

Questions and Answers
Regarding the Missouri River Distinct Population Segment (DPS) of Arctic grayling
Candidate Status

What is the Service's determination regarding the status of Arctic grayling?

After evaluating all the available scientific and commercial information regarding the Arctic grayling of the upper Missouri River basin we have concluded that the native Arctic grayling of the upper Missouri River basin constitutes a listable entity under the Endangered Species Act (ESA). The Service has delineated a distinct population segment (DPS) that includes all remnant native populations in the upper Missouri River basin, of which there are believed to be five. This DPS includes both fluvial (river-dwelling) and a few adfluvial (lake-dwelling) life-history types. We feel that conservation of the species is best served by maintaining the full life history and genetic diversity that exists within the native populations. The DPS does not include introduced, naturalized populations that currently exist in lakes that did not historically contain Arctic grayling or lake populations that are outside the native range of the species in the upper Missouri River basin.

After an analysis of the threats to the DPS and potential effect of ongoing conservation actions, the U.S. Fish and Wildlife Service has determined that protection under the ESA is warranted. However, listing the Missouri River Distinct Population Segment (DPS) of Arctic grayling at this time is precluded by the need to address other listings of higher priority.

The Missouri River Distinct Population Segment (DPS) of Arctic grayling will be added to the list of candidate species under the ESA and will be proposed for listing when funding and workload priorities for other listing actions allow.

If the Service proposes the Missouri River Distinct Population Segment (DPS) of Arctic grayling for listing in the future, the public will have an opportunity to comment.

As a candidate species, the Missouri River Distinct Population Segment (DPS) of Arctic grayling will not have Federal protection and will remain a state-managed species.

Why did the Service make this decision?

The five remaining indigenous populations of the Missouri River Distinct Population Segment (DPS) of Arctic grayling are isolated from one another by dams or other factors. Most populations face threats that result from the alteration of their habitats, such as habitat fragmentation from large dams or smaller irrigation diversion structures, water withdrawals, high summer water temperatures, loss of riparian habitats, and entrainment in irrigation ditches. At least three populations (Big Hole River, Madison River-Ennis Reservoir, Red Rock lakes) face threats from competition with and predation by nonnative trout species; and these same three populations are at low abundance and show evidence of population declines in recent decades.

Severe drought likely affects all populations, but the effects of drought are most pronounced for populations residing primarily in streams and rivers (Big Hole River) or shallow lakes (Madison River-Ennis Reservoir, Red Rock lakes).

The Service does not consider climate change in and of itself to be a significant current threat, but if current climate change projections are realized, climate change will influence the severity and scope of other threats. The lack of existing regulations to adequately conserve Arctic grayling populations is likely a secondary threat.

The Service believes that because of these factors, the Missouri River Distinct Population Segment (DPS) of Arctic grayling should be protected under the ESA.

Why did the Service exclude introduced lake-dwelling populations from the entity considered for listing?

Neither the ESA nor the Service's implementing regulations expressly address whether introduced populations should be considered part of an entity being evaluated for listing, and no Service policy addresses the issue. Consequently, our interpretation is that the intent of the ESA is to conserve native populations and genetic resources over a representative portion of a species' historical occurrence.

The single DPS proposed by the Service includes only remnant native populations, of which there are currently believed to be five: Big Hole River, Mussigbrod and Miner lakes (in the Big Hole drainage), Madison River-Ennis Reservoir, and Red Rock lakes. The DPS does not include introduced, naturalized populations that currently exist in lakes that did not historically contain Arctic grayling or that are outside the native range of the species in the upper Missouri River basin. We excluded these introduced lake-dwelling populations because they are not native populations. These populations were introduced to provide recreational fishing opportunities in remote and semi-remote lakes, and were not established for any stated conservation purpose nor do they appear to have any formally recognized conservation value with respect to native populations.

What is a candidate species?

Candidate species or DPS' are plants and animals for which the Service has sufficient information on their biological status and threats to propose them for listing as endangered or threatened under the ESA, but for which development of a proposed listing regulation is precluded by higher priority listing actions to address species in greater need.

Candidate species receive no statutory protection under the ESA. The Service encourages voluntary cooperative conservation efforts for these species because they are, by definition, species that warrant future protection under the ESA.

What is being done to conserve the Missouri River Distinct Population Segment (DPS) of Arctic grayling?

State, Federal, nonprofits, local working groups as well as private landowners are currently implementing conservation efforts to benefit the Missouri River Distinct Population Segment (DPS) of Arctic grayling. We commend these conservation partners for their efforts and encourage them to continue these efforts.

The Service and the Montana Department of Fish, Wildlife and Parks (MFWP) have worked cooperatively to further the conservation interests of Missouri River Arctic grayling through implementation of a Candidate Conservation Agreement with Assurances (CCAA) for the upper Big Hole River, and through ongoing attempts to re-establish fluvial (river-dwelling) populations within the species' historic range in the upper Missouri River basin.

The MFWP has been actively engaged in working with local landowners to implement conservation measures to benefit the Arctic grayling in the Big Hole River under the CCAA that was finalized in 2006. The MFWP leads the Big Hole Grayling CCAA implementation effort, and is supported by Montana Department of Natural Resources and Conservation (MDNRC), USDA Natural Resources Conservation Service (NRCS), and the Service. Other groups helping implement the CCAA include the Big Hole Watershed Committee, the Big Hole River Foundation, Montana Trout Unlimited, the Western Water Project (affiliated with Trout Unlimited), and The Nature Conservancy.

This CCAA is a voluntary agreement whereby local landowners commit to implement conservation measures that will aid in the recovery of the Arctic grayling in the Big Hole River and in return, receive assurances that they will not be subject to future land and water use restrictions should the Missouri River Distinct Population Segment (DPS) of Arctic grayling become a listed species. The guidelines of this CCAA will be met by implementing conservation measures that improve stream flows, protect and restore riparian habitats, identify and reduce or eliminate entrainment (inadvertent capture) of grayling in irrigation ditches, and remove human-made barriers to grayling migration. Currently, 32 landowners representing 160,178 acres in the upper Big Hole River drainage are participating in the CCAA. The Big Hole Grayling CCAA is one of the largest CCAAs in the nation. However, due to its voluntary nature, the CCAA provides no long-term regulatory protection for the species.

The MFWP has taken the lead for implementation of a brood reserve and translocation program designed to re-establish fluvial populations of Arctic grayling in the upper Missouri River basin. This program has been ongoing for more than 15 years. Although additional self-sustaining populations have not yet been established through this program, recent successes have been observed. For example, natural reproduction by translocated grayling was observed in the upper Ruby River during 2009.

The Service has developed a Comprehensive Conservation Plan (CCP) for the Red Rock Lakes National Wildlife Refuge outlines a set of broad goals and specific objectives or strategies with respect to conservation of the Red Rock lakes population of Arctic grayling that focuses on habitat improvements, reestablishment of populations, and removal of nonnative trout where

necessary.

The Service recognizes these ongoing and planned conservation efforts by all entities. At this time, the measures, although individually positive, do not cumulatively address all the significant threats to the species, especially those posed by nonnative trout.

The Service will continue to work with agencies and landowners to further implement ongoing and future conservation measures that will help conserve Arctic grayling and provide for the long-term recovery of the species.

Now that the Service has designated the Missouri River Distinct Population Segment (DPS) of Arctic grayling as a "candidate," what will happen next?

When a species becomes a candidate it is given a "listing priority number" (LPN). This number is given because there are not enough Service personnel, time, or money to propose all the candidate species for listing. The purpose of the LPN is to ensure that the species that are in the most trouble are given the highest priority.

We have assigned an LPN of 3 to the Missouri River Distinct Population Segment (DPS) of Arctic grayling, which places it near the top of the Service's nationwide listing priorities.

It is difficult to predict how long it might be before the Service prepares a proposed rule for the Arctic grayling. When the Missouri River Distinct Population Segment (DPS) of Arctic grayling might be proposed for listing will be depend on the number of LPN 2s that must be addressed by the Service and the funding available. While the Missouri River Distinct Population Segment (DPS) of Arctic grayling is a candidate, we will review its status and work with the State of Montana, other Federal agencies, private landowners, and other partners to step up efforts to conserve the species.

If the Service decides to go forward with listing the Missouri River Distinct Population Segment (DPS) of Arctic grayling as threatened or endangered, what is the process?

The Service would prepare a document, called a proposed rule, which would be published in the Federal Register and made available for public review. The public would be given at least 60 days to review the proposal and provide the Service with any comments or additional information. Public hearings would likely be held to gather public input. Within a year of the proposed rule, the Service would consider and analyze all the public comments and other information available to make a final decision on whether to list the Missouri River Distinct Population Segment (DPS) of Arctic grayling as threatened or endangered.

If the Missouri River Distinct Population Segment (DPS) of Arctic grayling is listed in the future, what activities could be impacted?

Depending on the location where an ongoing or proposed action occurs or will occur and the extent and scale of the action as well as the listing status (threatened or endangered), activities

such as irrigation, livestock grazing, hydroelectric dam operation, and recreational angling could be impacted.

What can landowners do to conserve candidate species?

The Service works with private landowners, Tribes, and other Federal and State agencies including other programs within the Fish and Wildlife Service to forge voluntary conservation agreements that benefit candidates and other species-at-risk. We provide technical assistance on designing and implementing conservation actions to address threats identified in our species assessments.

The Service and other federal partners can provide technical and financial assistance for conservation of candidate species on private land. The Service provides financial and technical assistance to landowners seeking to conserve candidate species on their land through its Partners for Fish and Wildlife Program. Additional financial assistance is available through various Service grants and agreements, as well as through Farm Bill and Department of Defense programs. In addition, the Service has the ability to take advantage of the additional management flexibility afforded to candidate species by facilitating development and implementation of Candidate Conservation Agreements (CCAs) and Candidate Conservation Agreements with Assurances (CCAAs).

CCAs are formal, voluntary agreements between the Service and one or more parties to address the conservation needs of one or more candidate species. Participants voluntarily commit to implement specific actions designed to remove or reduce threats to the covered species. CCAs can involve both Federal and non-Federal lands. Development and implementation of CCAs can provide CCA participants a strong indication of how activities will be conducted when a species becomes listed. For non-Federal landowners seeking regulatory assurances, CCAAs are an effective tool. A CCAA provides participating property owners with a permit containing assurances that if they engage in certain conservation actions for species included in the agreement, they will not be required to implement additional conservation measures beyond those in the CCAA in the event the species becomes listed. Also, additional land, water, or resource use limitations will not be imposed on them should the species become listed in the future, unless they consent to the change. For additional information on these tools, see <http://www.fws.gov/endangered/landowner/index.html>.