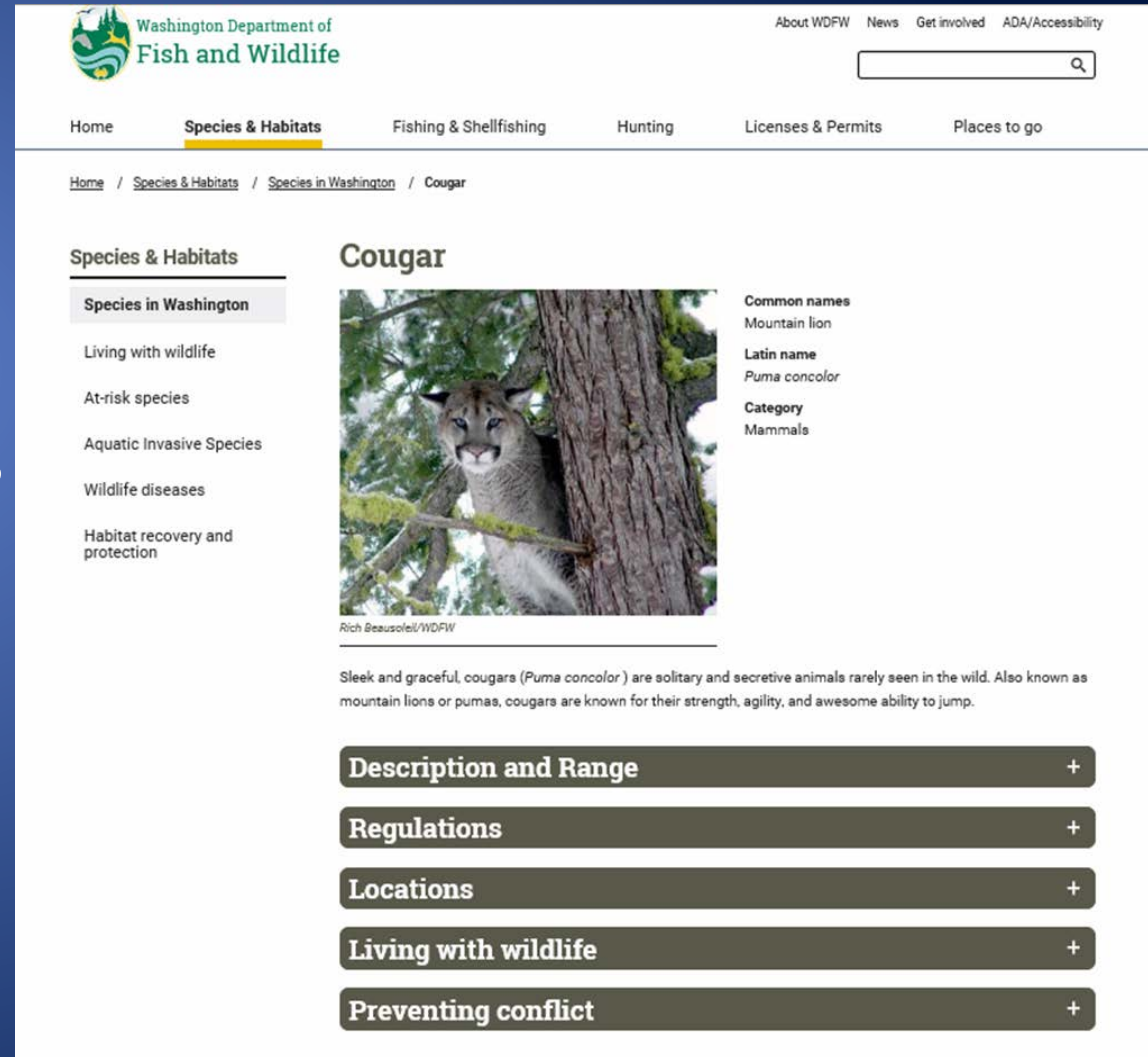
Mick Cope and Steve Bear

Cougar Game Management Plan Objectives for Public Safety

Minimize negative human-cougar interactions so that the “number of interactions per capita” is constant or declining from 2007 levels

Current Actions

- Website - Living with Wildlife
 - Basic Cougar Biology
 - Conflict Prevention
 - Clear brush and other hiding places
 - Don't feed wildlife/pets
 - Keep pets inside
 - Keep garbage cans inside
 - Secure Livestock

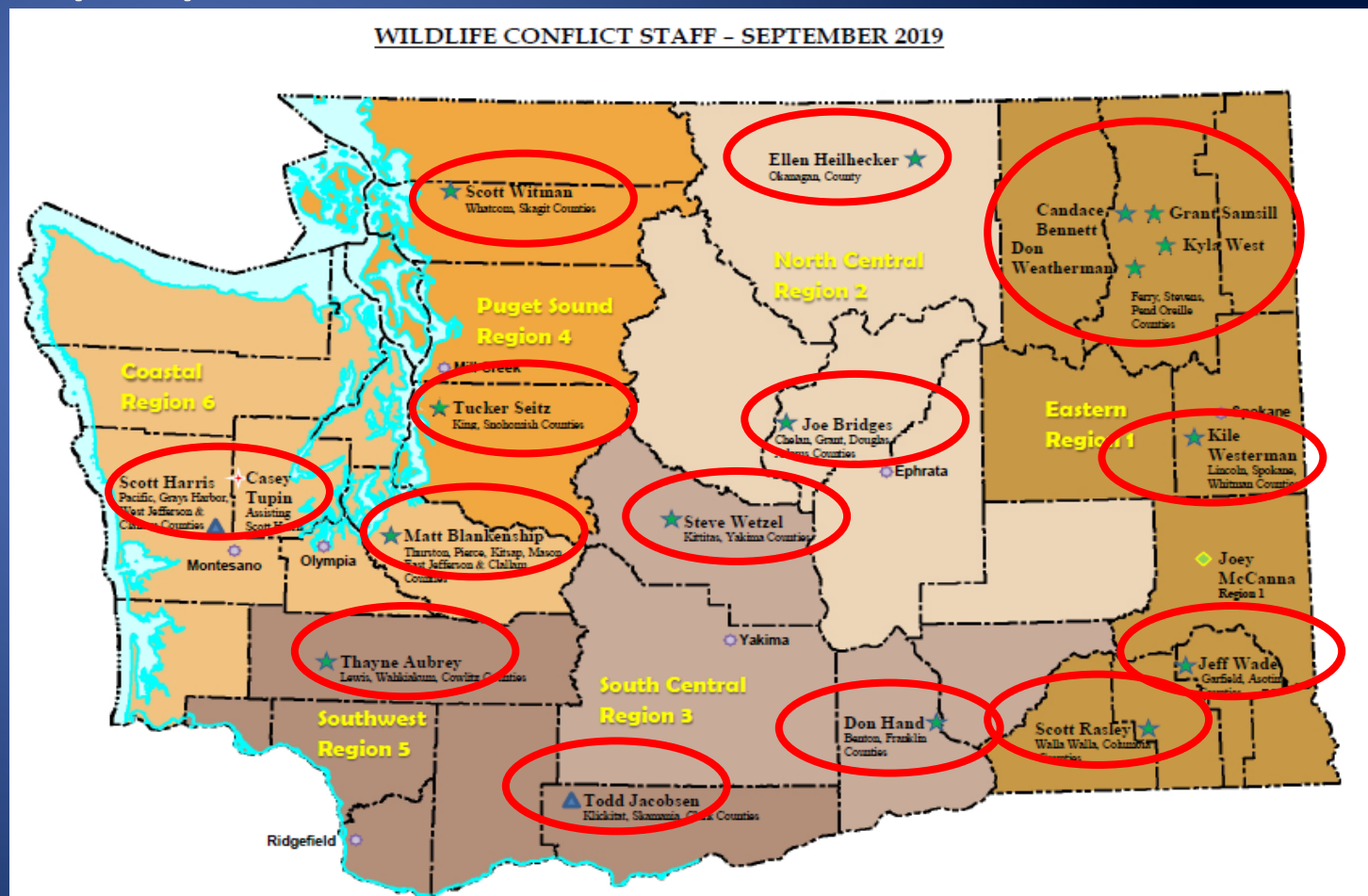


The screenshot shows the Washington Department of Fish and Wildlife website. The header includes the department logo, navigation links (Home, Species & Habitats, Fishing & Shellfishing, Hunting, Licenses & Permits, Places to go), and a search bar. The breadcrumb trail reads: Home / Species & Habitats / Species in Washington / Cougar. The main content area is titled "Cougar" and features a photograph of a cougar perched on a tree branch. To the right of the photo are fields for "Common names" (Mountain lion), "Latin name" (*Puma concolor*), and "Category" (Mammals). Below the photo is a short paragraph: "Sleek and graceful, cougars (*Puma concolor*) are solitary and secretive animals rarely seen in the wild. Also known as mountain lions or pumas, cougars are known for their strength, agility, and awesome ability to jump." At the bottom of the page are five expandable sections: "Description and Range", "Regulations", "Locations", "Living with wildlife", and "Preventing conflict", each with a plus sign icon.

Current Actions

- Wildlife Conflict Specialists (18)

- Personal Communication
- Husbandry
- Education/Outreach



Current Actions

- Enforcement Officers
 - Personal Communication
 - Dangerous Wildlife Reports



Photo credit: Rick Bannan; The Reflector 11/26/2018

Cougar Calls for Service- WDFW Enforcement

Cougar Calls for Service- WDFW Enforcement Program						Current
Region	CY 2015	CY 2016	CY 2017	CY 2018	Total	CY 2019 To Date*
R1	145	178	216	326	865	235
R2	88	89	103	104	384	121
R3	30	44	69	72	215	62
R4	81	64	64	85	294	70
R5	62	63	55	156	336	110
R6	51	50	130	175	406	173
Total	457	488	637	918	2500	771

2019 Total Projection

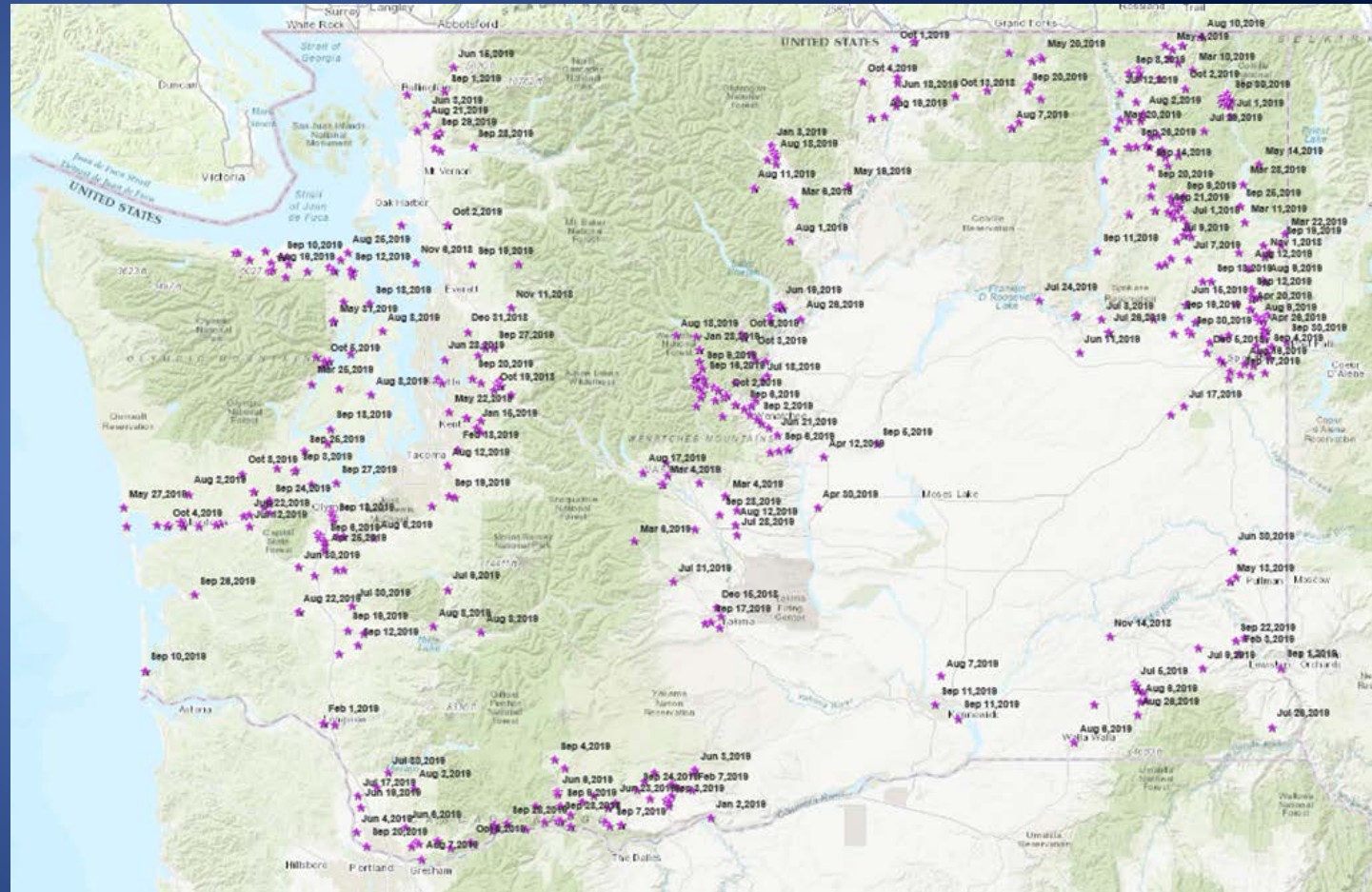
996

Using the 2015-2018 growth rate applied to remaining CY averages, the projected calls would create an additional 225 incidents

*the information for CY 2019 is from 01/01/19 to 10/10/19

Current Actions

- Enforcement Officers
 - Personal Communication
 - Dangerous Wildlife Report
 - Cougar Pursuit Season
 - RCW 77.12.077
 - Lethal Removal
 - Human safety – director memo
 - Livestock or pets



Reported Cougar Incidents in past 365 days

Cougar Lethal Removals- WDFW Enforcement

WDFW Lethal Cougar Removal: <u>2019 to Date</u>	
Region	Regional Reporting
R1	62
R2	5
R3	3
R4	8
R5	13
R6	16
<u>Total</u>	107

WDFW Lethal Cougar Removal Statewide Historical:			
2015	2016	2017	2018
26	27	32	80

Current Actions

- Enforcement Officers

- Personal Communication
- Dangerous Wildlife Report
- Cougar Pursuit Season

- RCW 77.12.077

- Lethal Removal

- Human safety
- Livestock or pets

- County Governments

- RCW 77.15.245



Public Safety Planning for Future Actions

- Considerations:
 - Public Outreach Campaign:
 - Public Outreach Plan (2010) – limited resources
 - Workshops with County Governments – Partnerships
 - New Rules: Public Safety Cougar Removal
 - WAC 220-440-030 – longer timeframe
 - OTHER?



Questions/Discussion

