

2005 Yukon River In-Season Management Fund and Test Fisheries

Final

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And

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CRE-11-05

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January 06

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Prepared for:

Yukon River Panel

Yukon River Commercial Fishing Association

Tr'ondëk Hwëch'in First Nation

ACKNOWLEDGEMENTS

Many thanks to the people who participated in this project's Steering Committee, many of whom volunteered their time to contribute to the success of this project. Special thanks to Patrick Milligan and Rick Ferguson of DFO for the technical review of this project and their contribution to the Steering Committee. Thanks go to staff at Tr'ondëk Hwëch'in for their hard work in the distribution of fish. Finally, thanks go to the coordinator, Kirsten Davis for project organization. Funding for this project was provided by the Yukon River Panel's Restoration and Enhancement Fund.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	i
ABSTRACT.....	1
INTRODUCTION.....	2
METHODS, MATERIALS, RESULTS AND DISCUSSION.....	4
RECOMMENDATIONS.....	7
APPENDICIES.....	7

ABSTRACT

In 2005, test fisheries were not conducted for either Chinook or chum salmon. Pre-season projections indicated an average to below average run for Chinook and average to above average escapements for chum. In season indications from Alaskan test fisheries, sonar counts and commercial fisheries were consistent with these predictions. The combination of these results with early returns from the DFO wheels at the border enabled the Yukon Salmon Committee to recommend that an unrestricted aboriginal fishery and a restricted commercial fishery take place. For these reasons, a test fishery was not implemented in 2005, the In Season Management Committee did however meet in the run up to the fishery and this report will concern itself with their deliberations.

INTRODUCTION

Salmon management in the Yukon Territory is preformed, technically, by way of a mark-recapture program. This program is conducted primarily by Fisheries and Oceans Canada (DFO) who capture salmon from the Yukon River just upstream of the Canada/U.S. border with fishwheels and mark these fish with “spaghetti” tags. After marking, these fish are released back into the river and allowed to continue their upstream migration. Crucial to this program and to the assessment of in-season abundance and the ability of fisheries managers to make in-season fisheries management decisions, is gaining re-capture information from these tagged fish. This information has traditionally been gathered via the commercial salmon fishery. In recent years, the numbers of salmon returning to Canada have been depressed to a level that, at times, has not allowed managers to open a commercial salmon fishery, given system-wide conservation goals. It is for this reason that test fisheries have been utilized to gather this information.

There are two species of salmon that are harvested from the Yukon River; Chinook (*Oncorhynchus tshawytscha*) and chum salmon (*O. keta*). Test fisheries organized for Chinook management have been consumptive, in that gillnets are used. The resulting Chinook salmon captured and retained are distributed to Yukon First Nations for subsistence purposes. Chum salmon test fisheries are non-consumptive, as live-capture fishwheels are used to gather the re-capture information.

To date, test fisheries have been operated (1997-2004) on a year-to-year and “contingency only” basis. The In-Season Management Fund (IMF) was created to enable managers to perform this technical fisheries management project on a more long-term basis and to allow for additional management information to be collected. This community-based project is conducted by a partnership of the Yukon Commercial Fishing Association (YRCFA), the Tr’ondëk Hwëch’in (TH),

other Yukon First Nations, and DFO. The project is now managed by way of a Steering Committee.

The apparent decline in the productivity of Yukon River chum and Chinook stocks, as witnessed during the 1997 to 2003 period, has not always allowed for a sufficient commercial fishery to estimate stock size using traditional mark-recapture techniques. Again in 2005, uncertainty regarding the preseason forecast indicated that a full strength commercial fishery for both Chinook and chum would not be likely. Commercial catch data, including tag recoveries, has been the traditional source of recapture information for the DFO mark-recapture program. This mark-recapture program estimates run abundance and escapement numbers to the Canadian portion of the Yukon River. This project, the In-Season Management Fund (a.k.a. 'test fishery'), allows the continued recovery of tags during periods when the commercial fishery is closed or limited due to poor or uncertain adult returns.

By employing and involving aboriginal and non-aboriginal commercial fishers and local assistants in these test fisheries, the secondary objectives are: to contribute to community-based management; to foster conservation and stewardship ethics; and, to maintain the value of Canadian-origin Yukon River salmon to Yukoners, through the maintenance of a vested interest in them.

By managing these test fisheries via an "In-Season Management Fund" and a project steering committee, this project has the potential to become more effective as a result of increased involvement from the scientific community, First Nations and fishers in general.

Given both the project's "contingency only" status in any one given year and the likelihood of its required continuation, this new method of managing test fisheries is thought to be a logical progression of fisheries management.

METHODS, MATERIALS, RESULTS AND DISCUSSION

Steering Committee

The first Steering Committee meeting was held on May 11th and a subsequent meeting was held on June 8th. Minutes from these meetings have been attached to this report (Appendix A). The project's Steering Committee is made up of representatives from the Yukon River Commercial Fishing Association (YRCFA), Tr'ondëk Hwëch'in (TH) and Fisheries and Oceans Canada (DFO) and decisions related to the project have been made by consensus. Project organization and the hiring of coordinators and fishers were conducted via the IMF steering committee. Recommendations were suggested by the committee as a whole.

The Yukon River In-Season Management Fund (YRISMF) Steering Committee was composed of: Patrick Milligan, DFO; Mel Besharah and Peter Dunbar, YRCFA; Art Christianson and Roberta Joseph, Tr'ondëk Hwëch'in and; Sebastian Jones, Stewardship Coordinator

Chinook Test Fishery

A scientific collection license to conduct the test fishery was applied for and received from DFO. Authorization from TH was sought to conduct the test fishery and was gained by way of the TH Chief and Council. Various other project details were considered by the Steering Committee, such as: the hiring of a project coordinator; developing a fish distribution plan; locations and timing of fisheries; choosing project participants (fishers); and, data collection methodology.

In 2005, managers went into the chinook season with the intent to conduct a minimum of one test fishery “opening” to assess run strength. With this directive, a coordinator was hired to organize the chinook test fishery openings and fishers were solicited to participate in the test fishery. A criterion for involvement was developed to characterise the expectations of fishers involvement. This document was agreed to by the Steering Committee (Appendix “B) and distributed to interested fishers. Data collection sheets were developed by DFO. It was agreed that fishers would be organised into two groups, each fishing in an upstream and a downstream location; one in the Dawson City area and one in the Fortymile River area.

Chum Test Fishery

As the season progressed, it became apparent that the chum run was going to vastly exceed expectations and no steering committee meetings were held to discuss the chum season. It was determined that the chum test fishery was not required as run strength was sufficient to allow for commercial openings.

Discussion

Post-season discussions did not take place to any formal extent, as there was no test fishery. The first meeting of the 2006 ISMFC will take place in May.

The recommendations from 2004 were applied as follows:

1. That a person be hired to ensure data collection forms and collection licenses are produced and distributed in a timely manner. **This was done by the coordinator**
2. That this person assist the Dawson Community Steward to prepare a draft selective chinook fishing strategy and implementation plan for review by the Steering committee before the 2005 season. **Upon advice from DFO and the YRP, a selective fishing strategy was developed as a stand alone R&E project; CRE-10N-06**

3. That the fish wheels used for the chum test fishery be readied and utilized in the above noted chinook selective fishery. **See above recommendation. Separate fish wheels shall be used.**
4. That if only one four-day chinook test fishery opening is scheduled that the entire catch be assigned to the Tr'ondek Hwech'in First Nation to distribute as they see fit. The rationale for this recommendation being: the fishers will have other opportunities to obtain fish and the number of fish to be distributed amongst other FNs will be very small, TH will easily be able to absorb the fish **Although there were no fish caught, it was anticipated that this recommendation would have been adopted**
5. That the solicitation of interest in being a test fisher be sent to all qualified fishers rather than just commercial fishers. **This was done.**
6. That an attempt be made to rationalize the likelihood of a test fishery based on brood year expectations similarly to the system presently employed in the Integrated Fishery Management Plan. **In effect, this was adopted.**
7. To hold the first ISMSC meeting in June. **This was adopted.**

Project financial information can be obtained from the attached file:

“CRE-11-05Financial Statements.xls”.

This file can be found in Appendix E.

RECOMMENDATIONS

NONE

APPENDICIES

Appendix A – Steering Committee Minutes

2005 In-season Management Fund - Test Fisheries (CRE-11-05)

MEETING MINUTES

May 11, 2005 - 2:00PM

Absent:

Present:

Art Christiansen, Tr'ondek Hwech'in
Jake Duncan, CSC-YF&WMB
Roberta Joseph, Tr'ondek Hwech'in
Kirsten Davis, Project Coordinator
Sebastian Jones, Dawson Stewardship Coordinator
Patrick Milligan, STAD-DFO
Rick Ferguson, STAD-DFO
Linda Taylor, DCRRC

1. Agenda approved by consensus. There was a concern raised that details of item number two were considered inappropriate for inclusion in the agenda.

2. Coordinator:

| A decision was reached to retain the coordinator hired by the interview process of 2004.

3. Review recommendations from 2004 final report.

1. Rick was instructed to develop data forms and input sheets ASAP and forward them to Sebastian for the committee's review at the next meeting.
2. The technical advisors pointed out that this was not part of the proposal for this year so it was not adopted
3. It was decided that Seb will work out the cost of running one of the live catch wheels during Chinook season, compare the cost of running and maintaining one wheel to both wheels and come up with an estimate that Pat will review and pass along to Hugh. Mel says that cost of launch and maintenance will be covered already and wear and tear will be minimal. The location of the wheels may pose a problem, but moving them will not

be costly. There will be a need to delegate someone to maintain the wheels during the interim season.

4. Art will take this recommendation to Chief and Council and report back to the Steering Committee with their decision
5. Make that the second meeting!
6. The fishers must be able to mimic the Commercial Fishery. Local knowledge and experience will produce the best results as this is a mark/recapture program and the ratio of tagged fish to untagged fish is what counts. The candidates must have a demonstrated ability to fish, the equipment and the time to do so. The existing qualifications will be reviewed and will be passed along to Art and Roberta to distribute to Subsistence fishers once the Test Fishing Strategy is finalized.
7. Seb will take this idea to the Salmon Committee as an agenda item for their next meeting. Pat stressed that the first priority is conservation and that it would have to be a fairly special looking forecast to go straight into Commercial Fishing. In order to make a confident estimate it is necessary to reach the peak of the run.

4. Review objectives from 2005 proposal and reconcile with 2004 recommendations:

Objectives 1 through 3 were found to be concerned with setting up the committee and accepted, the 4th spoke to using the live catch wheels and size selective nets in the test fishery, however, the R&E \$ are oversubscribed and will not be released for this.

5. Next Meeting: Wednesday June 8th, 2pm, TH Lands room

Other Items:

Seb suggested that the Committee take a look at how Test Fisheries are operated on other rivers and compare this method for costs etc., to the method currently in place. Rick will send this information to the Steering Group as soon as possible.

Art requested the IFMP be forwarded to the committee.

SUMMARY OF ACTION ITEMS:

#	WHO	WHAT	BY WHEN
1	Rick	streamline forms and update licenses	ASAP
2	Seb	Complete estimate for cost of running wheel/wheels during Chinook TF season.	ASAP

3	Art	Chief and Council decision on fish distribution.	ASAP
4	Seb and Kirsten	review qualifications	before next meeting
5	Kirsten	send out letters of interest to all qualified fishers	after TF Strategy is finalized
6	Pat	Forward ADF&G's selective fishing report to committee	ASAP
7	Rick	send info on other TF methods	ASAP
8	Seb	add recommendation #7 to next Salmon Committee meeting agenda	before Salmon Committee's next meeting
9	Pat	Send IFMP to Committee	ASAP

2005 In-season Management Fund - Test Fisheries (CRE-11-05)

MEETING MINUTES

June 8, 2005 - 2:00PM

Absent:

Present:

Art Christiansen, Tr'ondëk Hwëch'in
Peter Dunbar, YRCFA
Roberta Joseph, Tr'ondëk Hwëch'in
Kirsten Davis, Project Coordinator
Sebastian Jones, Dawson Stewardship Coordinator
Patrick Milligan, STAD-DFO
Rick Ferguson, STAD-DFO

-
1. Agenda approved by consensus.
 2. Review of action items as follows:
 1. Rick is putting the finishing touches to the forms.

2. Completed.
3. Chief and Council have yet to meet. Art will inform committee of decision.
4. Completed. Test Fisher Criteria will be altered to include suggestions made by committee members, ie. net check schedules every six hours, mandatory attendance of workshop on data sheets and fish handling technique.
5. Completed.
6. Pat will check on the Jeff Bromaghin report and e-mail if not already done so.
7. Completed.
8. Completed. Salmon Committee put decision on manager's heads to do as they see fit.
9. Pat will send ASAP.

3. The Test Fishery strategy for the 2005 season is to assemble a list of interested fishers, provide training, prepare to go fishing on short notice. The selective nets will be given to the fishers who, in the opinion of the committee, will do the best job.

4. The season outlook according to the YRDFA In-Season Management teleconference projects that run timing is average, possibly five to seven days later than the 2005 season. Water high and fast. No more kings reported walking by Hooper Bay, although some chum were caught in nets.

5. Roberta kindly booked the lands room for our next meeting on June 29 at 2 pm.

SUMMARY OF ACTION ITEMS:

#	WHO	WHAT	BY WHEN
1	Kirsten	e-mail letter of interest to Roberta	ASAP
2	Rick	complete forms	ASAP
3	Pat	send IFMP to committee	ASAP
4	Pat	forward ADF&G's selective report to committee	ASAP
5	Art	bring Chief and Council's decision on fish distribution to next meeting	by next meeting

Appendix B – Involvement Criteria

DRAFT CRITERIA FOR FISHERS INVOLVEMENT IN THE 2005 TEST FISHERY

The primary objective of the Test Fishery is to collect and report data to be analyzed by DFO. Stock assessment estimates, or the understanding of how many fish are migrating to the spawning grounds, will be based primarily on the data collected in the Test Fishery. If run sizes are sufficient to allow a commercial fishery to take place, then stock assessment will be achieved with data collected from a commercial fishery.

Care and Handling of Fish

The fish must: be cleaned
 have the head left on
 have the gills removed
 be packed in ice

The roe must be placed in a bucket and the bucket stored on ice. Ice will be available to fishers at the ice machine. Fishers can pick up a key from the coordinator. Upriver fishers will deliver fish to Dawson and contact the project coordinator as soon as they arrive in town. Downriver fishers will make arrangements with the project coordinator prior to the opening for pickup.

Data Collection

All data must be accurately recorded at every net check and submitted to the coordinator daily (this can be done by radiophone). Nets are to be checked a **minimum** of every **6** hours. Fishers will document how many nets they are using, the location of each net, and the length and depth of each net. All nets must be **clearly** marked 'TF – 05' on the shore adjacent to the net location.

For each fish caught the fisher will record:

 the length
 the sex
 all tag information
 which net the fish was caught in
 approximate depth the fish was caught

At the end of every opening all data sheets and tags will be delivered to the coordinator.

The prime directive around the Test Fishery is to provide meaningful Mark- recapture data.

To achieve this, candidate fishers must be able to demonstrate the ability to mimic the commercial fishery, including but not limited to:

- Adequate gear-either nets or wheels. In certain circumstances, the program may require specialized equipment, e.g. live catch wheels or specifically sized nets, these will be provided.
- A history that shows the ability to fish effectively.
- The time to put in so that they can check the gear on the schedule required.
- Cross cultural ability.
- Participant should be able to take training and follow instructions so the data sheets are filled out in a comprehensible fashion.
- Fishers will be prepared to have part or all of their pay withheld if standards are not met.

The “product” you are providing (for payment) in the Test Fishery is data collected in an appropriate manner and fish that has been handled in an appropriate manner. Failure to produce these products may jeopardize your payment.

Appendix E – Project Financial Statements

[CRE-11-05Financial Statements.xls](#)

Summary of Costs Related to the In-Season Management Fund CRE-11-03									
Costs Related to Chinook Test Fishery:									
	Wages							\$ 1,000.00	
	Expenses							\$ -	
	Total							1,000.00	
Costs Related to Chum Test Fishery:									
	Wages							\$ -	
	Expenses							\$ -	
	Total							\$ -	
Other Expenses Related to Test Fishery based on Identified Priorities									
	Total "Other" Expenses							\$ 188.95	*
Project Administration:									
								\$ 95.12	
Total Costs Related to the In-season Management Fund:									
								\$ 1,284.07	
Amount Requested to "Top-up" Inseason Management Fund in Subsequent Year:									
								\$ 1,284.07	