CANDIDATE AND LISTING PRIORITY ASSIGNMENT FORM

SCIENTIFIC NAME: *Thymallus arcticus*

COMMON NAME: Fluvial Arctic Grayling (Upper Missouri River population), also known as Montana Arctic Grayling

LEAD REGION: 6

INFORMATION CURRENT AS OF: March 8, 2004

STATUS/ACTION:
___ New candidate
_X_ Continuing candidate
__ Non-petitioned
_X_ Petitioned - Date petition received: October 02, 1992
_X_ 90-day positive - FR date: January 19, 1993
_X_ 12-month warranted but precluded - FR date: July 25, 1994
___ Is the petition requesting a reclassification of a listed species?
_X_ Listing priority change
Former LP: _9_
New LP: _3_
Latest date species first became a candidate: July 25, 1994
___ Candidate removal: Former LP:
__ A - Taxon more abundant or widespread than previously believed or not subject to a degree of threats sufficient to warrant issuance of a proposed listing or continuance of candidate status.
__ F - Range is no longer a United States territory.
__ M - Taxon mistakenly included in past notice of review.
__ N - Taxon may not meet the Endangered Species Act=s definition of Aspecies.@
__ X - Taxon believed to be extinct.

ANIMAL/PLANT GROUP AND FAMILY: Fish, *Salmonidae*

HISTORICAL STATES/TERRITORIES/COUNTRIES OF OCCURRENCE: Montana and Wyoming.

CURRENT STATES/COUNTIES/TERRITORIES/COUNTRIES OF OCCURRENCE: Montana

LEAD REGION CONTACT: Chuck Davis, (303) 236-7400, extension 235.

LEAD FIELD OFFICE CONTACT: Lori Nordstrom, (406) 449-5225, extension 208.
BIOLOGICAL INFORMATION:
Arctic grayling have elongate, dark-colored bodies averaging 254-330 millimeters (10-13

inches) in length. During the spawning period, the colors darken and the males become more brilliant than the females. The most prominent feature is the dorsal fin, which is large and vividly colored with rows of orange to bright green spots. They spawn from late April to early July without excavating a redd (Kaya 1990).

Fluvial Arctic grayling are adapted to life-long residence in stream environments and make seasonal migrations between spawning, feeding and wintering areas within the river system (Shepard and Oswald 1989). Fluvial Arctic grayling inhabit cool water streams with intermediate gradients, spending much of their time in pools (Kaya 1990). For a thorough description of the taxonomy and life history of fluvial Arctic grayling see the Service's 1994 12-month administrative petition finding (U.S. Fish and Wildlife Service, in litt. 1994).

Historically, the fluvial (river-dwelling) population of the Arctic grayling was widely but irregularly distributed and locally abundant in the Missouri River headwaters above the Great Falls in Montana into northwest Wyoming within Yellowstone National Park. Fluvial Arctic grayling were documented in the drainages of the Sun, Smith, Jefferson, Beaverhead, Big Hole, Madison, Gallatin, Gibbon, and Firehole Rivers; and Grayling, Bridger, Bozeman, and Fan Creeks. Presently, the only self-sustaining remnant of the indigenous fluvial Arctic grayling population exists in the Big Hole River in Montana, an area estimated to represent 5 percent or less of the historical range (Kaya 1992a).

Montana Fish, Wildlife and Parks annually surveys the Big Hole River grayling population since 1983. The Big Hole River grayling population has fluctuated over this period, and low population estimates generally correlate with periods of drought, which cause low flows and high water temperatures (Table 1) (Fluvial Arctic Grayling Workgroup 1995, Magee and Lamothe 2003). Because of severe drought conditions in 2000 and 2001, traditional population monitoring efforts were highly curtailed to reduce stress on grayling. Therefore, population estimates are not available for those years (J. Magee, Montana Dept. Fish, Wildlife and Parks, in litt. 2002). In 2002, drought continued but was not so severe as to prevent grayling surveys. Spring 2002 spawning surveys captured the lowest number of grayling in the past 14 years of sampling and the spawning population was skewed to older fish, indicating limited spawning success or poor recruitment since 1999 (Magee and Lamothe 2003). It was not possible to make a 2002 population estimate because so few grayling were found in traditional survey sections in the mainstem Big Hole River (Magee and Lamothe 2003). Results from 2003 surveys are not yet available.

Decreased grayling abundance in traditional survey reaches in the mainstem Big Hole River is attributed to the past 4 years of drought. However, it is hoped the grayling population may not be as reduced as apparent from surveys in the mainstem Big Hole. In 2002 abundant numbers of grayling (87 age 1+ per mile) were unexpectedly located in the lower reaches of a tributary to the Big Hole River, indicating that grayling were using this tributary as a cool thermal refuge from high temperatures in the mainstem (Magee and Lamothe 2003). In 2003, abundant numbers of grayling were again found in the lower reaches of tributaries with the coolest water temperatures although final 2003 survey results are not yet available.

The Service and Montana Fish, Wildlife, and Parks (Montana Fish, Wildlife, and Parks and

U.S. Fish and Wildlife Service, in litt. 1996) signed an agreement (MFWP/USFWS agreement) recognizing the Fluvial Arctic Grayling Restoration Plan as the conservation strategy that will guide restoration and monitoring for the grayling. This agreement identifies population parameters (densities and population age structure) for the remnant population in the Big Hole River. Data for 2000 and 2001 were limited and not adequately sampled. In 2002, the density parameter was not met because grayling densities were so low no population estimate could be made; however, the population=s age structure fell within the lower limits of that parameter. Because time frames identified within the agreement for reestablishment criteria have now passed and because of additional information about grayling, we are in the process of revising this agreement to outline the next steps in securing the fluvial grayling population.

Table 1. Estimated number per mile of age 1+ fluvial Arctic grayling in the upper Big Hole River, Montana, from Montana Fish, Wildlife and Parks fall electrofishing surveys and Big Hole River discharge parameters (Magee and Lamothe 2003). McWisdom section is the McDowell and Wisdom sections combined. Standard deviations shown in parenthesis. Flows of 20 cubic feet per second (cfs) are considered an absolute minimum survival flow for grayling (Big Hole Watershed Committee 1997, Magee and Lamothe 2003).

SECTION	YEAR	ARCTIC GRAYLING AGE 1+	MIN FLOWS[1] (cfs)	DAYS <20 cfs[1] Jul-Sep	SECTION	YEAR	ARCTIC GRAYLING AGE 1+	MIN FLOWS[1] (cfs)	DAYS <20cfs[1] Jul-Sep
McDowell	1978	69	n/a	n/a	Wisdom	1993	32 (22)	55	0
Wisdom	1983	111 (50)	n/a	n/a	Wisdom	1994	65 (50)	1.9	55
Wisdom	1984	68 (29)	n/a	n/a	Wisdom	1995	70 (62)	31	0
McWisdom	1985	44 (29)	n/a	n/a	Wisdom	1996	64 (27)	39	0
Wisdom	1986	33	n/a	n/a	Wisdom	1997	96 (66)	70	0
McWisdom	1987	51	n/a	n/a	Wisdom	1998	76 (30)	45	0
McWisdom	1988	30	0	78	Wisdom	1999	35 (8)	16	5
McWisdom	1989	22	12	4	Wisdom	2000	no est[2]	7.3	49
McWisdom	1990	34	18	0	Wisdom	2001	no est[2]	6.0	55
McWisdom	1991	34 (24)	10	16	Wisdom	2002	no est[3]	13	6
Wisdom	1992	31 (16)	3.3	32	Wisdom	2003	N/A[4]	N/A[4]	N/A[4]

[1]Big Hole River discharge parameters measured at the USGS gauge at Wisdom (from Table 2 in Magee and Lamothe 2003). 2002 data is provisional.
[2]No estimates were made in 2000 and 2001 due to severe low flows.
[3]No estimate was made in 2002 due to low numbers of grayling captured.
[4]2003 data not compiled as of this writing.

In addition to protecting and maintaining the remnant grayling population in the Big Hole River, a high priority for grayling conservation has been to reestablish populations within the historic range in the upper Missouri River basin (Fluvial Arctic Grayling Workgroup 1995; Montana Fish, Wildlife and Parks and U.S. Fish and Wildlife Service 1996). Kaya (1992b) evaluated and prioritized sites for efforts to reestablish fluvial grayling populations within the historic range. Four reestablishment efforts have taken place--(1) Ruby River, stocking initiated in 1997; (2) Sun River (South and North Forks), stocking initiated in 1999; (3) Beaverhead River, stocking initiated in 1999; and (4) Missouri River Headwaters, stocking initiated in 2000. As planned, each of these reintroductions received at least 3 years of stocking in an effort to establish a variety of age classes. At this time, no self-sustaining populations have been reestablished from these efforts, which have been hampered by the drought. Another problem has been the limited number of grayling available to be stocked, therefore the sites may not have been stocked at high enough densities to allow them to become established. The Fluvial Grayling Workgroup decided in February, 2003, to focus reestablishment efforts for the near term at the Ruby River site because it seemed to have the best potential for success. This allows all available grayling from the broodstock to be stocked at this site at higher densities, increasing the likelihood of successful reestablishment.

In 1982, the fluvial Arctic grayling was designated as a category 2 candidate for listing under the Endangered Species Act, as amended. In response to a petition to list the grayling as endangered, the Service determined that listing the fluvial Arctic grayling was warranted but precluded by higher priority listing actions in 1994 (59 FR 37738). The listing priority number has been 9 primarily because the ongoing cooperative prelisting activities to improve habitat conditions in the Big Hole River and reestablish populations in the historic range reduced the magnitude of the threats. Although these cooperative efforts continue, the remnant population in the Big Hole River appears to have declined substantially and the reestablishment efforts have not produced self-sustaining populations. Therefore, the listing priority number is being elevated to 3 (see “Rationale for listing priority number” and “Summary of reasons for addition, removal or listing priority change,” below).

THREATS:

A. <u>The Present or Threatened Destruction, Modification, or Curtailment of its Habitat or Range</u>.

A substantial portion of the historic range of the fluvial Arctic grayling has been altered by the construction of dams and reservoirs that created barriers obstructing migrations to spawning, wintering or feeding areas; inundated grayling habitat; and altered the hydrology of river systems (Kaya 1990).

The predominant land use in the upper Missouri River drainage is agriculture-related, primarily ranching and cultivation. The primary impact of these activities on grayling habitat is the diversion of water for irrigation and stock water. Irrigation withdrawals during spring emergence may strand eggs and juvenile fish preventing them from accessing cover in the vegetation along the shoreline. Because dewatering reduces the available habitat, the grayling are concentrated in the remaining water and thus susceptible to increased predation.

Irrigation and stock water removals during late summer increases water temperatures in the river channel. Again in 2002, water temperatures at most monitoring stations throughout the Big Hole River exceeded the thermal tolerance for Arctic grayling (≥77 F)(Magee and Lamothe 2003). Water temperature data for 2003 is not yet available.

There is the potential for grayling, particularly fry and juveniles, to move into irrigation ditches and become stranded when the diversions are shut down without opportunity for them to return to the river, resulting in mortality (Shepard and Oswald 1989).

Severe drought has continued in southwestern Montana since 1999, exacerbating the impacts of water withdrawals in the Upper Missouri River basin. Water conservation efforts as delineated in the Big Hole Watershed Drought Management Plan were implemented in 2000, 2001, 2002, and 2003. These efforts included angling closures and voluntary closures of irrigation diversions in certain river reaches. Additionally, since 1994 a Flow Enhancement Program has been in place to provide alternative water sources, such as stock water wells, so that landowners do not have to divert water from the Big Hole River and its tributaries. As a result of the water conservation efforts by local water users and the cooperative work of the Big Hole Watershed Committee; Fish, Wildlife and Parks; U.S. Fish and Wildlife Service=s Partners for Fish and Wildlife; and many others, water flow was maintained in critical reaches of the Big Hole River in 2000, 2001, 2002, and 2003. This contrasts with the1988 drought where the Big Hole River ran dry in some reaches. Additionally, drought has occurred during the same years as attempts to reestablish grayling populations and likely has been a factor in the lack of success in reestablishing self-sustaining populations.

Degraded riparian conditions in the upper Big Hole River drainage may be impacting the grayling population as indicated by the declining numbers of grayling in a particular reach that historically was productive for grayling. Productivity in this reach has declined even in good water years (Magee and Lamothe 2003).

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes.

Arctic grayling are easily caught by anglers, therefore, historical exploitation likely contributed to, or initiated past declines or local extirpations. Currently, catch-and-release fishing regulations are in effect for grayling in rivers in Montana to reduce mortality from recreational fishing. All angling is closed on the Big Hole during periods of severe drought (Big Hole Watershed Committee 1997). Also during severe drought, survey efforts are curtailed to reduce stress to grayling (Magee 2002).

C. Disease or Predation.

Predation and/or competition with Arctic grayling by non-native trout are thought to be factors limiting grayling populations (Kaya 1992b) and likely affect the success of reestablishment efforts. Non-native brook trout (*Salvelinus fontinalis*), rainbow trout (*Oncorhynchus mykiss*), and brown trout (*Salmo trutta*) are well-established with locally abundant populations throughout the upper Missouri River drainage. Research on competition between grayling and non-native brook trout (*Salvelinus fontinalis*) found little evidence that brook trout negatively affected microhabitat use or growth of Arctic grayling (Byorth and Magee 1998). However, further studies are necessary to determine whether competition or predation occur at other life stages or with brown or rainbow trout.

D. The Inadequacy of Existing Regulatory Mechanisms.

Most of the upper Missouri River and its major tributaries are managed to produce abundant, large, non-native trout. Such management may be contrary to grayling restoration efforts if grayling populations are negatively affected by interactions with non-native fish. Montana Fish, Wildlife and Parks altered some its regulations in some waters to be more compatible with grayling restoration.

E. Other Natural or Manmade Factors Affecting its Continued Existence.

Unknown.

BRIEF SUMMARY OF REASONS FOR REMOVAL OR LISTING PRIORITY CHANGE: Despite strong, cooperative efforts among agencies, landowners, municipalities, and the angling community to reestablish populations within the historic range of the upper Missouri River basin and improve habitat conditions for the remnant grayling population in the Big Hole River, the reintroduction efforts have shown very limited signs of success after 5 years. In fall, 2002, the remnant grayling population in the Big Hole River apparently had declined to such a low level that not enough fish were found to estimate population density. Spring 2002 spawning surveys captured the lowest number of grayling in the past 14 years of sampling and the spawning population was skewed to older fish, indicating limited recruitment for the past two years. Hopefully mitigating for the low grayling numbers found in the mainstem of the Big Hole River, in 2002 and 2003 numerous grayling were found in the lower, cooler reaches of some tributaries to the mainstem Big Hole River. Drought conditions since 1999 have increased water temperatures, reduced flows, and likely exacerbated the effects of factors such as flow reductions from irrigation and stock water withdrawals, locally poor riparian conditions and competition or predation from non-native fish.

FOR RESUBMITTED PETITIONS:

a. Is listing still warranted? YES

b. To date, has publication of a proposal to list been precluded by other higher priority listing actions? YES

c. Is a proposal to list the species as threatened or endangered in preparation? NO

d. If the answer to c. above is no, provide an explanation of why the action is still precluded:

Since publication of the 2002 CNOR, the publication of a proposed rule to list this species has been precluded by other higher priority listing actions, and based on work scheduled we expect that will remain the case for the remainder of Fiscal Year 2004. Almost the entire national listing budget has been consumed by work on various listing actions taken to comply with court orders and court-approved settlement agreements, emergency listing, and essential litigation-related, administrative, and program management functions. We will continue to monitor the status of the grayling as new information becomes available. This review will determine if a change in status is warranted, including the need to make prompt use of emergency listing procedures.

LAND OWNERSHIP: This species is currently found in river systems primarily on private lands; however, rivers within the historic range also cross State and Federal (National Park Service, U.S. Forest Service, Bureau of Land Management) lands.

PRELISTING: The Montana Fluvial Arctic Grayling Workgroup is an interagency committee established in the 1980s to provide guidance on grayling restoration, research, and management. The Workgroup developed and approved the 1995 Montana Fluvial Arctic Grayling Restoration Plan. The Restoration Plan identifies a restoration goal and necessary actions to achieve that goal.

The1996 MFWP/USFWS agreement (Montana Fish, Wildlife, and Parks and U.S. Fish and Wildlife Service, in litt. 1996) recognizes the Restoration Plan as the conservation strategy that will guide restoration and monitoring for the grayling. This agreement delineates steps and time frames toward reestablishing four local grayling populations, in addition to population parameters for the remnant population in the Big Hole River. Because time frames identified within the agreement for reestablishment criteria have now passed and because of additional information about grayling, we are in the process of revising this agreement to outline the next steps in securing the fluvial grayling population.

With support from the Service=s Fish Technology Center and state hatcheries, a genetically complete fluvial Arctic grayling brood reserve (derived from Big Hole River grayling) has been established and is maintained in two closed-basin lakes in Montana. These grayling are used for reintroductions within their historic range. In the event of catastrophic loss of grayling in the Big Hole River, this brood reserve could be used in efforts to refound the Big Hole River population.

Efforts to reestablish grayling populations within the upper Missouri River basin began in 1997, but at this time self-sustaining populations have not been reestablished (see “Biological Information” above for further discussion).

The Montana Partners for Fish and Wildlife Program and Fish, Wildlife and Parks have been working with ranchers in the Big Hole River Valley since 1994 to assist landowners in developing off-site livestock watering systems (i.e., wells and tanks) and improving the efficiency of irrigation systems. To date, the Partner=s Program has provided funding and technical assistance in the installation of 19 off-site watering systems (Magee and Lamothe 2003). These projects play a critical role in maintaining instream flows in the Big Hole River, particularly, during drought periods. The benefits vary from year to year but studies suggest that the wells increase Big Hole River flows by 5 to 15 cfs (see table 1). Fisheries biologists believe these augmented flows play a crucial role in grayling survival during drought events. These programs also are working to improve habitat conditions in the Big Hole River basin.

On May 21, 2003, the Center for Biological Diversity and Western Watersheds Project filed a complaint arguing that emergency listing of the grayling was needed and that ongoing conservation efforts were not adequate to justify the 2002 CNOR that reconfirmed the listing priority number of 9 for the grayling.

The cooperating landowners and members of The Big Hole Watershed Committee have said that if the grayling is listed under the ESA they will no longer participate in efforts to maintain instream flows and other conservation efforts for grayling. These warnings are taken seriously and because the landowners= participation is crucial to grayling conservation, many members of the Fluvial Arctic Grayling Workgroup consider listing to be a threat to grayling.

In April 2003, the Regional Office determined that there was no significant risk to the well-being of the fluvial Arctic grayling that necessitated use of emergency list authority. We continue to believe warranted but precluded status is appropriate and that emergency listing is not necessary:

- Fluvial grayling have existed in the Big Hole River as the sole remnant of the Upper Missouri River population for at least 40 years. During this time, the population has endured periods of severe drought (see Table 1).

- Grayling are highly fecund and when conditions are good, they are able to quickly respond with successful spawning and recruitment into the population. Evidence of this is provided in the survey results from the mid-1990s (see Table 1).

- Although 2002 survey estimates for the Big Hole River were very low, abundant numbers of grayling (87 age 1+ per mile) were located in the lower reaches of a tributary to the Big Hole River, demonstrating that grayling were using this tributary as a thermal refuge (Magee and Lamothe 2003). Survey results from 2003 are still being compiled.

- Because of ongoing drought conditions since 2000, water conservation efforts as delineated in the Big Hole Watershed Drought Management Plan have been implemented annually and will continue to be implemented when necessary in the future. These efforts included angling closures and voluntary closures of irrigation diversions in certain river reaches.

Additionally, since 1994 a Flow Enhancement Program has been in place to provide alternative water sources, such as stock water wells, so that landowners do not have to divert water from the Big Hole River and its tributaries. As a result of the water conservation efforts by local water users and the cooperative work of the Big Hole Watershed Committee (BHWC); Fish, Wildlife and Parks (FWP); U.S. Fish and Wildlife Service's Partners for Fish and Wildlife (Partners); and many others, water flow has been maintained in critical reaches of the Big Hole River.

- The BHWC, FWP, and Partners are continuing their ongoing work with landowners to improve flow and riparian conditions in the Big Hole basin. In 2003, the BHWC received $400,000 to address numerous issues in the Big Hole basin. Projects include installation and monitoring of stream gages, modeling of water use, assisting landowners to improve irrigation efficiency and riparian enhancement, water quality monitoring, and exploring other methods to improve stream flows.

- With the benefit of the past 5 years' experience, efforts to reestablish fluvial grayling in its historic range will continue and be refocused using new techniques, increasing the likelihood of successful reestablishment.

- With support from the Service's Fish Technology Center and state hatcheries, a genetically complete fluvial Arctic grayling brood reserve (derived from Big Hole River grayling) has been established and is maintained in two closed-basin lakes in Montana and some hatcheries. These grayling are used for reintroductions within their historic range. In the event of catastrophic loss of grayling in the Big Hole River, this brood reserve could be used in efforts to refound the Big Hole River population.

REFERENCES:

Big Hole Watershed Committee. 1997. Big Hole River drought management plan. Unpubl. document.

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Montana Fish, Wildlife and Parks and U.S. Fish and Wildlife Service. 1996. Memorandum of Agreement for the implementation of the fluvial Arctic grayling restoration plan. Unpubl. document, U.S. Fish and Wildlife Service, Helena.

Shepard, B.B., and R.A. Oswald. 1989. Timing, location, and population characteristics of spawning Montana Arctic grayling (*Thymallus arcticus montana* Milner) in the Big Hole River drainage, 1988. Montana Dept. Fish, Wildl. and Parks, Bozeman.

U.S. Fish and Wildlife Service. 1994. Twelve-month finding on petition to list the fluvial population of the Arctic grayling. May 31, 1994, memorandum.

LISTING PRIORITY

THREAT			
MAGNITUDE	**IMMEDIACY**	**TAXONOMY**	**PRIORITY**
High	Imminent	Monotypic genus	1
		Species	2
		Subspecies/population	3*
	Non-imminent	Monotypic genus	4
		Species	5
		Subspecies/population	6
Moderate to Low	Imminent	Monotypic genus	7
		Species	8
		Subspecies/population	9
	Non-imminent	Monotypic genus	10
		Species	11
		Subspecies/population	12

Rationale for listing priority number:

We recommend the listing priority number for this population be elevated to 3 because the threats continue to be imminent and the magnitude is now high. The listing priority number has been 9 because the ongoing, cooperative activities to improve habitat (including instream flow) conditions in the Big Hole River and reestablish populations in the historic range reduced the magnitude of the threats. The fluvial Arctic grayling is restricted to a single, remnant population in the upper Big Hole River that appears to have declined to the lowest levels recorded, based on 2002 surveys. Survey results from 2003 are not available as of this writing. Additionally, efforts to reestablish fluvial grayling populations elsewhere in the historic range have not been successful. Ongoing drought continues to exacerbate threats to this remnant population.

Magnitude: The fluvial Arctic grayling population once ranged throughout the upper Missouri River drainage but now the only remnant population is restricted to the upper Big Hole River, an area estimated to be less than five percent of its historic range. In fall, 2002, the remnant grayling population in the Big Hole River apparently had declined to such a low level that not enough fish were captured to estimate population density. Spring 2002 spawning surveys captured the lowest number of grayling in the past 14 years of sampling and the spawning population was skewed to older fish, indicating limited recruitment for the past 2 years. Survey results from 2003 are not available as of this writing. Unexpectedly, in 2002 and 2003 abundant numbers of grayling were found in lower, cooler reaches of tributaries to the mainstem Big Hole River, hopefully mitigating for the low numbers of grayling found in the mainstem Big Hole River.

Efforts to reestablish grayling populations within the historic range in the upper Missouri River basin began in 1997. At this time, there is no evidence that these efforts have been successful in reestablishing self-sustaining populations at any of four reintroduction sites.

Therefore, the magnitude of the threat is elevated to high because the entire fluvial Arctic grayling population is restricted to a single remnant in the upper Big Hole River and that population appears to be at its lowest documented levels.

Imminence: The threats to the fluvial Arctic grayling population continue to be imminent. Drought conditions since 1999 have increased water temperatures, reduced flows, and exacerbated the effects of ongoing threats such as flow reductions from irrigation and stock water withdrawals, locally degraded habitat conditions, and potential competition or predation from non-native fish. Cooperative, community-based efforts have focused primarily on working with water users to leave water in the Big Hole River to increase flows and reduce water temperatures during periods of drought. Despite these efforts, there continue to be periods when flows are well below those considered "survival" flows for grayling and water temperatures exceed the thermal tolerance of grayling. Based on 2002 grayling population surveys, these water conservation efforts do not appear to have been adequate to maintain the grayling population at the density levels established in the agreement between Montana Fish, Wildlife and Parks and the Service.

APPROVAL/CONCURRENCE: Lead Regions must obtain written concurrence from all other Regions within the range of the species before recommending changes to the candidate list, including listing priority changes; the Regional Director must approve all such recommendations. The Director must concur on all additions of species to the candidate list, annual retentions of candidates, removal of candidates, and listing priority changes.

Approve: Ralph Morgenweck March 12, 2004
Regional Director, Fish and Wildlife Service Date

Concur: Steve Williams April 5, 2004
Director, Fish and Wildlife Service Date

Do not concur: _____ _____
Director, Fish and Wildlife Service Date

Director's Remarks:

_____

_____

_____

Date of annual review: March 04, 2003

Conducted by: Lori Nordstrom