Black Bear Framework Option

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Washington's Proposed Framework

Objective → stable bear populations at the BBMU-scale

  ✓   create adaptive management action(s) if objectives are not being met

Female mortalities / habitat **x** density $\leq$ intrinsic growth rate

Harvest *(+wound loss* **)*
Timber, Conflict
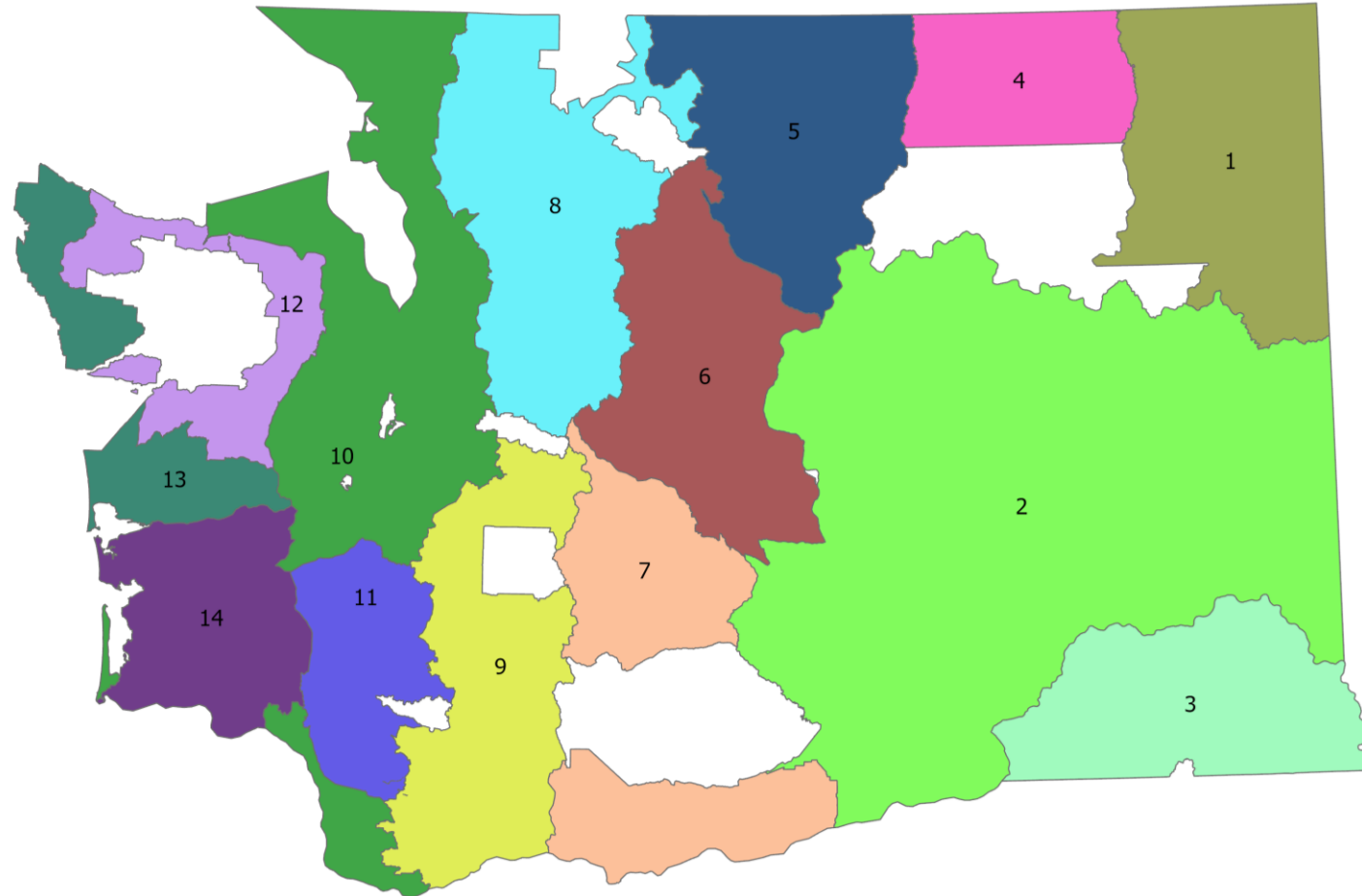
Female (>1yr)
population size

Natural,
Other *(Roadkill, Poaching,...)*
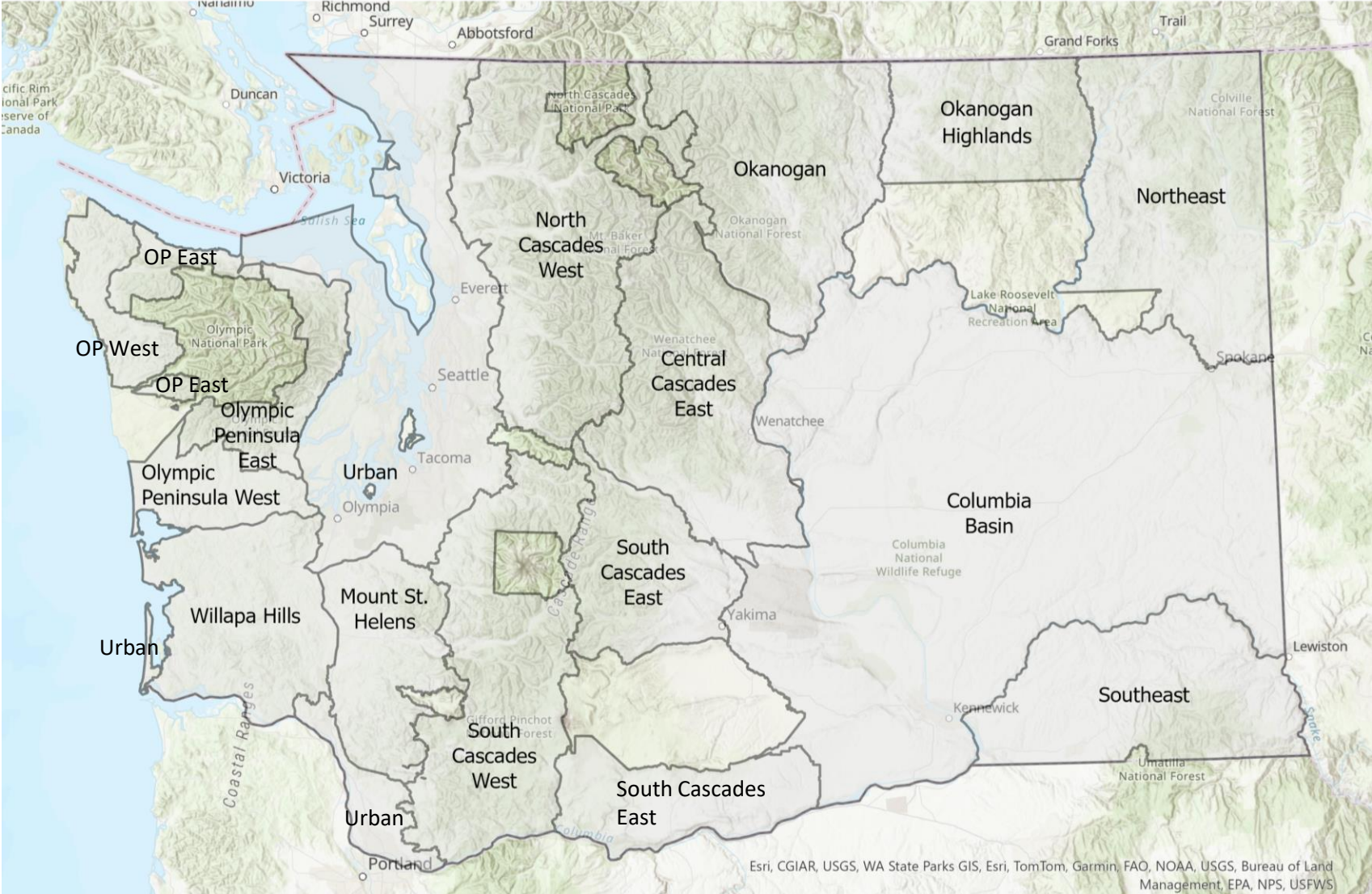
Proposed Black Bear Management Units
From 9 to 14 BBMUs

* BBMUs may change based on continued Regional input
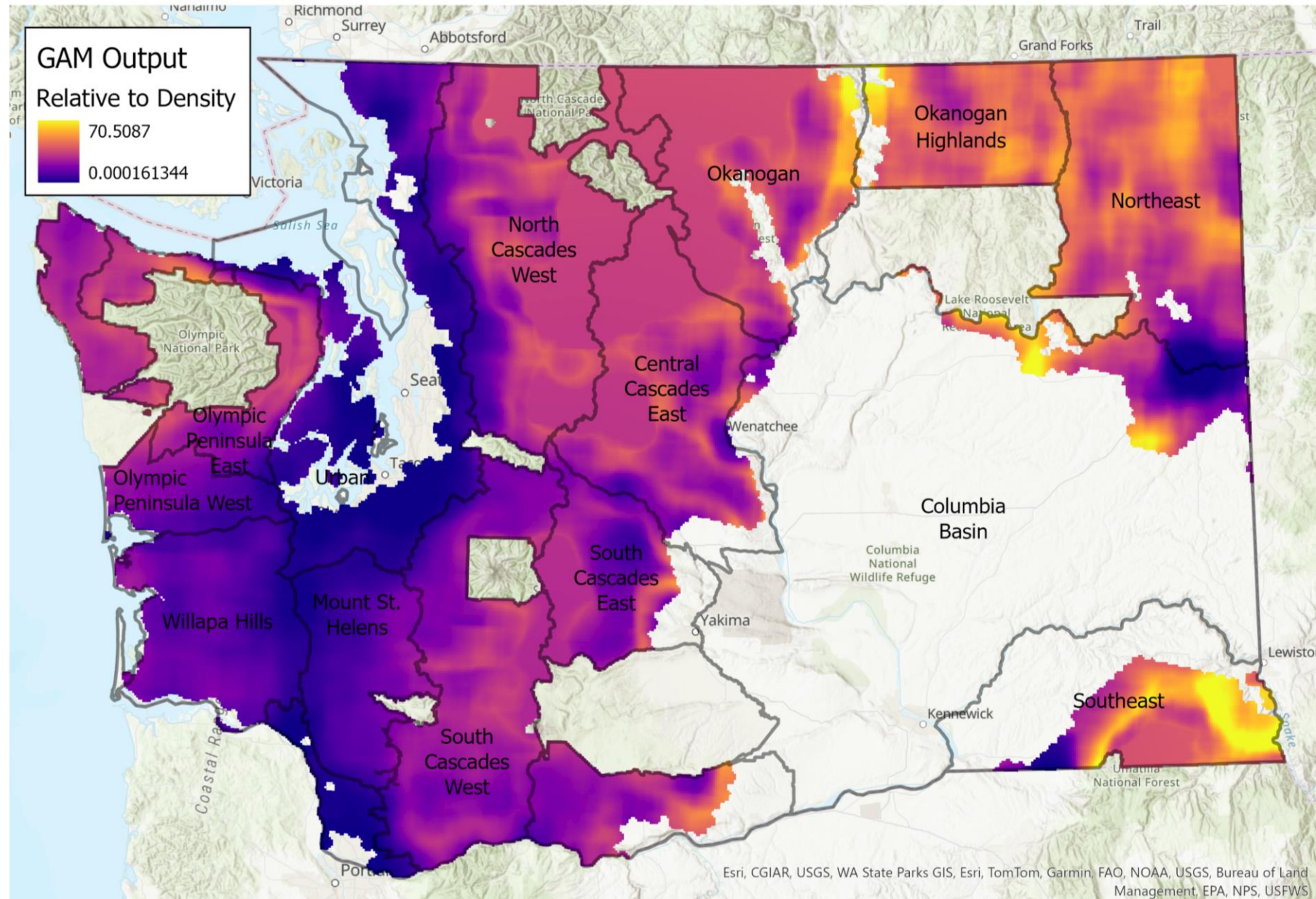
Black Bear Management Units

Black Bear Management Units

BBMUs overlaying the density model output cropped to bear habitat.

Note the Urban BBMU – low predicted density and high human presence (low social capacity)

Note the Columbia Basin BBMU – non-habitat

Adaptive Management

- Estimate female mortality rates within BBMUs at **3-year intervals**
  - Incorporates environmental variation and variations in hunter effort
  - Emergency rules can always go into effect during poor mast/fruit years
- Adjust hunting seasons during rule-making: bag limits, season dates
  - General season recommendations:
    - Aug 1 – Nov 15
    - 2 bear bag limit
  - If BBMU-level female mortality $\leq$ 8% IGR:
    - No change to general season recommendations
  - If BBMU-level female mortality > 8% IGR:
    - Reduce bag limit AND
    - Adjust season dates – 2-week intervals, starting with season opening
      - *Unless* we have a different management objective (i.e., Urban BBMU)
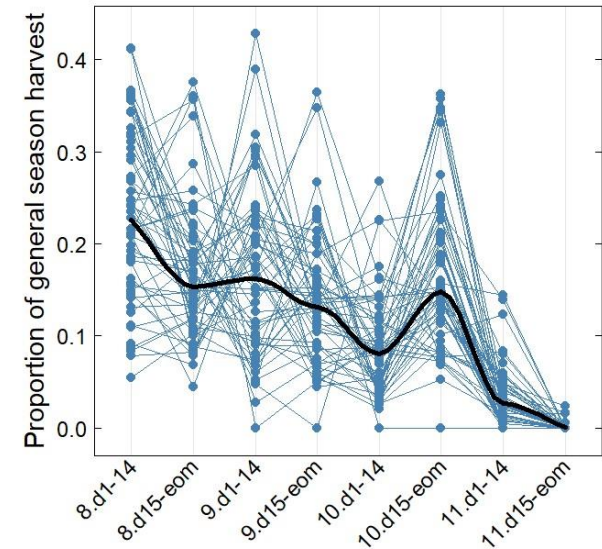
Example Framework

	BBMU 1
Mortality Rate	8%
Bag Limit	2
Season Open	01-Aug
Season Close	15-Nov

- General season recommendations:
  - Aug 1 – Nov 15
  - 2 bear bag limit

Example Framework

	BBMU 1	BBMU 2
Mortality Rate	8%	<8%
Bag Limit	2	2
Season Open	01-Aug	01-Aug
Season Close	15-Nov	15-Nov

- General season recommendations:
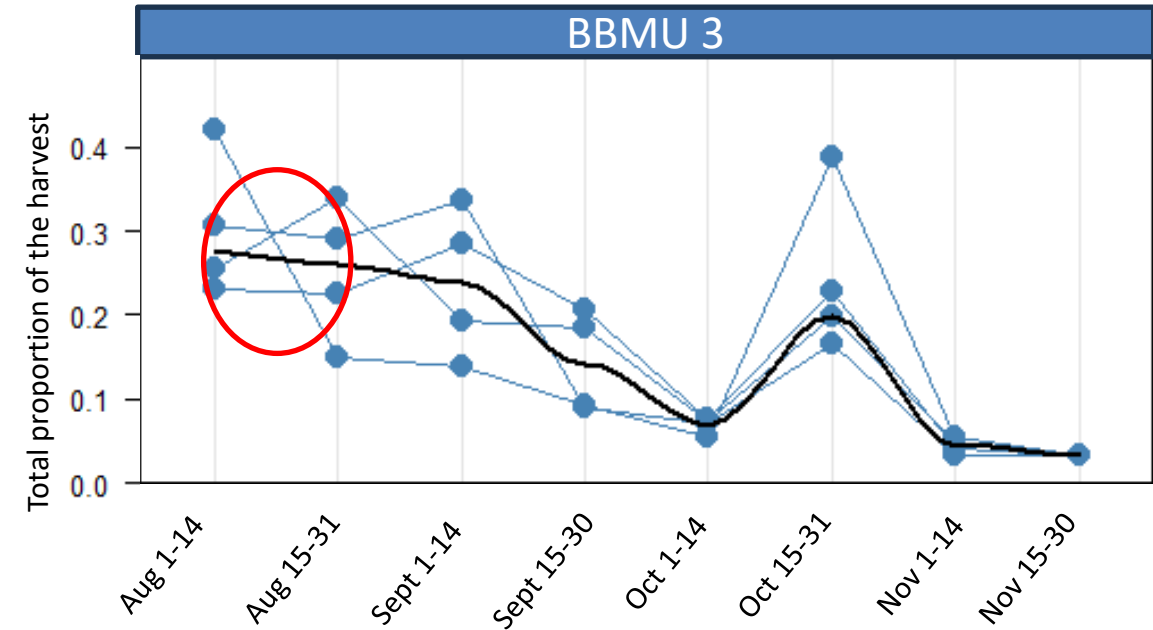 - Aug 1 – Nov 15
  - 2 bear bag limit

Example Framework

	BBMU 1	BBMU 2	BBMU 3
Mortality Rate	8%	<8%	>8%
Bag Limit	2	2	1
Season Open	01-Aug	01-Aug	15-Aug
Season Close	15-Nov	15-Nov	15-Nov

- General season recommendations:
 - Aug 1 – Nov 15
  - 2 bear bag limit

Example Framework

	BBMU 1	BBMU 2	BBMU 3
Mortality Rate	8%	<8%	>8%
Bag Limit	2	2	1
Season Open	01-Aug	01-Aug	15-Aug
Season Close	15-Nov	15-Nov	01-Nov

- General season recommendations:
  - Aug 1 – Nov 15
  - 2 bear bag limit

BBMU 3
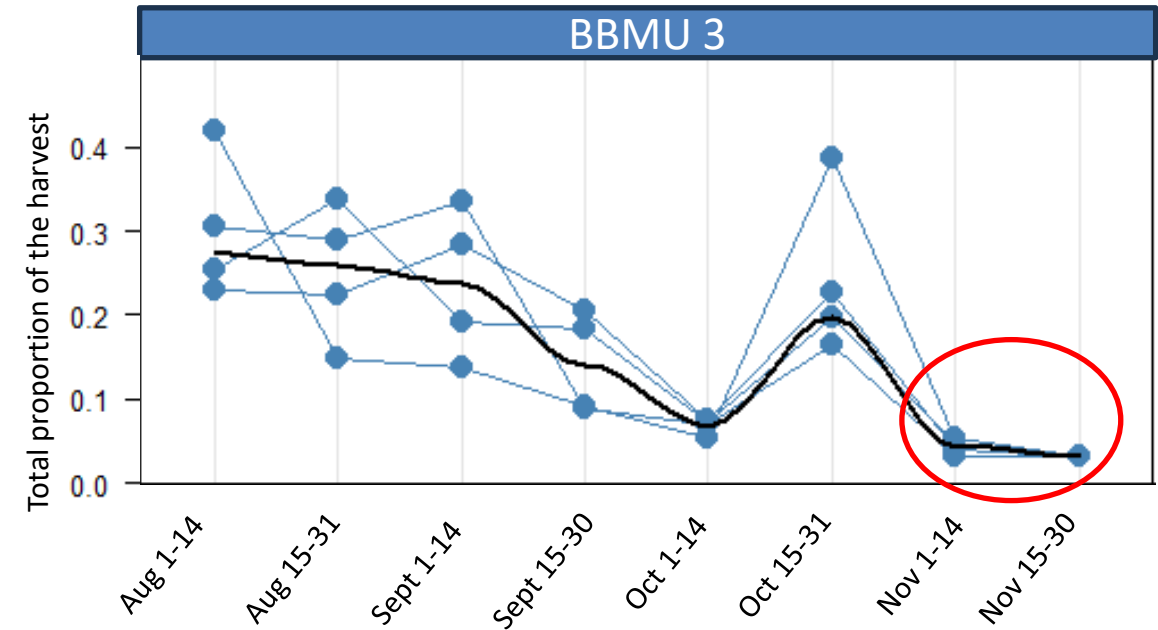
Female Mortality Rates

BBMU	Female Mortality Rates
Okanogan Highlands	6%
Northeast	5%
*Columbia Basin**	*NA*
Southeast	7%
Okanogan	7%
Central Cascades East	6%
South Cascades East	5%
North Cascades West	5%
*Urban**	*20%*
South Cascades West	6%
Mt. St. Helens	7%
Willapa Hills	15%
Olympic West	8%
Olympic East	5%
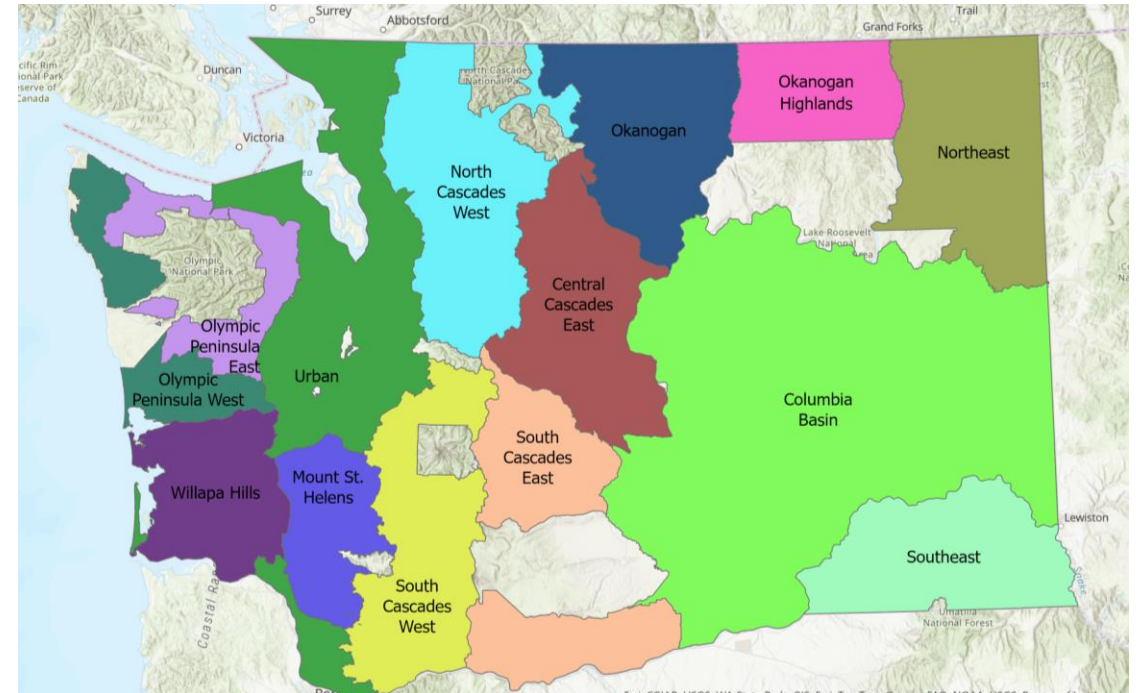
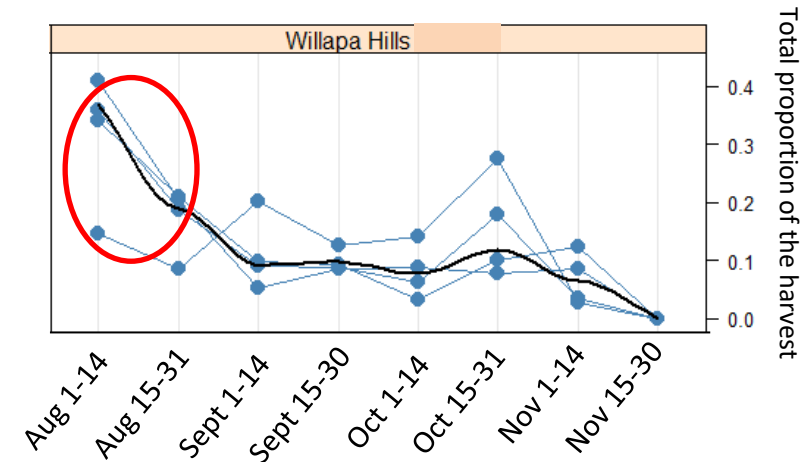*BBMU is managed to not maximize bear populations in urban or non-habitat areas

$$\frac{harvest * 1.1 + timber + conflict}{(female\ density^a\ model\ estimates)} \leq 8\%\ IGR$$

[a] counting >1 year old bears

Recommended Season Setting by BBMU

BBMU	Female Mortality Rates	Bag Limit	Season Dates
Northeast	5%	2	August 1 - November 15
Columbia Basin*	*NA*	*2*	*August 1 - November 15*
Southeast	7%	2	August 1 - November 15
Okanogan Highlands	6%	2	August 1 - November 15
Okanogan	7%	2	August 1 - November 15
Central Cascades East	6%	2	August 1 - November 15
South Cascades East	5%	2	August 1 - November 15
North Cascades West	5%	2	August 1 - November 15
Urban*	*20%*	*2*	*August 1 - November 15*
South Cascades West	6%	2	August 1 - November 15
Mt. St. Helens	7%	2	August 1 - November 15
Willapa Hills	15%	1	August 15 - November 15
Olympic West	8%	2	August 1 - November 15
Olympic East	5%	2	August 1 - November 15

*BBMU is managed to not maximize bear populations in urban or non-habitat areas

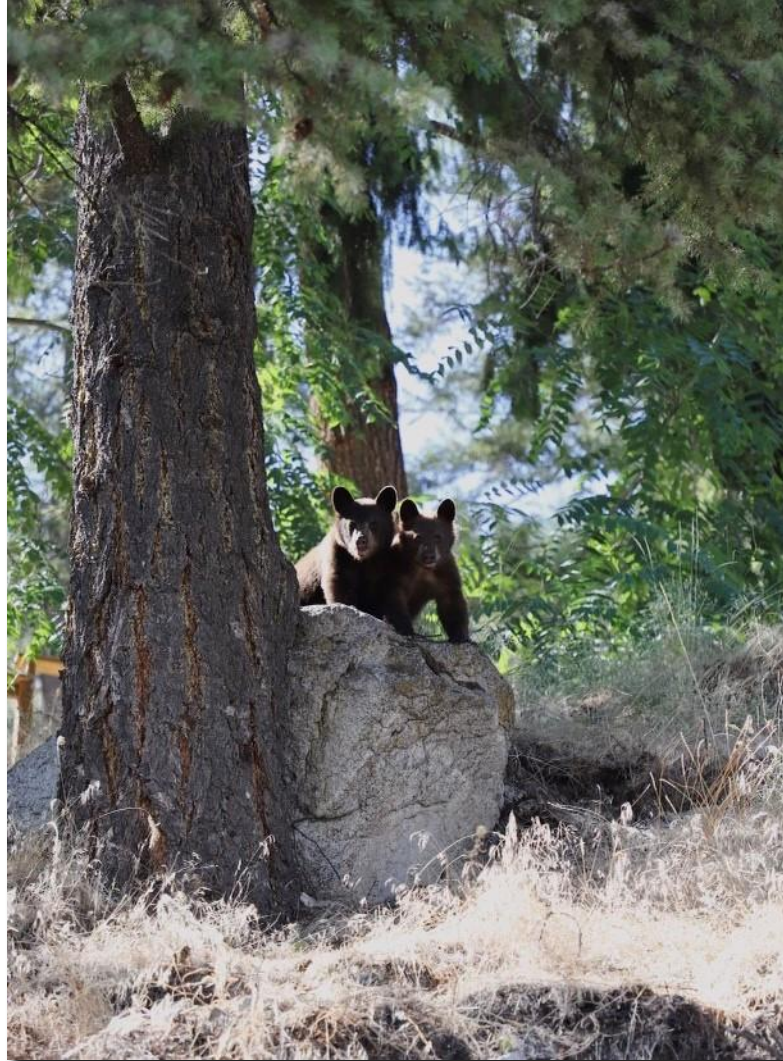+No bear harvest in GMUs 157, 410-417, 419-424, 490, 522, and 655

Additional Rule Change Proposals

- Make it illegal to shoot cubs and females with cubs

- Insert date for mandatory tooth submission deadline

Questions?

Proportional Harvest by BBMU* 2020-2023

*Urban and North Cascades West BBMUs have been changed and were not updated here. Please only use this as guidance for your decision-making.