

**Fishery Management Plan for Arctic Grayling in the  
Goodpaster River, 2001–2004**

by

**James F. Parker**

February 2003

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Alaska Department of Fish and Game

Division of Sport Fish





***FISHERY MANAGEMENT REPORT NO. 03-03***

**FISHERY MANAGEMENT PLAN FOR ARCTIC GRAYLING IN THE  
GOODPASTER RIVER, 2001–2004**

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## PREFACE

The Alaska Department of Fish and Game (ADF&G) is the fish and wildlife management agency for the State of Alaska. The Division of Sport Fish is the management division within ADF&G that is responsible for the management of sport fisheries. The goals of Sport Fish Division are to conserve wild stocks of sport fish, to provide diversity of recreational fishing opportunities for the public, and to optimize the social and economic benefits from recreational fisheries for all Alaskans. To accomplish these goals the Division of Sport Fish has instituted a fisheries management process that relies on sound scientific principles and public involvement. Part of this process is the development of Sport Fish Management Plans for sport fisheries that are important to the public or that have characteristics that require focused management.

The Sport Fish Management Plan for Arctic grayling in the Goodpaster River was a result of the public process, which included the regulatory prescription handed down by the Alaska Board of Fisheries. The open regulatory process of the Board of Fisheries enabled numerous opportunities for public participation in the development of regulations relating to this plan. The objectives found in this plan were developed around the implied intent of the regulatory process and the best available scientific information. The objectives should be viewed as dynamic and therefore should continue being the focus of discussions between managers, the public, and the Board of Fisheries.

## INTRODUCTION

The Arctic grayling *Thymallus arcticus*, fishery is the primary sport fishery on the Goodpaster River. Maintaining healthy stocks of Arctic grayling in the Goodpaster River is essential for not only the Goodpaster River fishery, but also for other fisheries in the upper Tanana River drainage since Arctic grayling spawn in the Goodpaster River and use other rivers for summer feeding. The Goodpaster River Arctic grayling fishery occurs during the ice-free season, from approximately 10 May through 15 October. Most anglers participating in this fishery are residents from Fairbanks, Delta Junction, or North Pole; a number of these anglers own cabins on the Goodpaster River.

Mineral exploration by Teck-Pogo Incorporated and future development of the Pogo Creek gold mine (located in the valley of the North Fork Goodpaster River; 68 miles upstream from the mouth) has the potential to impact the habitat of the Goodpaster River. With the potential of mining in the upper watershed, monitoring of the Arctic grayling adult population with funds supplied by Teck-Pogo Incorporated began in 1998.

The Department of Natural Resources (DNR) Tanana Basin Area Plan (TBAP) for State lands was adopted in 1985 and updated in 1991. This plan covers 14.5 million acres of state land in the Tanana valley, including the Fairbanks area. Amendments to TBAP were made in 1991, changing land use practices within the Goodpaster River corridor. These changes included making the corridor three miles wide instead of one; the corridor was split into a lower (Subunit 7D1) and upper unit (Subunit 7D2). The South Fork Goodpaster River, at approximately 33 miles up the Goodpaster River, is the boundary between the two units. Subunit 7D1 is managed for boat-accessible recreation, to protect scenery, roadless recreational opportunities, and fish and wildlife habitat. Goodpaster River cabin owners formed the Goodpaster River Property

Owner Association, which is a significant voice for developing land use policy for the recreational use of the river.

This report presents updated fishery management objectives for the Arctic grayling fishery in the Goodpaster River. The public previously reviewed objectives for the Arctic grayling fishery in the spring of 1993 (ADF&G 1993). Comments received during the public review period stressed the importance of maintaining Arctic grayling at the current population size, which likely has not changed over many years. Objectives identified in this report will update those made in 1993 and will be incorporated by ADF&G into a Regional Arctic grayling management strategy.

## **GOODPASTER RIVER DESCRIPTION**

The Goodpaster River is a large rapid run-off tributary of the Tanana River. It has a drainage area of approximately 1,600 mi<sup>2</sup>, and flows southwest for 140 miles to its confluence with the Tanana River ten miles north of Delta Junction (Figure 1). This river has 13 named tributaries, the largest of which is the South Fork Goodpaster River (40 mi long). The Pogo mine site is approximately 35 miles upstream from the confluence of the South Fork Goodpaster River. The river is accessible by riverboat or airplane during the summer. Boat launches are at Big Delta on the Tanana River (14 mi downstream) and at Clearwater Lake (7 mi upstream). Riverboat navigation is possible in the lower 60 mi of the river and the lower 10 mi of the South Fork Goodpaster River. Floatplane access is feasible in the lower 23 miles of the river. Private landing strips are at Central Creek (river-mi 60), at Pogo Creek (river-mi 68), and at Tibbs Creek a tributary of the Eisenmenger Fork. There are 66 summer cabins on the river, and all but eight are between river miles 3 and 30. There are no recreational cabins upstream of Central Creek. The length of river sampled in the spring from 1995-2002 for Arctic grayling, was from the confluence of the South Fork Goodpaster River (mile 33) to its mouth.

Access to the Goodpaster River during the winter is via snowmachine from Quartz Lake. The Pogo mine site is located approximately 35 miles upstream from the confluence of the South Fork. In 1998 through the spring of 1999, Tech Corporation upgraded the winter trail from Quartz Lake to the Pogo site, crossing the river 13 times.

## **GOODPASTER RIVER LAND USE**

The DNR manages the lower 33 miles of Goodpaster River corridor to protect scenery, roadless recreation, and fish and wildlife habitat. Specifically, commercial recreation activities (lodges, tent camps, etc) are allowed only if facilities are temporary and visually screened from the river (ADNR 1991). The DNR permits primitive campsite use to minimize impact to the riparian uplands of the river corridor. Commercial timber harvest is not allowed in the lower corridor, except for small, dispersed sales (up to 10,000 board feet) for personal-use (enough to build a cabin), or for special needs to control fire, disease, or insects affecting adjacent forestlands. To protect important grayling spawning areas, timber harvest is prohibited in the 100-year floodplain of the upper river (7D2). Access in the lower river corridor (7D1) will be limited to a winter road crossing near the mouth of the river, to access State Forest Unit 10 (ADNR 1991). Through a public process DNR made allowance in 1998-1999 to permit use of a RS2477 winter trail that crosses the lower river 13 times to assess the Pogo mining site above

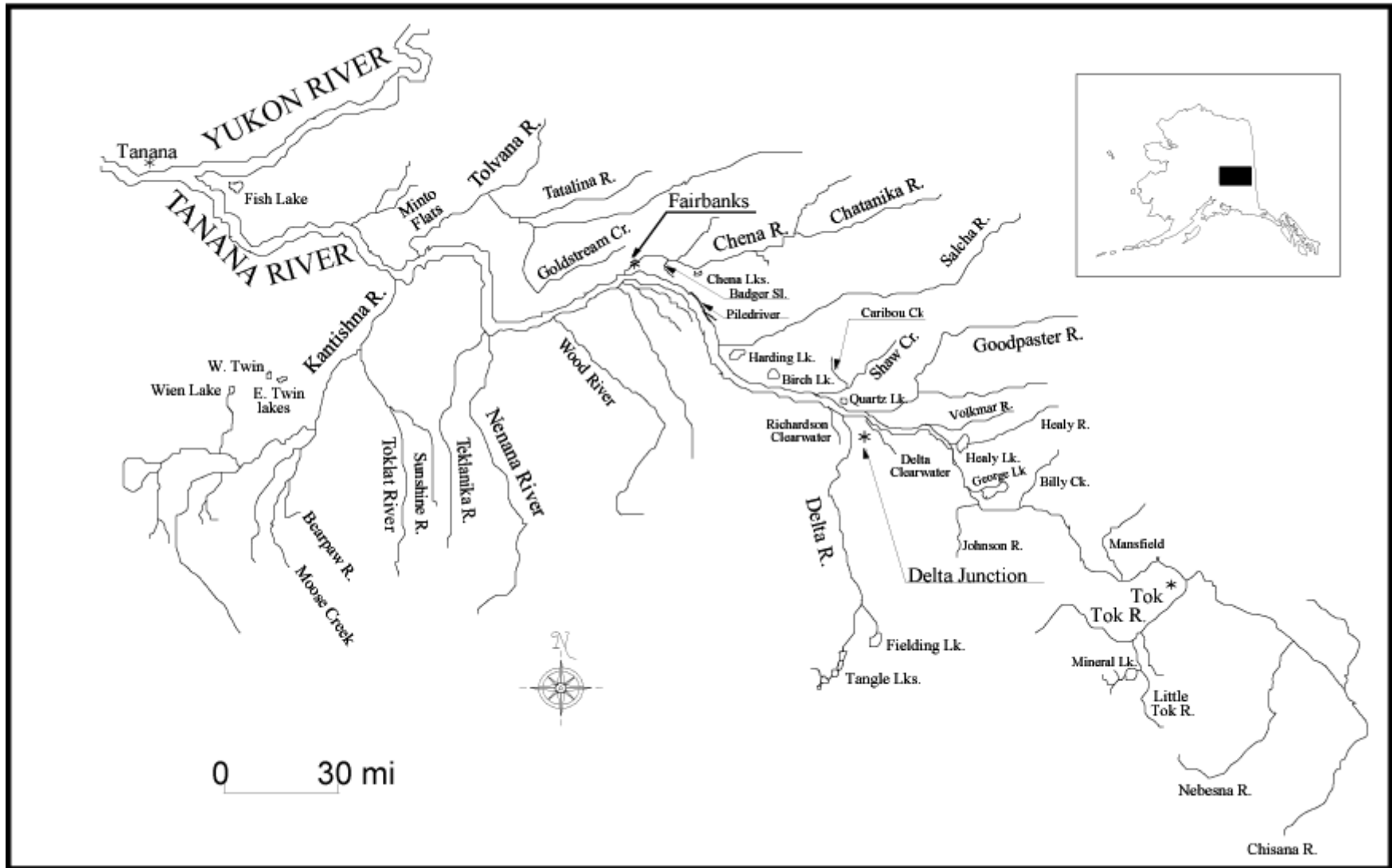


Figure 1.-The Tanana River drainage.

Central Creek. A RS 2477 stands for Revised Statute 2477 from the Mining Act of 1866, which states:

*"The right-of-way for the construction of highways over public lands, not reserved for public uses, is hereby granted."*

The act granted a public right-of-way across unreserved federal land to guarantee access as land transferred to state or private ownership. A RS 2477 may exist on private property.

Plans are currently under way to construct an all-season overland road from the Shaw Creek area or from Quartz Lake to the Pogo site.

## **FISHERY DESCRIPTION**

Goodpaster River (GPR) sport anglers primarily target Arctic grayling. The Goodpaster River serves as a spawning, summer feeding, overwintering, and nursery habitat for Arctic grayling. Some of the adult Arctic grayling after spawning move to other streams such as the Richardson and Delta Clearwater rivers to feed during the summer (Figure 1). Within the Goodpaster River, there is a movement of Arctic grayling to the lower river prior to and during ice-out. After spawning, some adults move upriver in late May and early June and then during the mid-summer period little movement occurs. Movement occurs again in the fall to over-wintering areas. During the mid-summer period, juveniles and sub-adults occupy the lower 33 mi (Figure 2). Mixes of all size groups are found in the middle drainage from the South Fork Goodpaster River up to Central Creek, but adults are predominately found above Central Creek.

From 1995 to 1997, abundance estimates of the Arctic grayling spawning stock were obtained for the lower 33 miles of the Goodpaster River during May. During this three-year period, population estimates of fish  $\geq 270$  mm fork length (FL) ranged from 10,095 in 1995 to 16,436 in 1996, averaging 12,632 Arctic grayling (Table 1). Starting in 1998, the abundance of Arctic grayling ( $\geq 270$  mm fork length), using a multi-year Jolly-Seber approach ranged from 9,198 to 14,808 fish and averaged 12,885 fish (Table 1).

Movements of Arctic grayling prior to and after spawning are extensive and rapid (Ridder 1998, 1998b). Adult Arctic grayling in the Delta Clearwater River were implanted with radio tags in an experiment to study movements. It was demonstrated that these tagged Arctic grayling overwintered predominately in the Tanana and Goodpaster Rivers. During the first two weeks of May, 60% of the tagged grayling were located in the lower 33 miles of the Goodpaster River the remainder were located in seven other streams (Ridder 1998b). All but one (98%) of the tagged fish returned to the Delta Clearwater River for summer feeding areas (Ridder 1998b). Dates of return to the Delta Clearwater River ranged from May 21 to June 23 (Ridder 1998b). As a result of Arctic grayling movements in the spring and fall, the Goodpaster River fishery is prosecuted more on the summer juvenile and sub-adult population.

The Goodpaster River serves as a spawning, summer feeding, overwintering, and nursery stream for Arctic grayling. Some of the post-spawning fish move to other streams such as the Richardson and Delta Clearwater rivers for summer feeding (Ridder 1998a, b; Parker 2000; Figure 1). The Delta Clearwater River is the largest summer feeding stream in the area and the Goodpaster River is the largest contributor of adult Arctic grayling, making up to 60% of this stock (Ridder 1998b). Because of this movement behavior additional exploitation occurs on the

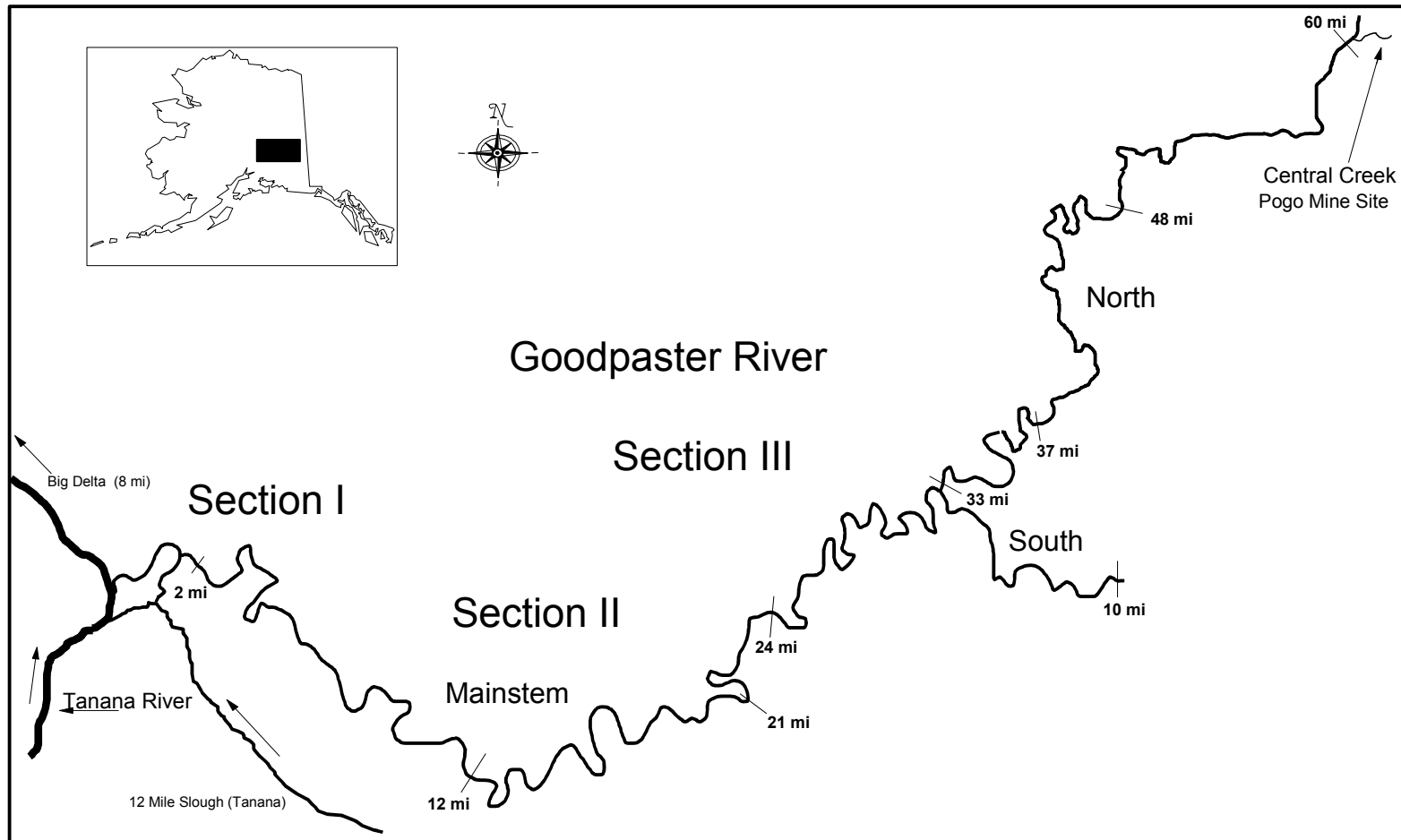


Figure 2.-The Goodpaster River.

**Table 1.-Estimates of abundance calculated using the Peterson and Jolly-Seber estimators for all fish and for males only of Arctic grayling ( $\geq 270$  mm FL) in the lower 33 miles of the Goodpaster River, May 1995 – 2002<sup>a</sup>.**

Year	Peterson		Jolly-Seber	
	N'	SE[N']	N'	SE[N']
1995	10,095	1,095	---	---
1996	16,436	2,124	14,145	1,488
1997	11,364	1,682	12,278	1,173
1998	---	---	9,198	970
1999	---	---	14,808	2,038
2000	---	---	12,442	1,601
2001	---	---	14,437	1,775
2002	12,616	1,453	---	---
Average			12,885	

<sup>a</sup> Estimates of abundance from Parker *In prep*.

Goodpaster River Arctic grayling stock from other sources. From 1977 to 1986 harvests in the Delta Clearwater River (DCR) averaged 5,700 fish and was ranked in the top five Arctic grayling harvest fisheries in the Tanana drainage (Ridder and Gryska 2000; Gryska 2001). From 1987 through 1994, average annual harvest declined to 1,800 fish then with catch and release regulations imposed in 1997 harvest have been zero since (Gryska 2001; Parker *In prep*). Hypothetically, we can estimate how much of the GPR stock in the DCR could be harvested from abundance estimates generated in 2000. Abundance of Arctic grayling  $\geq 270$  mm FL in the Delta Clearwater River was 7,634 fish (SE = 900; Gryska 2001). Abundance of Arctic grayling  $\geq 270$  mm FL was 12,442 fish (SE = 1,601; Parker *In prep*). Given that 60% of the Arctic grayling stock in the DCR were GPR fish, then nearly 4,600 ( $7,634 \times 0.60$  or 37%) of GPR adult fish were in the DCR. If 1,000 fish were harvested in the DCR in 2000, then 600 would be added to the estimate of 42 (Walker et al. *In prep*) harvested in the Goodpaster River for an exploitation rate of 5% ( $640/12,442$ ) on the Goodpaster River stock. There is no harvest on the DCR today with catch and release regulations that exist for adult fish. If harvest were ever allowed in future years, then models as the one demonstrated above are used to come up with optimal harvest levels on both systems. Contribution from the Goodpaster River to streams such as the Richardson Clearwater River and others are unknown at this time but are thought to be small.

## FISHERY PERFORMANCE

From 1997-2001, sport harvest of Arctic grayling from the Goodpaster River averaged 620 fish of which 340 were less than 12 inches (304 mm TL-Total length), and 280 fish were greater than 12 inches. 270 mm Fork Length (FL) is used by ADF&G for reporting abundance estimates which is nearly the same size as a 12-inch TL fish commonly used in regulation (280 mm FL =

305 mm TL; Grabacki, 1981), The average catch of Arctic grayling during the same 5-year period was 3,228, of which 2,170 fish were less than 12 inches and 1,058 were greater than 12 inches (Appendix A). More sport harvest of adult Arctic grayling is thought to occur in the Goodpaster River during the spring and fall when the fish are moving. The Statewide harvest survey suggests that mainly juvenile-sized fish are caught in the Goodpaster River. This is because many of the adults leave the lower section during the summer when most of the effort occurs. The Goodpaster River fishery is under no season or size restrictions and operates under the general region-wide regulation, which is a harvest and possession of 5 fish per day.

Angler effort in the fishery has been erratic, ranging from 477 to 3,061 angler-days, and averaging 1,706 angler-days from 1983-1999 (Appendix A). Catch data, first estimated in 1990, shows an upward trend to its greatest level in 1998 of 4,700 fish. Anglers appear to practice more catch-and-release on the Goodpaster River in recent years than prior to 1996 (Appendix A). The typical angler owns a cabin on the Goodpaster River and will fish grayling near their place of residence. Less typically, cabin owners will make special trips away from their cabin when wanting to target locations on the river where pike and burbot can be caught. This is no frills fishing; anglers use spinning rods with Mepps spinners or casting lures keeping what grayling they catch for immediate consumption. Non-cabin owners take boats from the Tanana River Bridge or Clearwater Lake to the Goodpaster River to fish grayling since this is the closest river to Delta Junction in which grayling can be caught and kept. In recent years there have been inquiries about flying into the upper watershed at Tibbs Creek airstrip for float trips although it is unknown how many trips occur. Teck-Pogo Inc. has also received inquiries about using their landing strip to stage float trips.

## **FISHERY MANAGEMENT**

Seasonal migrations and stratified summer populations in the Goodpaster River Arctic grayling population must be considered in management planning. Extensive migrations occur in the fall with fish moving to overwintering areas and again in the spring when fish move to spawning areas before dispersing to summer feeding areas. The migrations can be complex even within the tributaries of the Goodpaster River. This migration pattern presents a management situation where sport harvest on one stock of Arctic grayling such as in the Goodpaster River, exists in other rivers. The question, is the cumulative harvest on one stock in the Goodpaster, Delta Clearwater, and Richardson Clearwater rivers for example, sustainable? Designing management programs and setting regulatory policy for such fisheries without quantifiable knowledge of migrations, the number of stocks involved, and their respective recruitment, may result in a loss of opportunity for anglers or over-exploitation of the stocks.

The Goodpaster River open-water fishery harvests primarily juveniles and sub adults (fish less than 270 mm FL) in the lower 33 mi (50 km) of the river during June through August. Adults however, comprise a majority as in 2002 (88%), of the assessed population in the lower 33 miles of the Goodpaster River in May (Parker *In prep*). After spawning is complete by the third week in May about a quarter of these fish migrate to the DCR and the remainder move upstream (Ridder 1998a). Adult Arctic grayling that spawn in the Goodpaster River are subjected to fishing effort and harvest in other rivers besides the Goodpaster River.

The fluctuation in interannual Arctic grayling population size within interior Alaska Rivers is not unusual given the complex nature of the spawning, summer feeding, and over-wintering migrations that occur annually. Variability in recruitment, namely during spawning, emergence

and the larval stage, due to spring floods has produced a “boom and bust” type situation for many grayling stocks in the Tanana River drainage (Clark 1992). Typically when water levels are normal or flood events are minimal, recruitment is good, and conversely when high discharge events occur such as occurred in the late seventies and early eighties, declines in population abundance were observed throughout the drainage.

## MANAGEMENT OBJECTIVE AND RATIONALE

The management goal for the Goodpaster River is to maintain an Arctic grayling spawning population which sustains the fishery in its current state.

The objective for the Goodpaster River recreational fishery is:

- 1. To maintain the Arctic grayling population such that fish numbers do not fall below 9,000 fish (greater than or equal to 270 mm fork length) in the assessed portion of the river in May.**

Average abundance of adult (>12 inches) Arctic grayling in the Goodpaster River is 12,885 fish which represents the assessed spring adult population in the first 33 miles of the river (Table 1). The lowest estimate is 9,198 ( $\geq 270$  mm FL) fish in 1996 and the largest 14,808 ( $\geq 270$  mm FL) in 1999 (Table 1). It is believed that even the lowest estimate represented a healthy stock. If the population were to go below 9,000 in two consecutive years, then regulatory action would be proposed.

A Harvest of 2,000 Goodpaster River Arctic grayling over 270 mm annually may indicate overexploitation. This level of harvest includes a percentage of harvest that occurs in local streams; such as Delta Clearwater River, Shaw Creek, Tanana River, Blue Creek, Richardson Clearwater River, Volkmar Creek, and others. Currently, very little harvest is attributed from these sources because of the catch and release regulation on the DCR, for example (Table 2).

Investigation of contributions of Goodpaster River Arctic grayling adults to the Delta Clearwater River (DCR) harvest determined that the largest contributor of grayling (60%) to the DCR was the Goodpaster River (Ridder 1998b). In 1995 and 1996 the Goodpaster River (GPR) contributed 10% and 7% of its adult population respectively to the DCR. During 1995 and 1996, the exploitation rate of the GPR stock in the DCR was 5.2% and 2.8% respectively (Ridder 1998b). Additionally, the GPR fishery exploits the grayling population about 4% per year (average from 1995-2001) ranging from less than 1% (2000) to nearly 9% (1995) and are considered sustainable (Table 2). Since 1998, harvest of adult grayling was prohibited within the Delta Clearwater River.

For management purposes, combined harvests on the GPR stock of 2,000 adult fish (> 12 inches) deserve consideration of restrictive regulations to curb harvest not only in the Goodpaster River but in the Delta Clearwater River and others as well. Historically, harvests in the Goodpaster River occasionally exceeded 2,000 during the 1980s (Appendix A).

Arctic grayling harvest is generally limited to the lower 33 miles of the Goodpaster River below the confluence of the South Fork Goodpaster River because of access. Harvest of Arctic grayling above the confluence of the South Fork Goodpaster River is mostly from anglers that float down from the headwaters or use small jet boats or airboats.

**Table 2.-Abundance, harvest, and exploitation of adult (>12 inches) Goodpaster River Arctic grayling (1995-2001).**

Year	GPR Abundance <sup>a</sup>	GPR Harvest in DCR <sup>b</sup>	Harvest in GPR <sup>c</sup>	Total Harvest of GPR Spawners	Exploitation of Assessed GPR Spawners
1995	10,095	325	556	881	0.087
1996	14,145	483	408	891	0.065
1997	12,278	155	258	413	0.033
1998	9,198	0 <sup>d</sup>	474	474	0.056
1999	14,808	0 <sup>d</sup>	176	176	0.010
2000	12,442	0 <sup>d</sup>	42	42	0.004
2001	14,437	0 <sup>d</sup>	325	325	0.023
Mean	12,486	281	171	457	0.039

<sup>a</sup> Spring abundance for the first 33 miles of the Goodpaster River for fish > 12 inches or  $\geq 270$  mm FL, using the Jolly-Seber and Peterson estimates (Table 1).

<sup>b</sup> Assuming 60% of the Delta Clearwater River summer stock adults of Goodpaster River origin (Ridder 1998b).

<sup>c</sup> Total harvest of grayling >12 inches as reported in Howe et al. 1996; 2001a, b, c, d; Walker et al. *In prep*; Jennings et al. *In prep*. (also Appendix A).

<sup>d</sup> Catch and release only regulation for the Delta Clearwater River starting in 1997.

Regulatory options to reduce harvest and protect the Goodpaster River Arctic grayling population include; 1) establishment of minimum size limits; 2) designating sections of the river for catch-and-release fishing; 3) establishing a season closure including a winter closure on portions of the Tanana River where grayling overwinter in ice-free water; and, 4) implementing change in bag limits.

Historically, very little fishing occurs in the upper Goodpaster River above Central Creek. The establishment of a 50-man camp on the river at the Pogo site could affect harvest and effort in the future. Currently, a Pogo-Teck Inc. fishing policy prevents harvest from workers while on duty (Appendix B). However, if a permanent road is build to the mining site, without restricted public access more potential angler effort may occur and this management plan will be revisited at that time.

## **EVALUATION AND RESEARCH RECOMMENDATIONS**

In order to meet objective levels of harvest in Arctic grayling fisheries dependent on the Goodpaster River stock, ADF&G must ensure that harvests of Goodpaster stock are sustainable.

Management data requires periodic estimates of the May population of Arctic grayling within the assessed area of the Goodpaster River.

Since the current and recent estimates of abundance are over 9,000 and the Delta Clearwater River is conservatively regulated, assessment every year is not necessary. It is recommended that abundance be estimated in the assessed area at least every five years. If at that time abundance is below 9,000, assessment will also be undertaken the next year. Estimation of

abundance will also be initiated if harvest of Goodpaster River adults is greater than 2,000 in two consecutive years.

Further assessment is also recommended in preparation for possible increased use caused by future development. This includes collecting baseline information on the Arctic grayling population in the upper watershed.

For purposes of monitoring harvest of Arctic grayling from the Goodpaster, Delta Clearwater, Richardson Clearwater and Volkmar rivers as reported in the Statewide Harvest Survey will be considered as part of the Goodpaster River spawning stock.

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## **APPENDIX A**

**Appendix A.—Estimates of effort, harvest, and catch for Arctic grayling and other species in the Goodpaster River (1983-2000<sup>a</sup>).**

Year	Angler Days	Harvest		Total	Harvest			Catch		Total	Catch		
		Grayling <12"	Grayling >12"	Grayling Harvest	Pike	Burbot	Whitefish	Grayling <12"	Grayling > 12"	Catch Grayling	Catch Pike	Catch Burbot	Catch Whitefish
1983	1,989	...	...	3,021	0	0	0	...	...	...	...	...	...
1984	766	...	...	1,194	65	221	65	...	...	...	...	...	...
1985	2,844	...	...	2,757	0	350	175	...	...	...	...	...	...
1986	933	...	...	1,508	16	88	0	...	...	...	...	...	...
1987	3,061	...	...	1,702	0	13	0	...	...	...	...	...	...
1988	1,037	...	...	1,273	36	109	0	...	...	...	...	...	...
1989	1,930	...	...	1,964	10	120	0	...	...	...	...	...	...
1990	2,083	...	...	760	17	0	186	...	...	3,342	34	0	186
1991	786	196	440	636	0	0	0	440	465	905	0	0	0
1992	1,430	281	485	766	26	17	0	2,399	1,200	3,599	120	17	0
1993	1,692	461	127	588	9	86	0	1,217	706	1,923	66	86	0
1994	825	342	358	700	0	0	309	945	864	1,809	66	0	309
1995	2,028	0	325	325	106	23	0	1,673	1,504	3,177	408	23	0
1996	1,244	484	351	595	33	16	0	2,167	754	2,921	142	35	0
1997	2,226	246	398	532	60	0	0	2,552	1,896	4,448	292	0	0
1998	774	206	462	671	0	109	0	2,878	1,827	4,705	34	109	0
1999	1,915	677	175	854	18	51	0	3,297	585	3,882	26	137	0
2000	477	21	42	63	0	0	0	720	570	1,290	95	0	0
2001	787	548	325	873	0	7	0	1,403	412	1,815	9	7	0
Averages													
1983-2001	1,519	315	317	1,112	21	75	53	1,790	980	2,818	108	35	41
1997-2001	1,244	340	280	620	16	33	0	2,170	1,058	3,228	91	51	0

<sup>a</sup> Mills 1984-1994, Howe et al. 1995, 1996, 2001a, b, c, d; Walker et al. *In prep*; Jennings et al. *In prep*.

## **APPENDIX B**

## **Appendix B.-Pogo project fishing policy.**

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APPLIES TO: All employees of Sumitomo and Teck and associated contractors.

POLICY: Teck, the operator of the Pogo gold exploration project, strictly forbids fishing on the Goodpaster River and its tributaries surrounding Pogo. This includes harvest and "capture and release" of grayling, burbot, Northern pike, whitefish, salmon and any other aquatic species present in these watercourses.

EXCEPTIONS: With permission from Teck and the Alaska Department of Fish and Game, environmental scientists under contract to Teck and government employees may harvest aquatic species for scientific studies. Pogo employees may fish in these drainages only if they are off duty and have traveled to the area by their own efforts. Pogo employees who are off duty but are still on site may not fish.

RATIONALE: The Alaska Department of Fish and Game does not allow salmon fishing anywhere in the Goodpaster River and few of the other game species of fish are available in the upper river areas. A portion of the Goodpaster River Arctic grayling population migrates into the upper watershed, including the vicinity of the Pogo site, during the open water months. Historically, few fishermen access the upper watershed area. However, fishermen do utilize other portions of this grayling population, primarily in the lower Goodpaster River and the Delta Clearwater River. Past experience has shown that grayling population in the lower Goodpaster River and Delta Clearwater River has declined under heavy fishing pressure. Additional fishing pressure by Pogo project personnel would have the potential to further reduce this fish population. By not allowing fishing by project personnel at Pogo, we can help minimize Pogo project impact to this valuable resource.

PENALTIES: Adhering to Teck's no fishing policy is a condition of employment. Employees found violating this policy will be dismissed from the project.

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