To: Regional Director, Region 6, Denver, CO.

From: Mike Jimenez, Wolf Management and Science Coordinator for the NRM

Subject: Service Review of the 2011 wolf population in the NRM DPS

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In the 2009 rule to delist wolves in the Northern Rocky Mountains (NRM) Distinct Population Segment (DPS), except Wyoming, (74 FR l51123, April 2, 2009) the U.S. Fish and Wildlife Service (Service) committed to monitor the status of the NRM DPS wolf population and any potential threats to it for at least 5 years post-delisting and make that review available for public inspection. We reviewed the 2011 Interagency Annual Report to make this analysis and determination (U.S. Fish and Wildlife Service, Idaho Department of Fish and Game, Montana Fish, Wildlife and Parks, Nez Perce Tribe, National Park Service, Blackfeet Nation, Confederated Salish and Kootenai Tribes, Wind River Tribes, Washington Department of Fish and Wildlife, Oregon Department of Fish and Wildlife, Utah Department of Natural Resources, and USDA Wildlife Services. 2012. Northern Rocky Mountain Wolf Recovery Program 2011 Interagency Annual Report. M.D. Jimenez and S.A. Becker, eds. U SFWS, Ecological Services, 585 Shepard Way, Helena, Montana, 59607, http://westerngraywolf.fws.gov). This memorandum constitutes the Service review of the status of the 2011 wolf population in the NRMN DPS and our determination of any possible threats to it (Service et al. 2012).

NRM Wolf Population - In 2011, the gray wolf population in the NRM DPS (Idaho, Montana, Wyoming, eastern one-third of Washington and Oregon, and a small portion of north central Utah) increased approximately 3% from 2010. Wolf packs, and especially breeding pairs, largely remained within the core recovery areas, but breeding pairs were again confirmed in eastern Washington and Oregon. On December 31, 2011, the NRM DPS contained at least 1,774 wolves in at least 287 packs (groups of two or more wolves with territories inside the NRM DPS that persisted until December 31, 2011). At least 109 packs met the definition of a breeding pair (packs that contained at least one adult male, one adult female, and two or more pups on December 31, 2011). We estimated there was a minimum of 431 wolves in the Northwest Montana Recovery Area (NWMT), 499 in the Greater Yellowstone Recovery Area (GYA), and 797 in the Central Idaho Recovery Area (CID). By state, within the NRM DPS, there were an estimated minimum of 653 wolves in Montana, 328 in Wyoming, and 746 in Idaho. Twenty-nine wolves (5 packs, 1 breeding pair) were estimated to be in eastern Oregon and 18 wolves (3 packs, 2 breeding pairs) were found within the NRM DPS in eastern Washington. An additional 2 packs (one breeding pair) were known to exist in western Washington outside the NRM DPS. The minimum recovery goal of an equitably distributed wolf population containing at least 300 wolves and 30 breeding pairs in Montana, Idaho, and Wyoming for at least 3 consecutive years (managed to maintain over 150 wolves and 15 breeding pairs in each state) has been exceeded in the NRM DPS since 2002.

Agency Control of Problem Wolves - In the NRM DPS, lethal control of problem wolves (including agency control and legal take in defense of property by private citizens) decreased by approximately 36% in 20l1 (*n*=166) compared to 2010 (*n* =259; Table 5a-c). In the three primary NRM DPS states, Wyoming removed the largest and Idaho removed the smallest proportion of their 2011 minimum estimated wolf population through agency control. For strictly comparative purposes, we estimated the absolute minimum number of wolves alive throughout the year by combining the 2011 NRM DPS minimum population estimate of 1,774 wolves with all known wolf mortalities from all causes (*n*=166 agency control; *n*=322 legal harvest; *n*=92 other known mortalities). This sums to an absolute minimum NRM DPS estimate of 2,354 wolves known alive at some point in 2011(MT=869, ID=1,042, WY=392, OR=32, WA=19). The absolute minimum estimate was only used to compare relative rates of wolf removal among states and by cause (in this section, the "legal public harvest of wolves" section, and the “human-caused wolf mortality" section). Agency control removed approximately 7% of the absolute minimum NRM DPS estimated wolf population in 2011. By state, within the NRM DPS, agency control removed approximately 7% of the absolute minimum Montana wolf population, 9% in Wyoming, 6% in Idaho, and 6% in Oregon. Washington had no wolves removed through agency control in 2011.

Legal Public Harvest of Wolves - The NRM DPS gray wolf population was removed from federal protection in all states except Wyoming in May 20l1 and, subsequently, legal public harvest was instituted during the fall of 2011 in Montana and Idaho. In 2011, 322 wolves were legally harvested in the NRM DPS which accounted for approximately 14% of the absolute minimum NRM DPS estimated wolf population. Legal harvest removed approximately l4% and 19% of Montana's and Idaho's absolute minimum estimated wolf populations in 2011, respectively. No legal public harvest occurred in Oregon, Washington, or Wyoming during 2011; however, one wolf from a Washington border pack was legally harvested in Idaho.

Human-Caused Wolf Mortality - In 2011, excluding agency control and legal harvest, other forms of human-caused mortality accounted for 19 known wolf mortalities in Montana, 8 in Wyoming, and 18 in Idaho. Oregon and Washington had no other forms of human-caused mortality in 2011. When all forms of human-caused mortality were combined (agency control, legal harvest, and other human-caused mortality) a total of 204 wolves were removed in Montana (~23% of absolute minimum MT estimated population), 45 wolves were removed in Wyoming (~14% of absolute minimum WY estimated population), 281 wolves were removed in Idaho (~27% of absolute minimum ID estimated population), 2 wolves were removed in Oregon (~6% of absolute minimum OR estimated population), and 1 wolf was removed in Washington (~5% of absolute minimum WA estimated population). Overall, approximately 23% of the NRM DPS absolute minimum estimated wolf population was removed due to human-causes. We had previously determined that only excessive levels of human-caused mortality could possibly threaten the wolf population in the NRM DPS (74 FR 15166, Adequacy of Regulatory Mechanisms within the NRM DPS). Despite the levels of human-caused mortality and other

forms of mortality documented in 2011, the wolf population increased approximately 3%, demonstrating that human-caused mortality was adequately regulated.

Wolf Population Recovery- By every biological measure the NRM DPS wolf population is fully recovered. Resident packs have saturated suitable habitat in the core recovery areas and the population has exceeded recovery goals for 10 consecutive years. Dispersing wolves routinely travel between NRM states and Canada and successfully breed, demonstrating that the 3 subpopulations function as a single large NRM meta-population. Consequently, genetic diversity in the NRM remains very high.

Data collected in 2011 describing wolf distribution, numbers, packs, breeding pairs, livestock depredations, compensation, wolf control, impacts on ungulates, and regulated public hunting suggest that the overall growth rate for the NRM wolf population has declined and the wolf population may be stabilizing at some yet undetermined lower equilibrium based on natural carrying capacity in suitable habitat and human social tolerance.

Post Delisting Monitoring -After reviewing field methods used by Montana Fish, Wildlife and Parks, Idaho Fish and Game, and the Nez Perce Tribe to monitor the wolf population in their respective states, the Service is confident that wolves in Montana and Idaho far exceeded recovery goals at the end of 2011, and monitoring methods adequately documented this.

The 2009 rule to delist wolves in the NRM DPS, except Wyoming, (74 FR l51l23, April 2, 2009) includes a list of three scenarios that could lead the Service to conduct a status review:
1) If the wolf population falls below the minimum NRM wolf population recovery level of 10 breeding pairs of wolves and 100 wolves in either Montana or Idaho at the end of the year.

- Recovery level was met in Montana and Idaho at end of 2011.

2) If the wolf population segment in Montana or Idaho falls below l5 breeding pairs or 150 wolves at the end of the year in any one of those States for 3 consecutive years.

- A minimum of 15 breeding pairs and 150 wolves was confirmed in Montana and Idaho at end of 2011.

3) If a change in State law or management objectives would significantly increase the threat to the wolf population.

- In an August 24, 2011 memo, the Service outlined a review of Idaho Department of Fish and Game wolf hunting and trapping regulations. The review determined that the regulations did not meet the threshold of a "significant threat" because they were consistent with a Service-approved plan, harvest limits were imposed in areas where genetic connectivity is a concern, and mandatory hunter and trapper reporting provided an adequate regulatory mechanism.

Conclusion - The status of the wolf population in the NRM DPS has consistently exceeded recovery goals since 2002 (as demonstrated by increased pack distribution and number of wolves, packs, and breeding pairs in 2011). Documented dispersal of radio collared wolves and effective dispersal of wolves between recovery areas determined through genetic research further substantiate that the meta-population structure of the NRM DPS has been maintained solely by natural dispersal. No threats to the NRM wolf population were identified in 2011. Potential threats include: A. The presence or threatened destruction, modification, or curtailment of its habitat or range; B. Overutilization for commercial, recreational, scientific, or educational purposes; C. Disease or Predation; D. Adequacy or inadequacy of existing regulatory mechanisms; and E. Other natural or man-made factors affecting its continued existence (including public attitudes, genetic considerations, climate change, catastrophic events, and impacts to wolf social structure) that could threaten the wolf population in the NRM DPS in the foreseeable future. Delisting the NRM DPS wolf population enables the States, Tribes, National Park Service and the Service to implement more efficient, sustainable, and cost effective wildlife programs that will allow them to maintain a fully recovered wolf population while attempting to minimize conflicts. Delisting has not threatened the NRM wolf population nor increased any threats to it.