

## Summary

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| <b>Meeting dates:</b> | August 21, 2015 Conference Call   |
| <b>Agenda item:</b>   | Petition for Rule Change to WAC 232-28-297 – 2015-2016, 2016-2017, and 2017-2018 Cougar hunting seasons and regulations |
| <b>Presenter(s):</b>  | Donny Martorello, Wolf Policy Lead<br>Scott Becker, Acting Carnivore Section Manager                                    |

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### **Background summary:**

The Commission will consider a petition for rulemaking, pursuant to RCW 34.05.330 and RCW 34.05.340, received on June 30, 2015 from the Humane Society of the United States, Conservation Northwest, Center for Biological Diversity, Mountain Lion Foundation, Wolf Haven International, The Cougar Fund, The Lands Council, Predator Defense, Kettle Range Conservation Group, and Gary Koehler, Ph.D. (hereafter, referred to as petitioners). The petition requests that the Commission effectively vacate its decision to increase the cougar harvest guidelines in 14 hunt areas of the State from 17-21%, and change the harvest guidelines back to the 12-16% recommended by the Department and reflected in the proposed rule. The petitioners make the following arguments in support of their petition: there is a lack of public involvement and opportunity for input on the proposed amendment; the 17-21% harvest guidelines deviates from the best available science; the proposed amendment is substantially different from the proposed rule; and increased harvest may disrupt cougar social structure which may result in increased cougar-human and cougar-livestock conflicts, and, as a result, will decrease social tolerance for cougars.

On February 2, 2015, the Department filed a Notice of Proposed Rulemaking to amend WAC 232-28-197 to set the 2015-16, 2016-17, and 2017-18 cougar hunting seasons and regulations. That proposal included harvest guidelines reflecting a 12-16% harvest rate for each hunt area. The Commission held a rulemaking hearing on the proposed rule on March 21, 2015, and considered adoption of the rule at its April 10, 2015 meeting. At that time, the Commission voted to adopt the amendments as proposed, with the exception of 14 hunt areas. For those areas, the Commission voted to increase the harvest guideline from 12-16% to 17-21% in areas that overlap with known wolf packs.

Following the April 2015 meeting, the Commission received two letters from a portion of the petitioners dated April 29 and May 6, 2015. The letters requested the Commission rescind its vote to increase the harvest guidelines for the 14 hunt areas and return to a 12-16% harvest guideline. During a May 1, 2015 conference call, the Commission discussed the request and reviewed its rule making process. The Commission determined that the rule in question was consistent with the Administrative Procedures Act, RCW 34.05, and the Commission's action was well within its authority to adopt a final rule that was not substantially different from the proposed rule. Upon review, the Commission did not adopt a new rule nor did it modify WAC 232-28-297, which it voted to adopt in April. On May 1, 2015, the department filed the rule amendment with the Code Reviser, in the form approved by the Commission on April 10. However, given the controversial nature of the issue, the Commission directed the Department to provide a recommendation for the 2016 and 2017 cougar hunting seasons at the March-April 2016 Commission meetings.

The June 30 petition suggests the adopted rule, WAC 232-28-297, deviates from the best available science on cougar management. The Department's recommendations at the March and April 2015 Commission meetings were based on the overall goals of the cougar harvest strategy, which were to provide for long-term, stable cougar populations with adequate adult

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males to provide social stability, and provide for recreational harvest opportunities. The best available science suggests that these goals may be achieved by implementing a harvest guideline of approximately 12-16% of the estimated cougar population (excluding kittens). That being said, a harvest guideline slightly above 16% doesn't necessarily equate to not meeting the stated goals. A 12-16% harvest guideline represents the greatest probability of achieving these two goals, whereas a 17-21% will likely have a lower probability of achieving the goals. The supporting science is from six cougar research projects in Washington over a 13-year period from WDFW, Washington State University, and University of Washington. The scientific findings from the six research projects have resulted in numerous publications in peer-reviewed science journals and have been incorporated into how the Department currently manages cougar (Lambert et al 2006, Robinson et al. 2008, Cooley et al. 2009a, Cooley et al. 2009b, White et al. 2011, Kertson et al. 2011, Beausoleil et al. 2013, Kertson et al. 2013, Wielgus et al. 2013, Maletzke et al. 2014).

The petition also states that increased harvest will likely lead to increased cougar-human and cougar-livestock interactions due to immigration of subadults into an area after the removal of territorial males (i.e., disrupt the social structure). To date, a direct cause and effect relationship between cougar mortality levels and cougar-human interaction has not been demonstrated, nor empirically evaluated. More specifically, there is no empirical evidence demonstrating that increasing cougar harvest levels decreases cougar-human interactions (Hopkins 2003). However, the evidence we do have (e.g., Peebles et al. 2013) suggests at a minimum, increasing cougar harvest levels does not decrease interaction levels. Peebles et al. (2013) actually goes one step further to conclude that increasing cougar harvest actually increases cougar reports and livestock depredations the following year, but the validity of these findings are tempered by the author's reliance on confirmed interaction reports - data we know to be of low quality (i.e., inaccurate) and highly confounded by human attitudes and behaviors (Kertson et al. 2013). What we do know with a great degree of confidence is increasing cougar harvest disrupts cougar social organization leading to larger home ranges and increased overlap among male cougars (i.e., more males using the same areas; Maletzke et al. 2014) while also shifting cougar age structure to younger age classes (Cooley et al. 2009a). We also know subadult cougar use of, and overlap with residential development is three times greater than that of adults (Kertson et al. 2013) and a greater amount of spatial and temporal overlap with residential areas increases the risk of cougar-human interactions (i.e., greater spatial and temporal overlap between cougars and people). Whether this increased risk of cougar-human interaction from greater use of residential areas by a greater number of subadult cougars translates into an actual increase in cougar-human interactions remains unknown.

Based on the adopted rule change, cougar harvest may increase in the 14 affected hunt areas with the 17-21% harvest guideline, but it is difficult to predict by how much due to a multitude of confounding factors such as weather, access, changes in hunting pressure, etc. Overall, the rule change from a harvest guideline of 12-16% to 17-21% in 14 hunt areas has the potential to increase harvest by 25-26 cougars. However, in examining the past three years of cougar harvest information from these 14 hunt areas, 2 hunt areas exceeded the 12-16% harvest guidelines during the early hunting season all 3 years, while an additional 3 hunt areas exceeded the harvest guidelines during the early hunting season in 2 of 3 years. In contrast, 2 hunt areas were below 12-16% harvest guidelines all 3 years while 4 other hunt areas were below 12-16% harvest guidelines for 1 year. For those areas that exceed the harvest guidelines during the early hunting season, the increase from harvest guidelines of 17-21% would not increase the number of cougars taken for those areas. Moreover, of the 14 hunt areas for which the Commission increased the harvest guidelines in the final rule, 9 authorize a range of harvest that overlaps with the harvest range anticipated by the 12-16% guideline. (For example, for GMU 113, the harvest guideline would change from 4-6 to 6-8.) Thus, the department would have the discretion to close those areas upon attainment of a harvest

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number consistent with the 12-16% harvest level.

Based on the best available information as well as three years of cougar harvest data, the proposed increase in the harvest guidelines in 14 of 49 hunt areas is not likely to have a significant effect on cougar population size. It remains unknown how the proposed rule will affect the social structure of cougar populations because we cannot predict how many additional adult males are likely to be harvested simply based on the new guidelines. Nonetheless, the proposed increase to the harvest guidelines in 14 hunt areas may not have a significant impact on the social structure of adult males in the short term, but it may over time.

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**Policy issue(s) you are bringing to the Commission for consideration:**

A petition to amend WAC 232-28-297 to restore a 12-16% cougar harvest rate in 14 hunt areas.

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**Public involvement process used and what you learned:**

There was an extensive public process associated with the Commission's adoption of the rule the petitioners now seek to amend. During the rulemaking process, the department received public comments requesting increased and decreased cougar seasons. Some comments mentioned the need to liberalize hunting of other predators, several comments mentioned wolves, and at least one comment specifically sought an increase in cougar harvest in areas where wolves are located.

The announcement of receipt of this petition and the notice of the FWC conference call has prompted a number of individuals to comment asking the Commission to either accept or deny the petition. In general, those that want the Commission to accept the petition are asking the Commission to follow the best available science and retain the 12%-16% guideline, while those that are asking for the Commission to deny the petition are citing lack of scientific evidence that the increase in the harvest guideline will result in significant impacts to the cougar population.

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**Action requested:**

The Department recommends the Commission deny the petition and retain the existing rule for the 2015-2016 cougar hunting season. The Department's recommendation to deny the petition is based on the potential limited impacts to total cougar population size and the social structure of adult males during the short term. Based on the Commission's direction on May 1, 2015, the Department will provide the Commission with a recommendation for the 2016 and 2017 cougar hunting season during the March 2016 Commission meeting.

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**Draft motion language:**

I move to deny the June 30, 2015 petition that the Commission initiate rulemaking to amend WAC 232-28-297 to reduce cougar harvest guidelines in 14 hunt areas of the State from 17-21% to 12-16%.

I move to once again direct the Department to provide a recommendation for the 2016 and 2017 cougar hunting seasons at the March-April 2016 Commission meetings.

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**Justification for Commission action:**

The justification for this action is based on the potential limited impacts existing changes will

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likely have on cougar population size and the social structure of adult males during the 2015-16 season. The Commission's action in April, 2015 was consistent with the Administrative Procedures Act, RCW 34.05, and was well within its authority to adopt a final rule that was not substantially different from the proposed rule. Further, the public had been notified of the existing rules for over 3 months, hunting rule pamphlets have been published, and there is a desire to maintain consistency with published information. Finally, the Commission will have the opportunity to take input from the petitioners and the public at large when it considers the Department's recommendation for the 2016 and 2017 seasons at the March-April 2016 Commission meetings.

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**Communications Plan:**

Notices of Commission decisions will be sent to petitioners and posted on the Fish and Wildlife Commission website.

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*Form revised 12/5/12*

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**Cougar harvest information in all 49 hunt areas, statewide, 2012-2014 seasons, WDFW.**

| Parameter                      | 2012-2013   | 2013-2014   | 2014-2015   | Average     |
|--------------------------------|-------------|-------------|-------------|-------------|
| Hunt areas open until March 31 | 39/49 (80%) | 34/49 (69%) | 41/49 (84%) | 38/49 (78%) |
| Total Harvest                  | 159         | 182         | 163         | 168         |

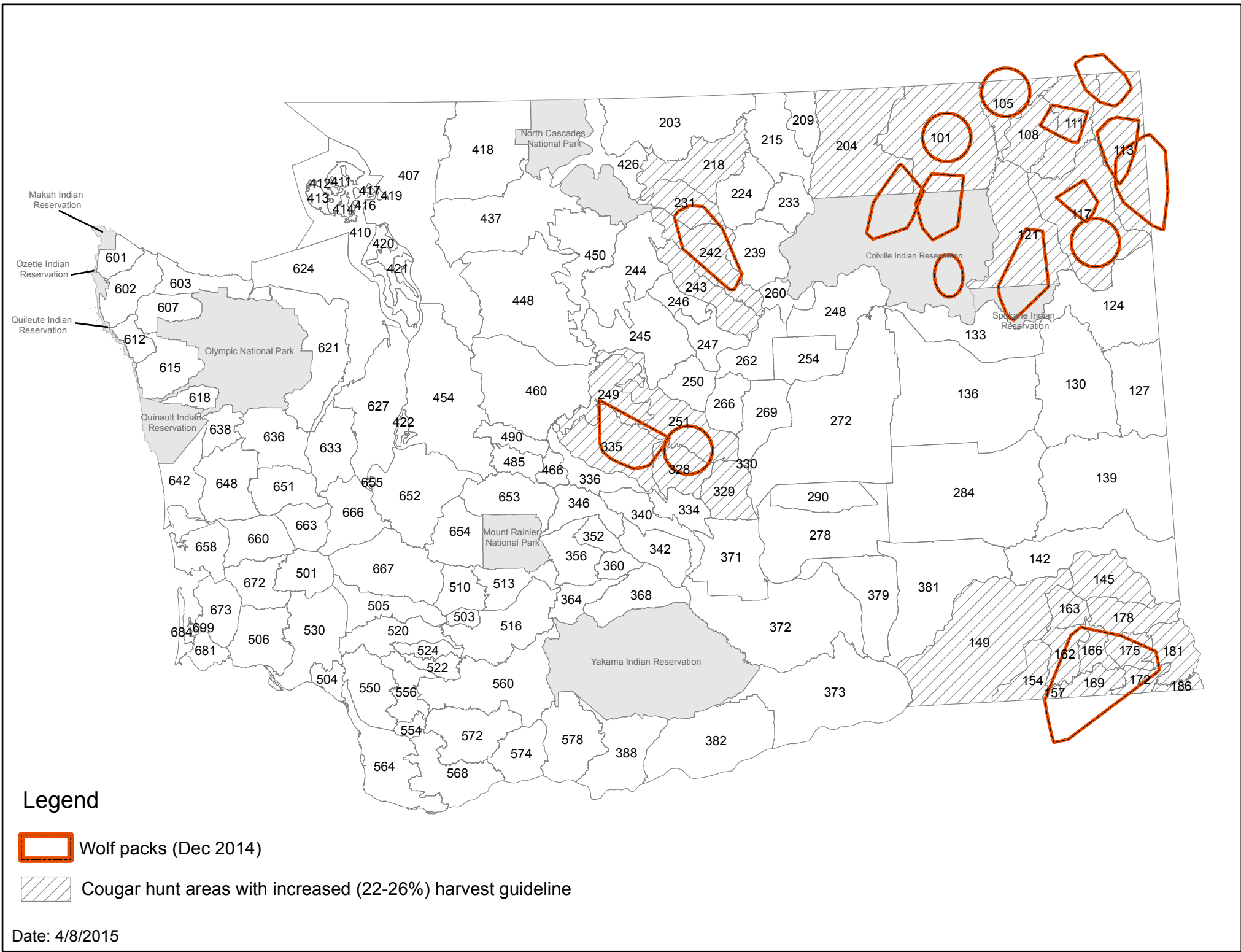
**Cougar harvest information in 14 (29%) of the 49 hunt areas, 2012-2014 seasons, WDFW.**

| Hunt area                 | Harvest Guideline |               | 2012-2013            |                      | 2013-2014            |                      | 2014-2015            |                      |
|---------------------------|-------------------|---------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|                           | 12-16%            | 17-21%        | Harvest <sup>1</sup> | Closure <sup>2</sup> | Harvest <sup>1</sup> | Closure <sup>2</sup> | Harvest <sup>1</sup> | Closure <sup>2</sup> |
| GMU 101                   | 7-9               | 10-12         | 1                    | 3/31/13              | 5                    | 3/31/14              | 10                   | 1/26/15              |
| GMU 105                   | 2                 | 2-3           | 2                    | 1/15/13              | 2                    | 1/14/14              | 4                    | 1/02/15              |
| GMUs 108 & 111            | 5-6               | 7-8           | 6                    | 1/15/13              | 6                    | 3/18/14              | 7                    | 1/05/15              |
| GMU 113                   | 4-6               | 6-8           | 3                    | 3/31/13              | 5                    | 3/31/14              | 6                    | 1/12/15              |
| GMU 117                   | 6-8               | 8-10          | 9                    | 1/15/13              | 12                   | 1/14/14              | 12                   | 1/05/15              |
| GMU 121                   | 5-6               | 6-8           | 7                    | 1/15/13              | 5                    | 3/31/14              | 8                    | 1/02/15              |
| GMUs 149, 154, 162, & 163 | 4-6               | 6-7           | 10                   | 1/15/13              | 10                   | 1/14/14              | 4                    | 3/31/15              |
| GMUs 145, 166, 175, & 178 | 3-4               | 5-6           | 7                    | 1/15/13              | 6                    | 1/14/14              | 7                    | 1/02/15              |
| GMUs 169, 172, 181, & 186 | 3-4               | 4-5           | 4                    | 3/31/13              | 4                    | 1/14/14              | 1                    | 3/31/15              |
| GMU 204                   | 6-8               | 9-11          | 4                    | 3/31/13              | 5                    | 3/31/14              | 1                    | 3/31/15              |
| GMUs 218 & 231            | 4-6               | 6-7           | 2                    | 3/31/13              | 3                    | 3/31/14              | 2                    | 3/31/15              |
| GMUs 242 & 243            | 4-6               | 6-7           | 4                    | 1/30/13              | 4                    | 3/31/14              | 3                    | 3/31/15              |
| GMUs 249 & 251            | 5-6               | 7-8           | 6                    | 3/31/13              | 6                    | 3/31/14              | 2                    | 3/31/15              |
| GMUs 328, 329, & 335      | 6-8               | 8-10          | 10                   | 1/15/31              | 9                    | 1/14/14              | 7                    | 3/31/15              |
| <b>Total</b>              | <b>64-85</b>      | <b>90-110</b> | <b>75</b>            |                      | <b>82</b>            |                      | <b>74</b>            |                      |

<sup>1</sup>Harvest totals include all cougar mortalities from recreational hunt seasons and public safety cougar removals, excluding kittens

<sup>2</sup>Closures on 3/31 mark the end of statewide season, not area specific closures due to harvest levels.

Summary: Of the 14 hunt areas, the change from a 12-16% harvest guideline (HG) to 17-21% equals a potential increase of 25-26 cougars. Harvest will likely increase but it is difficult to predict by how much because of confounding factors like snow conditions, access, changes in hunting pressure, etc. Four of the 14 hunt areas routinely exceeded the 12-16% HG (and the 17-21% HG), while 3 of the 14 rarely reached the 12-16% HG. Given this variability, a crude estimate is that harvest may increase about 15-30 cougars in the 14 hunt areas.



Makah Indian Reservation  
 Ozette Indian Reservation  
 Quileute Indian Reservation

North Cascades National Park

Olympic National Park

Quinault Indian Reservation

Mount Rainier National Park

Yakama Indian Reservation

Colville Indian Reservation

Spokane Indian Reservation

