Conservation Northwest
Keeping the Northwest Wild

May 9, 2019

Comments in response to: Docket No. FWS-HQ-ES-2018-0097, 84 FR 9648

Conservation Northwest respectfully submits the following comments on the U.S. Fish and Wildlife Service's proposed rule de-listing the gray wolf in the lower 48 states. Our comments focus on the lack of biological justification for removing protections when significant portions of the species' historical range remain unoccupied; not taking into account published research on the many survival advantages that un-hunted packs provide to wolves and the fact that these advantages may be necessary for long-term survival in the face of climate change and increasingly negative impacts of human on landscapes with currently suitable habitat; and finally, on the lack of using available tools in the ESA to tailor a rule to down-list and provide management flexibility in portions of the species range where the gray wolf is doing better and/or where state plans give more assurance of population persistence and resilience.

De-listing when there are large areas of un-occupied habitat does not adequately take into account the scientific understanding of the need for redundancy, representation and resilience in populations. Areas of suitable habitat that are currently un-occupied in the southern Rockies and parts of the Pacific West could very well play a role in maintaining genetic diversity and resilience of the population in the U.S. over time, especially as climate change alters habitats and prey distributions. Newer techniques in genetic analysis are just starting to help elucidate how wolves adapt to different environments (Hendricks et al., 2019) thus it seems premature to declare that self-sustaining populations in the Great Lakes or Northern Rocky Mountains are adequate for long-term survival of the species.

While there may be uncertainty over whether restored populations in currently unoccupied or sparsely occupied portions of the gray wolves' historic range are necessary to prevent eventual extinction from the entire lower 48 states, removing protections in states that have suitable habitat but no management plans would most likely prevent eventual re-colonization and therefore restrict both ecological representation (species occupying different niches and affecting different ecosystems through predator-prey interactions and trophic effects) but also truncate the public's ability to help shape how recovery unfolds for a species that was once part of much broader range of landscapes throughout the country (Carroll et al., 2010).

We also think that the Service does not adequately take into account concerns over how climate change may affect wolf prey populations. For example, moose are declining over many parts of their range and this decline is suspected to be caused by disease and heat that are driven by climate change (e.g., Mech et al., 2018, Nadeau et al., 2017). Other ungulates are or may become susceptible to disease such as chronic wasting disease that is not yet well understood. Loss of ungulate habitat from uncharacteristic fire is also a concern in the West. Such an underestimate affects how resilient wolves may be in the future and underscores the need for a broader distribution of the population to take into account the potential for local decreased populations or extirpation.

Web and email
conservationnw.org
facebook.com/ConservationNW
info@conservationnw.org

Seattle headquarters
1829 10th Ave W, Suite B
Seattle, WA 98119
206.675.9747
206.675.1007 (fax)

Conservation Northwest
Keeping the Northwest Wild

In addition to concern over wolves, we have concerns about how the Service is interpreting recovery over a significant portion of a species range for the precedent that this set for other species, such as Canada Lynx. Other organizations such as the Western Environmental Law Center are submitting substantive legal comments on this issue and we refer you to those and share their concerns.

In the background science review, the Service contends that wolves are resilient to hunting pressure and that breeding pairs are easily replaced. While research does show that packs may persist under hunting pressure, this takes a narrow view of the benefits that living as a social animal confers on fitness. Multiple studies show that un-hunted populations live in larger packs than hunted populations (e.g., Ausband 2015), have different social make-ups (Ausband 2017) and that living in pack sizes determined by ecological factors (prey size, terrain, wolf population saturation) affect how wolves live, from disease resistance (Almberg et al., 2015) to how many and what types of prey are consumed (MacNulty et al, 2011, MacNulty et al, 2014), and territorial defense (Cassidy 2017). These attributes may affect long-term evolutionary fitness in a changing world. Thus, assuming that allowing a substantial sport hunt will allow persistence of the species into the future in the face of a rapidly changing environment may need to be re-examined. This would impact the assessment of the adequacy of state management plans for allowing de-listing.

We recognize that failing to de-list or down-list in areas with secure populations can cause frustrations for people living with wolves from the lack of management flexibility. However, we think that the Service could propose to down-list the species to Threatened from Endangered rather than completely remove the gray wolf from federal protections. This could allow use of Section 4(d) of the Act to tailor more flexible management for addressing livestock depredations in areas that have larger populations like the Great Lake states, or competent state management and recovery plans that establish scientifically based state-wide recovery goals like Washington State regardless of federal status, while retaining protections in parts of the range where wolves have yet to re-colonize or have poor plans.

Sincerely,

Paula Swedeen, Ph.D.
Policy Director
Conservation Northwest

Literature Cited

Almberg, E.S., Cross, P.C., Dobson, A.P., Smith, D.W., Metz, M.C., Stahler, D.R. and Hudson, P.J., 2015. Social living mitigates the costs of a chronic illness in a cooperative carnivore. *Ecology letters*, *18*(7), pp.660-667.

Web and email
conservationnw.org
facebook.com/ConservationNW
info@conservationnw.org

Seattle headquarters
1829 10th Ave W, Suite B
Seattle, WA 98119
206.675.9747
206.675.1007 (fax)

Ausband, D.E., Stansbury, C.R., Stenglein, J.L., Struthers, J.L. and Waits, L.P., 2015. Recruitment in a social carnivore before and after harvest. *Animal Conservation*, *18*(5), pp.415-423.

Ausband, D.E., Mitchell, M.S., Stansbury, C.R., Stenglein, J.L. and Waits, L.P., 2017a. Harvest and group effects on pup survival in a cooperative breeder. *Proc. R. Soc. B*, *284*(1855), p.20170580.

Ausband, D.E., Mitchell, M.S. and Waits, L.P., 2017b. Effects of breeder turnover and harvest on group composition and recruitment in a social carnivore. *Journal of Animal Ecology*, *86*(5), pp.1094-1101.

Carroll, C., Vucetich, J.A., Nelson, M.P., Rohlf, D.J. and Phillips, M.K., 2010. Geography and recovery under the US Endangered Species Act. *Conservation Biology*, *24*(2), pp.395-403.

Cassidy, K.A., Mech, L.D., MacNulty, D.R., Stahler, D.R. and Smith, D.W., 2017. Sexually dimorphic aggression indicates male gray wolves specialize in pack defense against conspecific groups. *Behavioural processes*, *136*, pp.64-72.

Hendricks, S.A., Schweizer, R.M. and Wayne, R.K., 2019. Conservation genomics illuminates the adaptive uniqueness of North American gray wolves. *Conservation Genetics*, *20*(1), pp.29-43.

MacNulty, D.R., Smith, D.W., Mech, L.D., Vucetich, J.A. and Packer, C., 2011. Nonlinear effects of group size on the success of wolves hunting elk. *Behavioral Ecology*, *23*(1), pp.75-82.

MacNulty, D.R., Tallian, A., Stahler, D.R. and Smith, D.W., 2014. Influence of group size on the success of wolves hunting bison. *PloS one*, *9*(11), p.e112884.

Mech, L.D., Fieberg, J. and Barber-Meyer, S., 2018. An historical overview and update of wolf–moose interactions in northeastern Minnesota. *Wildlife Society Bulletin*, *42*(1), pp.40-47.

Nadeau, M.S., DeCesare, N.J., Brimeyer, D.G., Bergman, E.J., Harris, R.B., Hersey, K.R., Huebner, K.K., Matthews, P.E. and Thomas, T.P., 2017. Status and trends of moose populations and hunting opportunity in the western United States. *Alces: A Journal Devoted to the Biology and Management of Moose*, *53*, pp.99-112.

Rick, J.A., Moen, R.A., Erb, J.D. and Strasburg, J.L., 2017. Population structure and gene flow in a newly harvested gray wolf (Canis lupus) population. *Conservation Genetics*, *18*(5), pp.1091-1104.

Web and email
conservationnw.org
facebook.com/ConservationNW
info@conservationnw.org

Seattle headquarters
1829 10th Ave W, Suite B
Seattle, WA 98119
206.675.9747
206.675.1007 (fax)