

British Columbia

RIVER RAFTING GUIDE
CERTIFICATION MANUAL

2002

Registrar of Commercial River Rafting
Province of British Columbia

BRITISH COLUMBIA RIVER RAFTING GUIDE CERTIFICATION MANUAL

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BRITISH COLUMBIA RIVER RAFTING GUIDE CERTIFICATION MANUAL

CHAPTER ONE - INTRODUCTION

Fore word

To become certified, river rafting guides must successfully complete a certification examination.

This publication is designed to assist prospective guides in preparation for the certification examinations and to complete all necessary licensing requirements. It is one of the primary references to the skills and knowledge which the guide will be expected to demonstrate. It also contains the criteria established by the Registrar for the appropriate licences.

While this manual is of greatest interest to the river rafting guide and examiner, members of the general public may find it valuable as an orientation guide to the industry in this province. Copies may be obtained from the Registrar of Commercial River Rafting, P.O. Box 9398, Stn Prov Govt, Victoria BC V8V 9M9. Location address: 4th Floor, 395 Waterfront Crescent, Victoria BC V8T 5K7.

Background

British Columbia's first commercial river rafting trips were conducted on the Chilcotin and Fraser rivers in 1972. Shortly thereafter, in 1976, the River Outfitters Association of BC was formed to promote the growth of this industry.

In 1987, the Honourable Bruce Strachan, Minister of Environment and Parks, appointed the Commercial River Advisory Committee. The committee's objective was to make recommendations about river rafting standards and requirements based on input from the industry. One important result was the development of the certification examination.

Purpose of the Manual

The purpose of the British Columbia River Rafting Guide Certification Manual is to assist prospective guides in preparation for the British Columbia River Rafting Guide Certification Examination, and complete all the necessary licensing requirements.

This manual achieves its purpose in three ways:

1. It lists the detailed skills and knowledge that the guide will be required to demonstrate according to specific minimum standards.
2. It specifies the arrangements the guide must make prior to the certification examination, and lists the material and equipment he/she is required to bring to it.
3. It details the steps to be followed which will enable the guide to obtain a licence.

Description of the certification examination and the licensing process are provided in the next section, followed by directions for using this manual to the best advantage.

CHAPTER TWO

THE CERTIFICATION EXAMINATION

General

All commercial river rafting guides must be certified and licensed prior to conducting rafting trips on rivers located in British Columbia.

Certification and licencing are obtained by passing both the written and practical parts of the certification examination. Practical exams are based on “catching eddies” and not just the ability to run a river. Guides (class I waters only) are not required to pass a practical exam (performance checks).

Written and Practical

The certification examination is made up of two parts:

- A. Certification Examination Part One: Written/Oral
- B. Certification Examination Part Two: Practical

This manual refers to these as **written** and **practical**.

The prospective guide must pass the **written** and the **practical**. Failure of either constitutes a failure of the complete examination. In such an event, the river rafting guide may re-register for another examination. However, only two attempts are allowed in any one calendar year with the exception for Module One which may be attempted for a third time. A third exam re-write for Module One must take place at another exam site (provided there is available space) or at Capilano College.

Exam Process (Oral)

An oral examination is available for individuals who have reading difficulties provided it is administered by the Capilano College staff and is pre-arranged.

An oral examination will not be allowed as an avenue to a “fourth try” for the Module One exam or for a “third try” for all other written exams. Therefore, it is important that you declare your reading difficulties at the time of registration.

Any costs associated with the oral exam will be borne by the examinee.

- You may take the examination at Capilano College as long as you have made an appointment ahead of time.

Examination Modules

The length and detailed content of the **written** will depend on whichever of the available examination modules the guide writes. These include:

Module One	Common Skills and Knowledge	Mandatory for all.
Module Two	Common Skills and Knowledge	Mandatory for those who have attempted and failed Module One.
Module One (a)	Common Skills and Knowledge	Mandatory for those who have attempted and failed Module Two and have chosen to attempt a third re-write.
Module Three	Paddle Endorsement	Mandatory for paddle raft guides only.
Module Four	Oar Endorsement	Mandatory for oar raft guides only.
Module Five	Motor Endorsement	Mandatory for motor raft guides only.
Module Six	Regulatory Knowledge	Mandatory for trip leaders only.

Common Skills Certification and Endorsement

To qualify as a guide or senior guide (see note below) you must successfully complete a minimum of two **written** modules, that is:

Module One, and either of Modules Three, Four or Five, and at least one **practical** endorsement, that is, Paddle, Oar or Motor.

You may elect to attempt any module, or modules, in addition to the minimum numbers indicated, however, you will receive credit only for those in which you achieve a **pass** mark.

Note: Guides (Class 1 waters) are required to pass only the written module 1.

Advanced Skills Certification

To qualify as a trip leader, you must successfully complete a minimum of three written modules, that is:

Module One, Module Six, and either of Modules Three, Four or Five, and at least one **practical** endorsement, that is, Paddle, Oar or Motor.

Content of Certification Examination

The content of the certification examination is based on 90 tasks normally performed by river rafting guides. The list was created by responsible authorities within the commercial river rafting industry.

Of these tasks, 15 of them are considered critical and should be given particular attention when preparing for the examination. The critical tasks have been identified with an (*) in the complete list which follows:

Critical Tasks	Number	Task
*	1.	Select a river section(s).
*	2.	Inspects a river raft and associated river equipment.
*	3.	Presents a safety orientation briefing (dry land).
*	4.	Presents a safety orientation briefing (on river).
*	5.	Runs a river section(s).
*	6.	Organizes river rescue.
*	7.	Rescues endangered person(s).
*	8.	Signals others.
*	9.	Directs others.
*	10.	Selects trip routes.
*	11.	Conducts reconnaissance.
*	12.	Evaluates river/weather conditions.
*	13.	Identifies injuries.
*	14.	Swims a whitewater river.
*	15.	Re-flips a flipped raft.
	16.	Determines number/type of raft(s).
	17.	Evaluates injured person(s).
	18.	Determines personal needs.
	19.	Determines tools and equipment needs.
	20.	Determines provisions needs.
	21.	Determines environmental clothing needs.
	22.	Determines safety needs.
	23.	Determines transportation needs.
	24.	Determines communication needs.
	25.	Assigns river guides.
	26.	Prepares trip raft(s).
	27.	Prepares trip tools and equipment.
	28.	Prepares safety equipment.
	29.	Prepares environmental clothing.
	30.	Prepares trip provisions.
	31.	Prepares communication equipment.

Critical Tasks	Number	Task
	32.	Prepares check-in area.
	33.	Prepares safety orientation briefing.
	34.	Prepares guest briefing area.
	35.	Prepares put-in/take-out area(s).
	36.	Loads/unloads raft(s), tools, equipment, clothing and provisions.
	37.	Transports raft(s), tools, equipment, clothing and provisions.
	38.	Confirms guest particulars.
	39.	Administers liability waiver forms.
	40.	Launches river raft(s).
	41.	Takes out river raft(s).
	42.	Schedules trip.
	43.	Establishes trip objectives.
	44.	Reviews trip.
	45.	Confirms resources status.
	46.	Allocates resources.
	47.	Confirms permit(s)/licence(s).
	48.	Confirms trip plans.
	49.	Sets up meal area.
	50.	Prepares meal(s).
	51.	Serves meals.
	52.	Cleans up meal area.
	53.	Determines sanitation equipment.
	54.	Prepares sanitation equipment.
	55.	Implements sanitation procedures.
	56.	Prepares fire(s).
	57.	Prepares property.
	58.	Inventories river rafting property.
	59.	Inspects river rafting property.
	60.	Maintains base camp facilities.
	61.	Repairs raft(s).
	62.	Maintains river rafting tools.
	63.	Maintains river rafting equipment.
	64.	Services vehicle(s).
	65.	Replenishes warehouse provisions.
	66.	Replenishes first aid kits.
	67.	Replenishes repair kits.
	68.	Rescues endangered equipment.
	69.	Completes company trip log.
	70.	Completes river rafting guide log.
	71.	Reports incident(s).
	72.	Reports accident(s).

Critical Tasks	Number	Task
	73.	Organizes off-river activities.
	74.	Conducts social activities.
	75.	Prepares shelter(s).
	76.	Briefs river guides.
	77.	Debriefs river guides (post trip).
	78.	Briefs others.
	79.	Presents environmental briefing.
	80.	Completes post-trip cleanup.
	81.	Solicits guest(s) feedback.
	82.	Resolves guest(s) concerns.
	83.	Maintains professional standards.
	84.	Liaises with authorities.
	85.	Details company background.
	86.	Details company qualifications.
	87.	Arranges guests special needs.
	88.	Completes USA/Canada border requirements.
	89.	Treats injuries (first aid only).
	90.	Reviews river management plan (as applicable).

CHAPTER THREE

THE CERTIFICATION PROCESS

Certification Requirements

The Registrar of Commercial River Rafting of British Columbia is the responsible provincial authority for the certification and licensing of companies and individuals who wish to conduct commercial rafting trips within the province. The following process must be followed to receive a river rafting guide licence.

1. Contact the Registrar of Commercial River Rafting of British Columbia and order the British Columbia River Rafting Guide Certification Manual.
2. Read the manual completely and select an examination date.
3. Apply to take the examination on the selected date and enclose the appropriate fees. (See Appendix Five).
4. **Complete practical experience requirements** as listed in the guide qualification section for the applicable guide classification **prior to examination date**.
5. Study, prepare for, and **pass the examinations**.
6. Once you have met the written and practical certification requirements, apply to the Registrar of Commercial River Rafting of British Columbia for the guide licence, and enclose a head and shoulder (1"X1") photograph and the river rafting guide licensing fee of \$150. (Action photos will not be accepted).

Special Note:

Term length for Guide/Trip Leader Licences have been amended with the passage of the Business Paper Reduction Act, 1998, c.26. Guide and Trip Leader Licences are now be valid for a term of up to three years from the date of its issue and may be renewed for further periods of up to three years.

2003 Tentative Examination Schedule
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The following exam dates and locations have been chosen.

Location	River	Date	Exam Type
Chilliwack	Chilliwack	Commencing Sunday, May 13	Paddle/Oar
Spences Bridge	Nicola	Commencing Sunday, May 27	Paddle/Oar
Spences Bridge	Nicola	Commencing Sunday, June 3	Paddle/Oar/Motor
Golden	Kicking Horse	Commencing Sunday, June 17	Paddle/Oar
Valemont	Fraser	Commencing, Sunday, June 24	Paddle/Oar
Chilliwack	Chilliwack	Commencing, Sunday July 15	Paddle/Oar

Note: Practical Exams will be conducted on class III water.

More information will be provided to you upon examination registration.

NOTE: *Dates and locations are subject to change due to river conditions. Please contact Capilano College at (604) 984-4901 to confirm.*

2002 Examination Fees

Registration Requirement

Fees **MUST** be enclosed or paid by credit card with your registration for the written and practical. Phone Registrations must be paid with a Credit Card. There are no refunds. **YOU ARE NOT CONSIDERED REGISTERED FOR A SITE UNLESS YOU HAVE PAID.**

Written:	Module 1*	Common Skills & Knowledge	\$35.00
	Module 2*	Common Skills & Knowledge	\$40.00
	Module 1(a)	Common Skills and Knowledge	\$40.00
	Module 3	Paddle Endorsement	\$35.00
	Module 4	Oar Endorsement	\$35.00
	Module 5	Motor Endorsement	\$35.00
	Module 6	Regulatory & Knowledge	\$35.00
Practical:	PC 1-5*	Safety Briefing, Throwbags, Z-drag, Re-flip, swim	\$35.00
	PC 6	Paddle Endorsement	\$35.00
	PC 7	Oar Endorsement	\$35.00
	PC 8	Motor Endorsement	\$35.00

***Module 1 of the written (or Module 2 if failed Module 1 or Module 1(a) if failed Module 2) and PC 1-5 of the practical are mandatory examinations.**

Motor Endorsement - Equipment Requirement

Persons taking the Performance Check 8 (Motor Endorsement) must personally (or through a rafting company) provide at no cost (to Government or Examinations Contractor), a completely equipped motor raft at the examination site for the above stated purpose.

Special Provisions

River rafting companies are required to have their “Operating Plan” approved for each river or river section on which they intend to conduct trips.

The permit contains special provisions that relate to safety and preservation of the recreational value of the specified river. You are required to be familiar with these special provisions, and may obtain further details from the Registrar of Commercial River Rafting.

First Aid (note requirements - Appendix 1 and II - Terms and Conditions)

The following agencies provide first aid training:

Barber Health and Safety Inc. (Calgary, AB)	(403) 278-7900
Canadian Institute of Safety, Search & Rescue (Cochrane, AB)	(403) 932-3689
Canadian Red Cross Society (Burnaby, BC)	(604) 522-7092
Inside Out Experience Inc. (Bragg Creek, AB)	(403) 949-3305
International Wilderness First Aid Associates Inc. (Vancouver, BC)	(800) 298-9919
Med-Aid Training Services (Calgary, AB)	(403) 248-7849
Sirius Wilderness Medicine (Montreal, QC)	(819) 242-2666
Slipstream Adventures (Victoria, BC)	(800) 667-8277
St. John Ambulance Society (Vancouver, BC)	(604) 321-2651
The Academy of Emergency Training (Vancouver, BC)	(604) 878-1243
Trauma Tech (Vancouver, BC)	(604) 662-7740
Wilderness Medical Associates	(800) 369-4198
Workers Compensation Board (Vancouver, BC)	(604) 276-3090
Yukon College (Whitehorse, YT)	(867) 668-5200

The following first aid certification is **not** accepted:

Occupational First Aid Level 1 (WCB) (Including Transportation Endorsement)
 Emergency First Aid (St. John's, Red Cross)
 Royal Life Saving (or lifeguard)
 Any first aid with less than 16 hours of instruction.

If you have first aid certification that is not listed above, check with the Registrar's office for approval.

River Rescue

The following persons provide approved swiftwater rescue training and certification in the Province of BC for professional river guides:

1) Rescue 3 Instructors:

Robert Beaudry, BC Interior (Clearwater)	(250) 674-3914
Walter Bucher, Northern BC (Smithers)	(250) 847-2409
Eric Ridington, Southwestern BC (Whistler)	(604) 894-2388
Rivers & Oceans and Mountains	(877) 271-7626
Rescue Canada (Vancouver)	(604) 244-3725
Michael Schoenbachler, Southwestern BC (Chilliwack)	(604) 794-7249
Bob Daffe, Yukon (Whitehorse)	(403) 633-2742
Sean Alexander, Canadian Whitewater Adven. (Cochrane AB)	(888) 577-8118

2) Canadian Safety, Search and Rescue -
 Gerald Edwards, (Cochrane, AB)

(403) 932-3689

CHAPTER FOUR LICENCE QUALIFICATIONS

The following are the criteria established by the Registrar for Guides licences and Trip Leaders licences.

GUIDE (for Class I waters) QUALIFICATIONS

- must not be less than 19 years of age
- must be a competent swimmer
- must have knowledge of the construction of a raft and be capable of effecting repairs and replacement parts of the raft
- must have knowledge of safety, emergency procedures and the hazards associated with the rivers you will be rafting
- must not have any outstanding fines levied for conviction under the *Commercial River Rafting Safety Act*
- must pass a written examination approved by the Registrar.

GUIDE QUALIFICATIONS

- must not be less than 19 years of age
- must be a competent swimmer
- Must have completed (in control of a raft) 60 hours (12 days) in any one type of craft (paddle/oar/motor) under the supervision of a qualified trip leader in the grade of whitewater similar to that as you expect to guide commercial raft trips. This must be completed prior to taking the examination. For additional exams in a second or third type of craft – the applicant must have a minimum of 25 hours (5 days) of rafting experience for each type of craft. Applicants must sign, at the exam site, a “Declaration” signifying rafting experience.
- must have knowledge of the construction of a raft and be capable of effecting repairs and replacement parts of the raft
- must have knowledge of safety, emergency procedures and the hazards associated with the rivers you will be rafting
- must not have any outstanding fines levied for conviction under the *Commercial River Rafting Safety Act*
- must pass a written and practical examination approved by the Registrar.

SENIOR GUIDE QUALIFICATIONS

- must not be less than 19 years of age
- must be a competent swimmer
- must have completed a minimum of 42 days as a commercial river rafting guide
- must have knowledge of the construction of a raft and be capable of effecting repairs and replacement parts of the raft
- must have knowledge of safety, emergency procedures and the hazards associated with the rivers you will be rafting
- must pass a written and practical examination approved by the Registrar
- must not have any outstanding fines levied for conviction under the *Commercial River Rafting Safety Act*

TRIP LEADER QUALIFICATIONS

- must not be less than 19 years of age
- must be a competent swimmer
- must have completed a minimum of two years work as a licenced British Columbia guide or senior guide totaling a minimum of 72 days (20 of which must be in British Columbia); OR a minimum of 2 years work as a licensed commercial guide outside of British Columbia totaling a minimum of 80 days PLUS an additional 10 days of experience in British Columbia (totaling 90 days).
- must have knowledge of the construction of a raft and be capable of effecting repairs and replacement parts of the raft
- must have knowledge of safety, emergency procedures and the hazards associated with the rivers you will be rafting
- must not have any outstanding fines levied for conviction under the *Commercial River Rafting Safety Act*
- must pass a written and practical examination approved by the Registrar.

Trip Leaders

The *Commercial River Rafting Safety Act* requires a person in charge of a commercial river rafting trip to hold a trip leader's licence. Guide (for Class 1 waters), Guides, and Senior Guides may lead trips in certain circumstances.

If a Special Provision specifies that a holder of a Guide (for class 1 waters) Licence may be in charge of a commercial river rafting trip on that river or section of river, a Guide Licence is a Trip Leader for that limited purpose.

If a Special Provision specifies that a holder of a Guide Licence may be in charge of a commercial river rafting trip on that river or section of river, a Guide Licence is a Trip Leader Licence for that limited purpose.

If a Special Provision specifies that a holder of a Senior Guide Licence may be in charge of a commercial river rafting trip on that river or section of river, a Senior Guide Licence is a Trip Leader Licence for that limited purpose.

Endorsements

A licence holder (excluding a guide - for Class 1 waters) must also have one of the following endorsements:

- 1) Paddle
- 2) Oar
- 3) Motor

Paddle Endorsement - must pass a written and practical examination approved by the Registrar

Oar Endorsement - must pass a written and practical examination approved by the Registrar

Motor Endorsement - must pass a written and practical examination approved by the Registrar

CHAPTER FIVE

HOW TO USE THE MANUAL TO PREPARE FOR THE EXAMINATION

Procedures

As explained in detail in the previous section, the certification examination consists of two parts: **written** and **practical**.

This manual assists you to prepare for both parts by providing lists of the detailed skills and knowledge that may be tested.

The amount and nature of preparation will depend on which modules you elect to attempt.

This manual is organized for your benefit in the same way as the examination.

To prepare for the **written** it is strongly recommended that you read Chapter 1 of this manual if you have not already done so, before following the steps outlined next:

1. Turn to Chapter 2 - **THE CERTIFICATION EXAMINATION**
2. Read the overview to obtain a clear picture of the overall **written**, specifically its structure and conduct.
3. Determine which module(s) you will elect to attempt.
4. Turn to your first selected module in Chapter 6.
5. Read the list of the skills and knowledge that may be included in the **written**.
6. To prepare for each test item, read the relevant sections in the references.
7. Review the tasks in Chapter 2 - **THE CERTIFICATION EXAMINATION**.

To prepare for the **practical**:

1. Turn to Chapter 7 - **THE CERTIFICATION EXAMINATION PART TWO: PRACTICAL**
2. Read the overview.
3. Read the skills and knowledge items listed in all Performance Checks following the overview.
4. Read the related sections in the references indicated.

Note: You must submit a “Declaration of Rafting Experience” prior to taking guide exams.

DECLARATION OF RAFTING EXPERIENCE

Guide Qualification

Must have completed (in control of a raft) 60 hours (12 days) in any one type of craft (paddle/oar/motor) under the supervision of a qualified trip leader in the grade of whitewater similar to that as you expect to guide commercial raft trips. This must be completed prior to taking the examination. For additional exams in a second or third type of craft – the applicant must have a minimum of 25 hours (5 days) of rafting experience for each type of craft. Applicants must sign, at the exam site, a “Declaration” signifying rafting experience.

EXAMPLE

If you want to do the paddle exam, you require 12 days, all of which have been in a paddle boat. If you also want to take the oar exam, you require 17 days, five of which have been in an oar boat. If you want to do the paddle, oar and motor, a minimum of 12 days in one type of craft and an additional five days in each of the other types of craft is required for a total of 22 days minimum.

A form is provided near the back of this manual for your use.

CHAPTER SIX

CERTIFICATION EXAMINATION PART ONE: WRITTEN

General

This chapter enables you to prepare for the **CERTIFICATION EXAMINATION PART ONE: WRITTEN**.

The overview section contains a description of the general content, format, and conduct of the **written** and includes a list of the material and arrangements, which are your responsibility to provide during the examination.

The detailed skills and knowledge that may be checked for each of the seven examination modules follow the overview. These skills and knowledge items are based on the 90 performance tasks, which are listed in Chapter 2. It is recommended that you review them.

Format

The **written** uses two types of question structure, i.e., multiple choice and ranking. In each case, several possible answers will be provided. You must select the one best or most correct response.

Conduct

The **written** will take place in a designated location to be advised, and will be administered by the examiner. Only persons taking the exam and the Examiner may be present during the exam process.

Declaration of Rafting Experience

Be prepared to hand in your Declaration of Rafting Experience prior to taking your written exam. A Declaration Form (tear-out) is provided near the back of this manual.

MODULE ONE - COMMON SKILLS and KNOWLEDGE

General

This is a mandatory written module for all river rafting guides. All of the questions in Module One - Common Skills and Knowledge are based upon the references, indicated below, and the list of skills and knowledge study items which follow.

Main References

- A. *The Complete Whitewater Rafter* - Jeff Bennett
- B. *British Columbia River Rafting Guide Certification Manual*

Skills and Knowledge Study Items

Skills and knowledge questions in this module are divided into four sections:

- Section One - River Dynamics
- Section Two - Rafting Operations
- Section Three - River Rescue
- Section Four - Equipment

RIVER DYNAMICS**REFERENCES**

Water mechanics in whitewater rivers

Laminar

Turbulent

Chaotic

Braided

Main current

Helical current

Slow water/fast water

Erosion

Shallow sandbars

Deep pools

Undercut cliffs

Exposed roots

Overhanging trees

Volume of rivers

Gradient of rivers

Velocity of current

Wrapping

Eddies

Rotational forces

Twisting forces

River types

Small

Medium

Large

River gauges

River level

River sources

Obstacles/hazards

Drops/ledges

Waterfalls

Rapids

Standing waves/tailwaves

Wave trains

Staircases

Cliffs

Shallow gravel bars

Boulder piles/boulder gardens

Submarine boulders

Reflection waves

A. Chapter 5

B. Glossary

RIVER DYNAMICS**REFERENCES**

Diagonal/lateral waves
Haystacks
Breaking waves/stoppers
Pillows/cushions
Undercuts
Rooster tails
Boils
Holes
 Reversal
 Souse
 Breaking holes
 Flushing holes
 Stoppers
 Keepers
 Geometry of holes
 Spotting holes
 Downstream V's
 Upstream V's
 Sweepers
 Strainers
 Boulder sieves
 Whirlpools
Backwash
Lowhead dams/weirs
AWA river rating scales

RAFTING OPERATIONS**REFERENCES**

Types of maneuvers	A. Chapter 8
River directions	
Staying parallel	
Ferrying	
Turns and pivots	
Sideslips	
Eddy maneuvers	
Entering eddies	
Staying in eddies	
Exiting eddies	
Capsizing forces	
Heading down river	
Lining	
The safe system	
Scouting	
Bailing	
High siding	
Lowering center of gravity	
Beaching	
Knots and lashings	A. Appendices Pg. 191
Prusik loop	B. Glossary
Bowline	
Double fisherman's	
Double figure of eight	
Butterfly	
Hand signals	A. Chapter 9
Commands	A. Chapter 7
Highside	B. Glossary
Hold on	
Lay low	
Stop	
Drift	
Left/right - forward	
Left/right - back	
All forward/back	
Draw right/left	

RAFTING OPERATIONS**REFERENCES**

Safety

Safety briefing
 Safe entry points
 Put-in procedures
 Collisions with obstructions
 Extricate pinned, wrapped rafts
 Escape from a hole, reversal
 Ferrying upstream/downstream
 Tying up rafts
 Line person
 Personal wear

A. Chapter 4, Chapter 7
 B. Glossary

RIVER RESCUE**REFERENCES**

Equipment

Situation assessment
 Rescue planning
 Team organization
 Communication methods
 Delegation
 Alternative backup plan
 Evacuation method and plan

A. Chapter 9
 B. Glossary

Types of rescue

Self rescue
 Raft-based rescue
 Strong swimmer rescue
 Shore-based rescue
 Overhead rescue
 Flip rescue
 Tyrolean rescue

Grasping an endangered person
 Approaching a rescue helicopter
 Offensive/defensive swimming
 Safe swimming practices
 Anchor line, Z drag, tag line
 Belay

A. Chapter 9
 B. Glossary

RIVER RESCUE	REFERENCES
Rope throwing Throwbag	A. Chapter 9 B. Glossary

EQUIPMENT	REFERENCES
Types of ropes/lines Minimum requirement list Personal equipment list D-rings Types of rafts Types of rafting rigs Mandatory spares	A. Chapter 3 Page 189 - checklists B. Safety Standards for Commercial River Rafting

MODULE TWO - COMMON SKILLS and KNOWLEDGE

General

Module Two - Common Skills and Knowledge is an alternative to Module One - Common Skills and Knowledge. It is intended to be administered by examiners in those instances where the rafting registrant has failed his/her attempt of the certification examination.

The questions differ from those in Module One - Common Skills and Knowledge but all of the questions in Module Two - Common Skills and Knowledge are based upon the same references.

MODULE ONE (a) – COMMON SKILLS AND KNOWLEDGE

General

Module One (a) – Common Skills and Knowledge is an alternative to Module Two – Common Skills and Knowledge. It is intended to be administered by examiners in those instances where the rafting registrant has failed his/her attempt of the certification examination.

The questions are different from those in Module Two – Common Skills and Knowledge but all of the questions in Module One (a) – Common Skills and Knowledge are based upon the same references.

Note – A third exam re-write for Module One must take place at another exam site (provided there is available space) or at Capilano College.

MODULE THREE - PADDLE ENDORSEMENT

General

This is a mandatory written module for all river rafting guides who wish to be certified for the paddle endorsement. All of the questions in Module Three - Paddle Endorsement are based upon the references, indicated below, and the list of skills and knowledge study items which follow.

Main References

- A. *The Complete Whitewater Rafter* - Jeff Bennett
- B. *British Columbia River Rafting Guide Certification Manual*

Skills and Knowledge Study Items

Skills and knowledge questions in this module are divided into 3 sections:

Section One	-	Rafting Operations
Section Two	-	River Rescue
Section Three	-	Equipment

RAFTING OPERATIONS	REFERENCES
As per Modules One and Two	A. Chapter 8
Organizing Guests/Crews	A. Chapter 4
Paddle Strokes	A. Chapter 6
RIVER RESCUE	REFERENCES
As per Modules One and Two	
Grasping an endangered person	A. Chapter 9
Approaching a rescue helicopter	B. Glossary
Offensive/defensive swimming	
Safe swimming practices	
Anchor line, Z drag, tag line	
Belay	
Rope throwing+	
Throwbag	
EQUIPMENT	REFERENCES
As per Modules One and Two	
Types of ropes/lines	A. Chapter 3 Page 189 - Checklist
Minimum requirement list	B. Safety Standards for Commercial River Rafting
Personal equipment list	
D - rings	
Types of rafts	
Types of rafting rigs	
Mandatory spares	

MODULE FOUR - OAR ENDORSEMENT

General

This is a mandatory written module for all river rafting guides who wish to be certified for the oar endorsement. All of the questions in Module Four - Oar Endorsement are based upon the references, indicated below, and the list of skills and knowledge study items, which follow.

Main References

- A. *The Complete Whitewater Rafter* - Jeff Bennett
- B. *British Columbia River Rafting Guide Certification Manual*

Skills and Knowledge Study Items

Skills and knowledge questions in this module are divided into 3 sections:

- Section One - Rafting Operations
- Section Two - River Rescue
- Section Three - Equipment

RAFTING OPERATIONS	REFERENCES
As per Modules One and Two	A. Chapter 8
Guests/Crew	A. Chapter 4
Oar Strokes	A. Chapter 6

RIVER RESCUE**REFERENCES**

As per Modules One and Two

Grasping an endangered person
 Approaching a rescue helicopter
 Offensive/defensive swimming
 Safe swimming practices
 Anchor line, Z-drag, tag line
 Belay
 Rope throwing
 Throwbag

A. Chapter 9
 B. Glossary

EQUIPMENT**REFERENCES**

As per Modules One and Two

Frames
 Oars
 Inflating
 Stowing gear
 Rigging/lashing
 Types of rafts
 Catarrafts
 Cat rigs
 Oar repair
 First aid kits

A. Chapter 3
 A. Chapter 14

 B. Appendix One

MODULE FIVE - MOTOR ENDORSEMENT

General

This is a mandatory written module for all river rafting guides who wish to be certified on motor rafts. All of the questions in Module Five - Motor Endorsement are based upon the references, indicated below, and the list of skills and knowledge study items which follow.

Main References

- A. *The Complete Whitewater Rafter* - Jeff Bennett
- B. *British Columbia River Rafting Guide Certification Manual*
- C. *British Columbia Motorized Rafting Handbook*.

Skills and Knowledge Study Items

Skills and knowledge questions in this module are divided into 3 sections:

- Section One - Rafting Operations
- Section Two - River Rescue
- Section Three - Equipment

RAFTING OPERATIONS	REFERENCES
As per Modules One and Two Maneuvers	C. All

RIVER RESCUE**REFERENCES**

As per Modules One and Two

Grasping an endangered person
 Approaching a rescue helicopter
 Offensive/defensive swimming
 Safe swimming practices
 Anchor line, Z-drag, tag line
 Belay
 Rope throwing
 Throwbag

A. Chapter 9
 B. Glossary

EQUIPMENT**REFERENCES**

Engine repair
 Raft repair
 First aid kit

C. Appendix One

MODULE SIX - REGULATORY KNOWLEDGE

General

This is a mandatory written module for all river rafting guides who wish to be certified for the trip leader endorsement. Questions in Module Six - Regulatory knowledge is based upon the reference, indicated below.

Reference

British Columbia River Rafting Guide Certification Manual

Knowledge Study Items

Knowledge questions in this module are divided into three sections:

- Section One - Safety Standards for Operators Appendix I
- Section Two - Terms and Conditions for Guides and Trip Leaders Appendix II
- Section Three - Commercial River Rafting Safety Act and Regulations Appendix III & IV

CHAPTER SEVEN

CERTIFICATION EXAMINATION PART TWO: PRACTICAL

General

This chapter will enable you to prepare for the **CERTIFICATION EXAMINATION PART TWO: PRACTICAL**.

This first section of this chapter provides a description of the general content, format and conduct of the **practical**. It also provides a list of equipment and arrangements which are your responsibility to provide during the examination.

The detailed skills and knowledge that will be checked for all modules follow the overview. These take the form of eight performance checks (PC's). Further explanation of the PC's follows.

Format

The **practical** consists of up to eight performance checks (PC's) designed to certify you in essential skills and knowledge.

These PC's take the form of practical tasks, which you will be required to perform on and beside a British Columbia river which has been selected on the basis of its suitability for examining guides under realistic environmental conditions.

You are required to pass:

All of the following Performance Checks: PC - 1 (P-O-M), PC - 2, PC -3, PC - 4, PC -5, and either PC - 6 or PC - 7 or PC - 8 to obtain a pass score on the Practical. (See Performance Checks description next page).

Performance Checks

PC-1 P-O-M	PRESENT A SAFETY BRIEFING
PC-2	DEMONSTRATE THE RESCUE OF AN ENDANGERED PERSON
PC-3	DEMONSTRATE THE RESCUE OF ENDANGERED EQUIPMENT
PC-4	DEMONSTRATE ABILITY TO RE-FLIP A RAFT (see note below)
PC-5	DEMONSTRATE ABILITY TO SWIM WHITEWATER
PC-6	RUN A RIVER SECTION (PADDLE ONLY)
PC-7	RUN A RIVER SECTION (OAR ONLY)
PC-8	RUN A RIVER SECTION (MOTOR ONLY)

Note: Motor Raft Re-Flip not required for Motor Raft Endorsement

Conduct

The **practical PC's** will take place beside and on a designated river. The duration of the **practical** is one day but may take longer depending on the number of guide candidates at the exam.

Eight separate stands will be set up to examine guide applicants on their ability to perform the required Performance Checks that pertain to their examination selection.

Administrative Requirements

You must make your own arrangements prior to the **practical** for:

1. Travel to and from the site of the **practical**
2. Accommodation, if required, for the night before and during the **practical**.
3. Meals.
4. Personal equipment (see next page).

Practical Requirements

You are required to bring:

wetsuit/drysuit	booties	flip line
lifejacket	helmet	strap/stirrup system you may require to aid you getting onto a flipped raft
headwear	handwear	
footwear	knife, all purpose	
appropriate weather gear	whistle	

PERFORMANCE CHECK ONE

Performance: Present an entire safety briefing or portion of a safety briefing

Conditions

Given:

1. A fully equipped river raft.

Denied:

1. References
2. Assistance

Criteria conduct a safety briefing:

1. In accordance with standard format, content and demonstrations.
2. One attempt.
3. Within 30 minutes.
4. You must achieve 80% of the possible points.

NOTE: In lieu of presenting the entire safety talk, you may be required to present only portions of it, or you may be asked certain questions to test your knowledge.

Skills and Knowledge

You will be required to demonstrate the skills and knowledge needed to successfully complete each step shown below.

The skills and knowledge that may be checked during this PC are described in the following references:

- A. *The Complete Whitewater Rafter* - Jeff Bennett
- B. *British Columbia River Rafting Guide Certification Manual*

Marks given will be based on the following steps:

1. Describe nature, difficulty and general hazards of the trip clearly enough to help the guests make a more informed choice []
2. Confirm guests have read, understood and signed the waiver form. []
3. Question guests about medical conditions []
4. Question guest about swimming ability []
5. Confirm guests are not using drugs or alcohol. []
6. Check that guests are properly dressed/equipped: footwear, life jacket, helmet, thermal protection, glasses strap, jewelry. []
7. Demonstrate proper fitting of life jacket []
8. Instruct guests to wear their life jacket at all times []
9. Check guests' life jackets []
10. Explain how to properly fit a helmet []
11. Demonstrate how to enter, exit and move in a raft []
12. Describe hazards while moving in a raft including slippery fabric, movement of raft, hard objects, etc. []
13. Demonstrate correct seating position in a raft []
14. Demonstrate correct foot position and handholds []
15. Explain the procedures and identify who will be handling lines and holding on to the raft when arriving at or leaving the riverbank. []
16. Explain that clients should expect the raft to spin and move sideways and/or backwards. []
17. Demonstrate what is expected from a hold on command (including how to

- place the paddle while holding on (if applicable) []
18. Demonstrate what is expected from a lay low command as an aid in staying in the raft. []
19. Explain how clients should secure their personal equipment including hats, glasses strap, and jewelry. []
20. Demonstrate use of a bailing bucket or explain self-bailing features as applicable []
21. Explain the buddy system (before and after the buddy falls overboard). []
22. Instruct guests to stay calm, to not panic, and to be prepared for the gasp reflex if they should fall overboard. []
23. Explain the use of the perimeter line []
24. Demonstrate how to assist swimmer back into raft []
25. Describe how to offensively swim back to the boat and the importance of doing so. []
26. Demonstrate the paddle reach assist (even if this is an oar or motor safety talk). []
27. Demonstrate use of the throw bag/rope []
28. Describe the safety kayak assist (even if this is an oar or motor safety talk) []
29. Explain defensive swim procedure and breathing techniques []
30. Explain the importance of avoiding wood hazards as a swimmer []
31. Demonstrate how to avoid swimming into wood hazards []
32. Demonstrate what to do if you swim into a wood hazard and explain the importance of doing it properly, i.e. having the correct body position []
33. Explain how to get to shore if swimming and describe how to avoid foot entrapment []
34. Explain procedure for raft hitting rocks or similar solid hazards and demonstrate what is expected from a high side command []
35. Explain procedure for raft hitting submerged wood hazards (i.e. Logjams/strainers). []
36. Explain procedure for raft hitting above water wood hazards (i.e. Sweepers)[]
37. Explain flipped raft procedure []

38. Demonstrate how to get out from underneath a raft []
39. Explain how and why swimmers should avoid getting caught downstream of raft []

	Paddle	Oar	Motor
40. []	Demonstrate how to hold the paddle and describe the hazards of the T grip	Describe hazards posed by oars	Describe physical hazards posed by the motor
41. []	Demonstrate the basic paddle commands including forward, back, stop, left turn and a right turn.	Describe the hazards posed by the oar frame	Describe difficulty of communicating over the sound of the motor and how to compensate accordingly.

Summary

42. Elicit guest's questions often enough. []
43. Effectively demonstrate points using appropriate "props"/equipment. []
44. Effectively demonstrate points using appropriate body positions/movement. []
45. Deliver briefing with confidence. []
46. Deliver briefing in an organized manner. []
47. Deliver briefing with clarity. []

PERFORMANCE CHECK TWO

Performance: Demonstrate the rescue of an endangered person.

Conditions

Given:

1. Three throw bags (or candidates may use their own)
2. Three endangered persons (simulated – lifejackets set upon the ground approximately 11 meters away with a 1.5 metre piece of rope placed and centered across at front edge of target (laid at right angle to flight path of throw bag).

Denied:

1. References
2. Assistance

Criteria: demonstrate the simulated rescue of 3 endangered persons:

1. Three successful throws within 30 seconds.
2. A maximum of four attempted throws.
3. Throw bags must hit or cross the piece of 1.5 metre rope laid at right angle in front of the target.
4. If one throw is not successful the candidate may recoil and throw one more time (provided it can be done within the 30 second total time for all throws.)

Skills and Knowledge

You will be required to demonstrate the skills and knowledge needed to successfully complete each step shown below.

The skills and knowledge checked during this PC are described in the following references:

- A. *The Complete Whitewater Rafting* - Jeff Bennett
- B. *British Columbia River Rafting Guide Certification Manual*

Activity Demonstrate the rescue of an endangered person.

Steps:

1. Assess the situation.
2. Effect the rescue.

PERFORMANCE CHECK THREE

Performance: Demonstrate the rescue of an endangered equipment.

Conditions

Given:

1. A rescue scenario.
2. Rescue equipment (2 prusiks, 4 carabiners, 2 pulleys, webbing, 1 length of static rescue rope).
3. Simulated endangered equipment.

Denied:

1. References
2. Assistance

Criteria: demonstrate the set-up and re-flip techniques.

1. One attempt.
2. Utilize multiple equalized attachment points on simulated endangered equipment.
3. Within ten minutes.

Skills and Knowledge

You will be required to demonstrate the skills and knowledge needed to successfully complete each step shown below.

The skills and knowledge that may be checked during this PC are described in the following references:

- A. *The Complete Whitewater Rafter* - Jeff Bennett
- B. *British Columbia River Rafting Guide Certification Manual*

PERFORMANCE CHECK FOUR

Performance: Demonstrate the ability to re-flip a raft.

Conditions:

Given:

1. An overturned raft equipped with perimeter line.
2. Paddle
3. Personal rafting wear (candidate supplies) including flip line (and “stirrup” if desired).
4. Assistance from examiner (in the form of more body weight) by following candidates direction in the case of a small candidate and large raft.

Denied:

1. References
2. Assistance

Criteria: demonstrate the set-up and re-flip techniques.

1. One attempt
2. Within five minutes

Skills and Knowledge

You will be required to demonstrate the skills and knowledge of this PC as described in the following reference:

A. *The Complete Whitewater Rafter* - Jeff Bennett

Activity Re-flip an overturned raft.

Steps

References

1. Assess the situation
2. Climb atop the overturned raft. (using “stirrup” if desired).
3. Attach your flip line on one side of the raft at about its centre*
*re-flip may be done with a paddle (versus flip line) if the candidate wishes.
4. Move to the opposite side of the raft using the flip line to steady yourself.
5. Stand up on the edge of the raft.
6. Brace your legs and pull back on the flip line.
7. Lean backward, increasing the pull on the flip line, until the raft re-flips.
8. Re-board your raft.

A. Chapter 9

PERFORMANCE CHECK FIVE

Performance: Demonstrate the ability to swim whitewater.

Conditions

Given:

1. An assigned section of whitewater (less than 100 metres).
2. A designated series of safe eddies to reach.
3. Personal swimming wear (wetsuit/drysuit, lifejacket, helmet (candidate supplies)).

Denied:

1. Flotation equipment (other than lifejacket and thermal protection clothing).
2. References.
3. Assistance.

Criteria: Demonstrate the capability to swim offensively and defensively and catch designated eddies safely.

1. One attempt.
2. Within fifteen minutes.

Skills and Knowledge

You will be required to demonstrate the skills and knowledge of this PC as described in the following references:

- A. *The Complete Whitewater Rafter* - Jeff Bennett
- B. *British Columbia River Rafting Guide Certification Manual*

Activity Swim in whitewater.

Steps

1. Clarify any questions regarding directions given.
2. Assess the situation.
3. Enter the river.
4. Catch designated series of eddies.
5. Swim across the current offensively and defensively.
6. Recover and exit river.

References

- A. Chapter 9

PERFORMANCE CHECK SIX - PADDLE ONLY (P)

Performance: Run a river section.

Conditions:

Given:

1. A fully rigged river raft.
Paddle only.
Minimum 3 metres.
2. A specific river section
3. An assigned course/route including eddies to be caught.
4. Assigned guests/crew

Denied:

1. References
2. Assistance

Criteria: Run an assigned river section and route (paddle only):

1. In accordance with standard procedures, i.e.: ferrying, turning, entering/exiting eddies, bow upstream, bow downstream; and
 - recovering from adverse situations
 - command
 - control
 - safety.
2. One attempt.

Skills and Knowledge

You will be required to demonstrate the skills and knowledge needed to successfully complete each step shown below.

The skills and knowledge that may be checked during this PC are described in the following references:

- A. *The Complete Whitewater Rafter* - Jeff Bennett
- B. *British Columbia River Rafting Guide Certification Manual*

Activity Run a river section (paddle only)

Steps

1. Confirm safety/seating/security.
2. Identify hazards.
3. Read river conditions
4. Issue paddle stroke commands (as applicable):
 - forward
 - back
 - left draw/right draw
 - left back/right forward
 - right back/right forward
 - stop.
5. Correct paddle strokes deficiency(ies).
6. Select the raft angle/direction/speed.
7. Steer the raft through the selected course and catch designated eddies as instructed.
8. Control the raft angle/direction/speed.

PERFORMANCE CHECK SEVEN - OAR ONLY (O)

Performance: Run a river section (Oar only).

Conditions :

Given:

1. A fully rigged river raft.
Oar only.
Minimum 4 metres
2. A specific river section.
3. An assigned course/route including eddies to be caught.

Denied:

1. References
2. Assistance

Criteria: Run an assigned river section and route (Oar only):

1. In accordance with standard procedures, i.e.:
ferrying
turning
entering/exiting eddies
recovering from adverse situations
command
control
safety
2. One attempt.

Skills and Knowledge

You will be required to demonstrate the skills and knowledge needed to successfully complete each step shown below.

The skills and knowledge that may be checked during this PC are described in the following references:

- A. *The Complete Whitewater Rafter* - Jeff Bennett
- B. *British Columbia River Rafting Guide Certification Manual*

Activity Run a river section (Oar only)

Steps

1. Confirm safety/seating/security.
2. Identify hazards.
3. Read river conditions.
4. Select raft angle/direction/speed.
5. Control the raft angle/direction/speed.
6. Steer the raft through the selected course.

PERFORMANCE CHECK EIGHT - MOTOR ONLY (M)

Performance: Run a river section (Motor only).

Conditions

Given:

1. A fully rigged river raft.
Motor only.
Minimum 7.2 metres.
Cat rig.
Minimum 20 hp.
2. A specific river section.
3. An assigned course/route including eddies to be caught.

Denied:

1. References
2. Assistance

Criteria Run an assigned river section and route (Motor only)

1. In accordance with standard procedures, i.e.:
ferrying
turning
entering/exiting eddies
maintain a surf on a wave under power
recovering from adverse situations
command
control
safety
2. One attempt.

Skills and Knowledge

You will be required to demonstrate the skills and knowledge needed to successfully complete each step shown below.

The skills and knowledge that may be checked during this PC are described in the following references:

- A. *The Complete Whitewater Rafter* - Jeff Bennett
- B. *British Columbia River Rafting Guide Certification Manual*
- C. *Motorized Handbook*

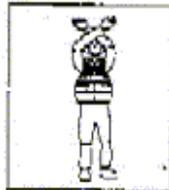
Activity Run a river section (Motor only)

Steps

1. Confirm safety/seating/security.
2. Identify hazards.
3. Read river conditions.
4. Select raft angle/direction/speed.
5. Control the raft angle/direction/speed.
6. Steer the raft through the selected course.

CHAPTER EIGHT HAND SIGNALS

1) ATTENTION, HELP



Palms open, one or both arms waving above head in cross pattern.

2) STOP



Arms shoulder height, extended parallel to ground, palm palms down.

3) BACK OFF



Arms outstretched, hands with palms up facing subject.

4) OK



Either one or both arms (later, palms) touching the top of the head.

5) GO RIGHT



Left arm extended, fingers indicating direction, right arm stretched above head, palm up, facing subject.

6) GO AHEAD



Arms extended straight above head, palm turned laterally.

7) GO LEFT



Opposite to "GO RIGHT"

8) COME HERE



Both hands extended straight above head, arms fully extended, palms turned inward.

GLOSSARY

Air Pocket	A breathable space of air beneath an overturned raft, or an air space that can be formed by facing downstream in a swift current.
Alluvium	Material deposited by stream. It includes gravel, sand, silt and clay.
Alluvial	Pertaining to material carried or deposited by running water. Alluvial fans are often formed where streams run into a valley.
Anchor Line	A line stretched taut across the river and secured to fixed objects. Used to maintain control of the rescue raft.
Backpaddle	A paddle stroke used to move the raft backward by pushing forward on the shaft and pulling back on the grip. Also a paddle command.
Baffle	An airtight fabric divider between chambers of a raft.
Back Ferry	Ferrying across a river using a backstroke, i.e., oar or paddle.
Bail	To clear water from a raft by dipping and throwing it over the side.
Bank	The river's shore.
Bar	Deposits of sand, gravel, or rock in the river channel or along the banks.
Belay	To slow or stop slippage of a rope with a load on one end.
Belay Line	Any rope used to belay a person or object.
Blade	The broad flat section of a paddle or oar.
Blower	An electric pump used to inflate rafts.
Boat	Raft.
Boil	A convex mound of water often located downstream of a reversal or near a whirlpool, and caused by upswelling of water or vertical currents.
Boil Line	The boundary between a boil and other current.
Bootie	A neoprene sock or shoe worn for thermal insulation.

Boulder Fan	A sloping, fan-shaped mass of boulders deposited by a tributary stream where it enters into the main canyon. Usually causes rapids by constriction and by the forming obstacles.
Boulder Garden	A rapid which is densely strewn with boulders, requiring intricate maneuvering.
Bow	The front end of a raft, that is, the end which the river rafting guide faces.
Bow Line	A rope used to secure a raft on a bank.
Bowline	A knot.
Breaking Wave	A wave that builds and falls upstream in a cyclical pattern.
CFS	Cubic feet per second. One cubic metre equals 35.2 cubic feet. See CMS.
CMS	Cubic metres per second. A unit of water flow used to indicate the volume of water flowing per second past any given point along a river.
CPR	Cardiopulmonary resuscitation. A life-saving technique used to restore a rescued swimmer's circulation and breathing.
Carabiner	A multi-purpose metal device used to attach lines to rafts, secure gear, or act as a pulley.
Cat Rig/Cataraft	A raft with a frame suspended between two pontoons.
Center Line	A tensioned rope tied down the center of a paddle raft from bow to stem and used as a handhold.
Chamber	One of the inflatable sections of the raft.
Channel	A route through a section of river.
Chute	A clear channel between obstructions. The current is faster than the surrounding water.
Clean	Free of obstructions.
Clove Hitch	A knot.
Confluence	The point where two or more rivers or river channels meet.

Current	Moving water.
Cushion	See Pillow .
Debris	Remnants of natural and man-made floating objects that can accumulate to form logjams or strainers.
Defensive Swimming	To swim on one's back with the feet pointed downstream. This position protects the head from injury by rocks.
Diaphragm	See Baffle .
Figure of 8	A knot.
Double Fisherman	A knot.
Double-Oar Turn	An oar stroke used to turn (or prevent the turning of) a raft. Consists of simultaneously pulling on one oar while pushing on the other.
Doughnut-Rig	An oval raft whose motor is mounted.
Downstream	The direction in which the water flows. The terms downriver and downstream are interchangeable.
D-Ring	A D-shaped ring attached to a raft and used to secure frames, lines, rope thwarts.
Drop	An abrupt descent in a river, a pitch.
Dry Bag	A waterproof pack, which is carried in the raft in whitewater.
Drysuit	A body suit with watertight closures used to keep swimmers dry and warm.
Eddy	A current that either stops or turns to head upstream. Found below obstructions that rise above the water surface and on the inside of bends.
Eddy Line	The sharp boundary at the edge of an eddy between two currents of different velocity or direction. Usually marked by swirling water and bubbles.
Eddy Out	To put a raft into an eddy.

Entrapment	When a body extremity is caught by an obstruction on the river bottom and the swimmer is held there by the force of the current.
Extrication	The removal of an entrapped person or equipment.
Falls	A drop over which the water falls free at least part of the way.
Feather	The technique where the blade of an oar or paddle is turned to offer the least resistance to wind or water.
Ferry	To direct a raft across a current at an angle by applying power against the current.
Flip Line	A rope attached to a raft, and used to right the raft in the event of a flip.
Flip Line Bag	A bag used to hold a flip line.
Flood Plain	That portion of a river valley, next to the river channel, which is built of sediments deposited by the river, and which is covered with water when the river overflows its banks at flood stages.
Forward	A paddle command to use a forward stroke to move the raft.
Forward Ferry	Ferrying across a river using a forward stroke, i.e., oar or paddle.
Forward Stroke	A paddle stroke to move the raft forward by pushing on the grip while pulling on the shaft. The basic stroke.
Foot Cup/Cone	A cup or cone, attached to the raft floor and used to brace the foot.
Frame	A solid structure onto which oars or a motor and the tubes are fastened.
Freeboard	The distance from the water line to the top of the tube.
Gradient	The slope of a river expressed in metres per kilometer or feet per mile.
Grip	The top end of a single-bladed paddle or end of an inboard oar.
Guide	A person in charge of a river raft.
Haul Line	A rope attached to a pinned raft and used to pull it free of an obstruction.
Haystack	A large standing wave that breaks vertically and is caused by deceleration of the current.

Helmet	Headgear of rigid material worn to protect the head from impact.
High Side	A command to jump quickly to the downstream side of the raft.
Hip Belay	A belay technique of passing one end of the rescue rope around the rescuer's body.
Hold On	Command whereby passengers use both hands to hold onto a secure part of the raft.
Hole	A depression in the water and an accompanying wave formed downstream of an obstruction when water flows over it. Less water volume creates a reversal. Also, unlike a reversal, a hole may for short periods of time hold persons or objects, but will nominally flush them out. See Reversal.
Hung Up	Description of a raft that is caught on, but not wrapped around, a rock or other obstacle.
Human Waste	To be buried in the active layer of the soil as far away as is possible from the high water line.
Hydraulics	The force of fluids in motion. In this context it involves moving water and includes waves, rapids, holes, whirlpools, boils and eddies on large volume rivers.
Hypothermia	A disabling physical condition caused by a lowering of the core body temperature.
Inspiratory Gasp Reflex	An involuntary response to cold water that causes a swimmer to gasp and breathe faster. This mechanism prevents a person from holding the breath while under water.
Insulating layer	Natural or synthetic clothing worn for warmth under an outside garment.
J-Tube	J shaped tube used for motorized rigs.
Keeper	A reversal capable of trapping a person or raft for a long time.
Larynx Spasm	An involuntary response to cold water where the muscles of the larynx contract and cut off the air supply.
Lay Low	Command to passengers to lower the center of gravity and to avoid sweepers.

Lead Boat	The first raft in a river progression, usually commanded by the trip leader.
Ledge	A ridge of rock that acts as a low natural dam. it is difficult to see from water level.
Left Draw	A paddle command to the left side crew to use a draw stroke.
Left Back/Right Forward	A paddle command to the left side crew to use a backstroke and the right side crew to use a forward stroke.
Life Jacket	A safety device worn to help keep the head above water and prevent drowning. Sometimes called a personal flotation device.
Lining	The use of ropes to work a raft down through a rapid while remaining on shore, or to tow a raft upstream.
Litter	Any frame that will transport an injured person in a horizontal position.
Logjam	A wall of logs and other debris through which water may flow, but through which rafts and people cannot pass. See also Strainer and Sweeper .
Meander	A loop-like bend in the course of the river.
Oar	A long shaft with a broad blade at one end and a handle at the other. The oar is mounted to the raft with an oarlock or pin and is used to propel or steer.
Oar Clip	The u shaped piece of resilient metal used to hold an oar to the thole pin. This mounting method keeps the oar blade at a fixed angle to the water.
Oar With Paddle Assist	A raft using both oars and paddles.
Oarlock	The U shaped piece of metal used to hold an oar in the thole pin. This mounting method allows feathering.
Outfit	The articles and methods used to fit out, or rig, a raft for river running. Also applies to any commercial company engaged in outfitting trips down rivers.
Outrigger	A stabilizing tube mounted alongside the raft tube. Two outriggers are normally used, one on either side of the raft.

PSI	Pounds per square inch. A measurement of air pressure.
Paddle	A long shaft with a broad blade at one end and a grip at the other.
Paddle Command	An instruction given by the guide to the crew to use a particular stroke to control a raft. Look under the specific paddle command or refer to the text for a description of all commands.
Paddle Frame	A frame attached lengthways between the thwarts. It provides rigidity and space for equipment.
Paddling Jacket	A water-tight nylon jacket worn for comfort while paddling.
Pan caking	When the bow raft flips back onto the middle raft in a triple-rig.
Pillow	The layer of water that pads the upstream face of rocks and other obstructions. The broader the upstream face, the more ample the pillow.
Pinned	Description of an object (raft) held stationery against an obstacle in a river which requires assistance from shore to free.
Pitch	A section of rapid steeper than the surrounding water. A drop.
Rapid	A fast , turbulent stretch of river, often with obstructions but usually free of waterfalls. Whitewater.
Record of Service	A record of completed trips, maintained by all guides for the purpose of qualification.
Reversal	A depression in the water and accompanying boils formed downstream of an obstruction when water flows over it. A larger volume flow creates a hole. Also, a reversal, unlike a hole, may hold persons and objects for long periods of time. See also Hole .
Riffle	A shallow rapid with very small waves, often over a sand or gravel bottom. A riffle does not rate a grade on either the Western or International scale of difficulty.
Rig	A rafting configuration of inflatable rubber, a frame, and a method of propulsion. Also see Outfit .
Right Draw	A paddle command to the right side crew to use a draw stroke and the left side crew to paddle forward.

Right Back/Left Forward	A paddle command to the right side crew to use a backstroke and the left side to use a forward stroke.
River Gauge	A gauge used to determine raftability ratings in terms of water volume (cubic metres per second). The gauge is placed along a riverbank.
River Left	The left side of the river when facing downstream.
River Right	The right side of the river when facing downstream.
Rock Garden	A rapid thickly strewn with exposed or partially covered rocks. It demands intricate maneuvering. Also called a boulder garden.
Rope Ladder	A ladder made by tying a series of double figure-of-eight knots in a rope. May be used in a Tyrolean rescue.
Row	To propel or steer a raft with oars only.
Rowing Frame	A rigid frame, metal or wood, that provides a seat for the rower, oarlock stands and a place to store gear.
Rubbing Strake	A patch of fabric bonded to the raft to protect the inflated rubber from frictional wear.
Runoff/Freshet	Water flow caused by melting snow or heavy rain.
Scout	To check out a rapid or part of the river from shore before running it.
Section	A portion of river located between two points. A stretch.
Self-Bailing Raft	A raft designed to allow water to drain out of the floor.
Shuttle	To move vehicles from the put-in to the take-out. Also to transport trip members back to their vehicles.
Sidecurler	A wave parallel to the main current, and formed by a side current passing over a rock as it enters the main channel.
Sit Harness	A simple rescue harness formed by rope or webbing. The rope is drawn through the rescuer's legs, around the hip, and secured with carabiners.
Snag Tag	A weighted rescue rope stretched across a river and used to snag a swimmer pinned under the surface of the water.

Sneak	To take an easy route around a difficult spot, often by maneuvering down one side of a big rapid in order to avoid the turbulence in the center.
Snout	See Pontoon .
Staircase	A stretch of river where the water pours over a series of drops that resemble a staircase.
Standing Wave	A wave of water which stays in position as water passes through. This often occurs when fast-moving water meets slower-moving water. Also called a haystack.
Stern	The rear end of the raft, to which the guides back faces.
Stern Frame	A rowing frame mounted in the stern section.
Stop	A paddling command to stop paddling.
Stopper	A wave powerful enough to stop a raft momentarily. Also called a stopper wave.
Strainer	Brush, fallen trees, bridge pilings, or any obstruction that allows the current to flow through, but pins rafts and swimmers. See also Logjams and Sweepers .
Stretch	A portion of the river located between two points.
Stroke	A paddle or oar technique. Look under the stroke name or refer to the text for a description of all the strokes.
Stuck	Description of a raft held stationary in the river due to an obstruction or hydraulics, which can be freed from the raft.
Sweep Boat	The last raft in a river progression.
Sweep Oar	A large oar extending over the stern and/or bow, usually with the blade angled at the throat. The rower usually stands.
Sweeper	A single log overhanging or in the water. It allows water to flow under, but can trap a raft or swimmer. See also Logjams and Strainers .
Tag Line	A buoyant rescue rope stretched across the river surface. Provides a conscious swimmer with a handhold.
Take-Out	The place where rafts are taken out of the water at the end of the trip.

Telfer Lower	A rescue method of attaching a raft to an anchor line and floating it downstream to the rescue site.
Thole Pin	An upright steel pin on a rowing frame that serves as a fulcrum or pivot for the oar.
Throat	The point on an oar or paddle where the shaft meets the blade.
Throw bag	A buoyant bag into which a floating rescue rope is stuffed. The full length of the rope unspools when the bag is thrown to a swimmer.
Throw Rope	A buoyant, visible rescue rope. Usually made of nylon.
Thwart	The cross brace of a raft, such as the lateral tubes of an oar raft.
Tongue	The smooth V of fast water found at the head of rapids.
Transom	A metal and wood frame mounted at the stern of the raft to support a motor.
Trim	The angle to the water at which a raft rides.
Trip	The passage of a raft, or more than one raft traveling in company, between one place and another on a river or waterway.
Trip Leader	A person in charge of a trip.
Triple Rig	Three rafts lashed together side by side.
Turbulence	Movement of water that is violent and sometimes regular in pattern.
Tyrolean	A general term for an overhead rescue technique that uses an anchor line to bring the rescuer near the endangered person.
Undercut Rock	A rock that is narrower at the bottom than at the top. The resulting reversal can push people or rafts under it and trap them.
Upstream	The direction from which the main current of water flows.
Upstream Ferry	A technique to move a boat across the current while powering upstream.
Vector Pull	A hauling technique of using two lines, where one line is attached to the other at an angle to gain sufficient mechanical advantage for a rescue.

Volume	The number of cubic metres of water that flows past any given point in one second. Expressed in cubic meters per second (CMS).
Wave	A swell in the current caused by increased water volume or an obstruction under the water surface. See also Haystack .
Wetsuit	A close-fitting garment of neoprene foam that provides thermal insulation and flotation.
Whirlpool	An eddy whose circular motion becomes extreme when water volume increases. Can submerge persons and equipment.
Whitewater	Aerated water as found in rivers. A rapid.
Width	A raft's measurement at its broadest point.
Wrapped	Description of a raft pinned by the current around a rock or other obstruction. Also a type of raft floor.
Z-Drag	A pulley system using a line, carabiners (pulleys) and an anchor point, to tension a line, creating mechanical advantage as required to rescue a pinned raft.

Appendix One

Safety Standards

SAFETY STANDARDS of the Commercial River Rafting Safety Act for OPERATORS			
Effective Date April 1, 1989	Amendment February 1, 1999	Approved: _____ <i>B.R. Dalziel, Registrar of Commercial River Rafting</i>	Page 1 of 11

Construction of Raft used for Commercial River Rafting

1. The raft must be constructed of good, sound material and it must be constructed so that it is capable of withstanding the weather and water conditions that are to be expected in the area and at the time in which the commercial river rafting trip is being undertaken.
2. Only inflatable rafts may be utilized for Commercial River rafting.
3. All rafts must be constructed so that the buoyancy chambers of the raft contain, in the aggregate, not less than four compartments, which must be:
 - a) of equal volume or as close to equal volume as is possible;
 - b) evenly distributed to port and starboard; and
 - c) constructed so that the deflation of a compartment will not cause air to escape from any other compartment.
4. All rafts must be fitted with topping-up valves for each buoyancy chamber.
5. All rafts must have:
 - a) one bow line which is at least twice the length of the raft, except motor powered rafts where a bow line equal to the length of the raft is sufficient,
 - b) a line fastened around the raft which is suitable for use as a hand grip by a person located in the water or safety straps positioned around the raft which may be similarly used by a person in the water, and
 - c) lines, straps or other handholds fastened inside the raft and positioned so that they are accessible to each passenger of the raft. Foot cups or thwarts for each passenger are acceptable for paddle rafts.

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6. All rafts must be kept in a state of repair so that:
- the buoyancy chambers of each raft will remain inflated to working pressure when allowed to stand for 30 minutes, and
 - each buoyancy chamber of the raft will retain its structural integrity when all other buoyancy chambers of the raft are deflated.

Capacity

- There must be sufficient space onboard the raft so that all passengers (except the guide) can be seated.
- No raft may be loaded with passengers and equipment exceeding the weight capacity determined by the manufacturer of the raft.
- The number of passengers onboard the raft may not exceed the number of passengers recommended to occupy the raft by its manufacturer.

Machinery

- If a raft is motorized, the minimum engine power must not be less than 15 kw (20 h.p.).
- The motor of a motorized raft must be in good working order and securely mounted on a transom, or a major structural member of the raft, and attached by rope, chain or other device to the raft.

Equipment Required to be Carried on Rafts

- Oar powered rafts must carry the following:
 - one approved lifejacket of the type set out in Schedule 1 in a number equal to the number of passengers aboard, plus one extra lifejacket on Expedition Trips. (N.B.: Small Vessel Regulation lifejackets may be carried where permitted under the Special Provisions for a river),
 - a first aid kit containing the equipment set out in Schedule 2, (N.B.: minimum of two kits are required for a group of two to 10 rafts (normally first and last rafts carry first aid kits). 10 or more rafts require one kit per five rafts.

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- c) a raft repair kit containing the equipment set out in Schedule 3 (N.B.: if a number of rafts are travelling together, one raft repair kit can be carried for the use of that group of rafts),
- d) a manual pump capable of inflating the buoyancy chambers of the raft(s) is required for a rafting trip,
- e) a buoyant heaving line of a minimum 15 metres in length which is flexible under ordinary circumstances of wetness and temperature and which must be attached to a buoyant throw bag or other buoyant heaving device,
- f) if the raft has sealed floors, a bailing bucket (or buckets) with a capacity of 15 litres must be secured onboard the raft, and
- g) one spare oar and oarlock or clip per raft (N.B.: if a number of rafts are travelling together, only two spare oars and oarlocks or clips can be carried for the use of that group of rafts).

2. Paddle powered rafts must carry the following:

- a) one approved lifejacket of the type set out in Schedule 1 in a number equal to the number of passengers aboard, plus one extra lifejacket on Expedition Trips. (N.B.: Small Vessel Regulation lifejackets may be carried where permitted under the Special Provisions for a River),
- b) a first aid kit containing the equipment set out in Schedule 2, (N.B.: maximum of two kits are required for a group of two to 10 rafts (normally first and last raft carry first aid kits). Ten or more rafts require one kit per five rafts,
- c) a raft repair kit containing the equipment set out in Schedule 3 (N.B.: if a number of rafts are travelling together, one raft repair kit can be carried for the use of that group of rafts),
- d) a manual pump capable of inflating the buoyancy chambers of the raft(s) is required for a rafting trip,

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- e) a buoyant heaving line of a minimum 15 metres in length which is flexible under ordinary circumstances of wetness and temperature and which must be attached to a buoyant throw bag or other buoyant heaving device,
 - f) if the raft has sealed floors, a bailing bucket (or buckets) with a capacity of 15 litres must be secured onboard the raft, and
 - g) one spare paddle.
3. Motor powered rafts must carry the following:
- a) one approved lifejacket of the type set out in Schedule 1 in a number equal to the number of passengers aboard, plus one extra lifejacket on Expedition Trips. (N.B.: Small Vessel Regulation lifejacket may be carried where permitted under the Special Provisions for a river,
 - b) a first aid kit containing the equipment set out in Schedule 2 (N.B.: Maximum of two kits are required for a group of two to 10 rafts (normally first and last raft carry first aid kits). 10 or more rafts require one kit per five rafts,
 - c) a raft repair kit containing the equipment set out in Schedule 3 (N.B.: if a number of rafts are travelling together, one raft repair kit can be carried for the use of that group of rafts),
 - d) a manual pump capable of inflating the buoyancy chambers of the raft(s) is required for a rafting trip,
 - e) a buoyant heaving line of a minimum 15 metres in length which is flexible under ordinary circumstances of wetness and temperature and which must be attached to a buoyant throw bag or other buoyant heaving device,
 - f) if the raft has sealed floors, a bailing bucket (or buckets) with a capacity of 15 litres must be secured onboard the raft,
 - g) one spare motor with a minimum engine power of 15 kw (20 h.p.) must be carried (N.B.: if a number of rafts are travelling together, one spare motor can be carried for each three rafts, provided that each raft in the group must have thole pins or oarlocks and a rowing seat fixed in place on the raft and each raft must carry a minimum of two oars which are readily accessible from all parts of the raft),

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- h) an engine repair kit carrying the equipment set out in Schedule 4, and
- i) one spare fuel line capable of being attached to the motor and one spare fuel tank filled with fuel.
- j) notwithstanding the provisions of sub-section (g) and where Special Provisions allow, rafts 4.88 metres (16 ft) or less in length are exempt from carrying a spare motor provided that each raft is equipped with a pair of oars and oarlocks or clips and one paddle for each person onboard.

4. No Single Raft Trips

If a Special Provision for a river or river section specifies no single raft trips:

- a) every raft on the trip must travel in a manner such that it is normally within sight of one other raft on the trip with the intent of being able to effect a rescue.
- b) the person in charge of operating a single company raft must make an agreement with the person in charge of at least one other raft on the trip that each person must stay aware of the other persons raft with the intent of meeting condition (a).

5. Down Stream Rescue Plan

A Down Stream Rescue Plan (when required by a Special Provision) is part of the Operating Plan and must be carried by the trip leader.

6. Safety Standards for Outfitters

- a) Special Provisions authorizing Senior Guides to lead a trip must have a person on the trip to hold and provide proof, on site, a valid certificate (issued within the last three years) for a River Rescue program approved by the Registrar.
- b) Special Provisions requiring a Trip Leader to lead a trip, must have a person(s) on the trip to hold and provide proof, on site, a valid certificate (issued within the last three years) for a River Rescue program approved by the Registrar and a valid Occupational First Aid certificate level 2 or 3, Wilderness First Aid certificate (minimum 36 hours), or equivalent first aid program approved by the Registrar.
- c) Special Provisions requiring Trip Leaders only must have one person per raft to hold and provide proof, on site, a valid Occupational First Aid certificate level 2 or 3, Wilderness First Aid certificate (minimum 36 hours), or equivalent first aid program approved by the Registrar and one person per raft to hold and provide proof, on site, of a valid certificate (issued within the last 3 years) for a River Rescue program approved by the Registrar.
- d) Special Provisions requiring Senior Guides and Trip Leaders as raft operators must have a person on the trip to hold and provide proof, on site, a valid Occupational First Aid certificate level 2 or 3, Wilderness First Aid certificate (minimum 36 hours), or equivalent first aid program approved by the Registrar and one person per raft to hold and provide proof, on site, of a valid certificate (issued within the last 3 years) for a River Rescue program approved by the Registrar.

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- e) Special Provisions with a guide ratio of (1 Trip Leader or Senior Guide to 1 Guide) will require:

One (1) person on the trip who holds and can provide proof, on site, a valid certificate (issued within the last three years) for a River Rescue program approved by the Registrar for each Guide operating a raft.

- f) Special Provisions with a guide ratio of (1 Trip Leader to 3 Senior Guides/Guides) will require:

One (1) person on the trip who holds and can provide proof, on site, a valid certificate (issued within the last three years) for a River Rescue program approved by the Registrar and a valid Occupational First Aid certificate level 2 or 3, Wilderness First Aid certificate (minimum 36 hours), or equivalent first aid program approved by the Registrar for each three Senior Guides or Guides operating a raft.

- g) Special provisions with a guide ratio of (2 Trip Leaders or Senior Guides to 1 Guide) will require:

Two (2) people on the trip who hold and can provide proof, on site, a valid certificate (issued within the last three years) for a River Rescue program approved by the Registrar, for each Guide operating a raft.

- h) Special provisions with a guide ratio of (3 trip leader/senior guides to 2 guides) will require:

Three (3) people on the trip who hold and can provide proof, on site, a valid certificate (issued within the last three years) for a River Rescue program approved by the Registrar, for each two (2) Guides operating a raft.

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Marking

1. All rafts used or operated by the holder of an Outfitter's Permit must be clearly marked with the name of the Outfitter and with a number that differentiates each raft and pontoon from all other rafts or pontoons used or operated by the Outfitter.
2. The above-noted marking must be:
 - a) in block characters and Arabic numerals that are not less than 10 cm. high and in a colour that contrasts with their background,
 - b) permanently affixed to the raft, and
 - c) located on the outside of the pontoon or raft so that the character or number is clearly visible from each side of the raft.
3. Temporary Markings:

Temporary markings are permitted where the raft or pontoon is not owned by the company and will be used for less than 20 days in one season. All other requirements apply.

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SCHEDULE 1**Lifejackets**

America's Cup "Ultrafloat" (model 110-W)

America's Cup Youth White water Vest (model 100-W)

Extrasport White water Vest - the "Buddy" (model Bud-3)

Ancient Mariner Lifejacket (model 1311A White water)

Buoy O Boy (model 905)

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SCHEDULE 2

First Aid Kit

As per WCB requirements, one raft per trip must carry a WCB Level 1 First Aid Kit.

All other rafts, as per Safety Standards for Operators, must carry a Basic WCB First Aid Kit.

For first aid kit contents, please refer to the Workers' Compensation Board of British Columbia "Occupational First Aid Regulations".

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SCHEDULE 3

Raft Repair Kit

The raft repair kit carried on an inflatable raft must contain the following:

- a) patches of raft fabric capable of repairing a 1-metre tear in the raft and compatible raft glue, cleaning solvent and patching tools,
- b) channel lock or similar pliers,
- c) a roll of duct tape, and
- d) matches in a waterproof container.

In addition to the above, the raft repair kit carried on an oar powered raft or a motorized raft must contain the following:

- a) Hose clamps capable of repairing the oars, paddles or outboard handles of the raft, and
- b) a screwdriver.

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SCHEDULE 4

Engine Repair Kit

The engine repair kit carried on a motor powered raft must contain the following:

- a) if the raft is not carrying a spare motor, it must carry a spare propeller,
- b) spare cotter pins or shear pins, if required,
- c) two spark plugs and a plug wrench, and
- d) an adjustable wrench.

Appendix Two

**Guides and Trip Leaders
Terms and Conditions
of Licence**

GUIDES and TRIP LEADERS TERMS and CONDITIONS OF LICENCE			
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Definitions:

1. In these terms and conditions

"**Act**" means the *Commercial River Rafting Safety Act*;

"**Familiarization Trips**" – the number of descents on a river section a Guide or Trip Leader is required to complete prior to acting as a guide on a commercial raft trip on that river section.

"**Guide**" means the holder of a valid and subsisting Guide Licence of a "Guide" or "Senior Guide" class;

"**Outfitter Permit**" means the outfitter permit issued under the Act to the outfitter who has employed the Guide or Trip Leader to conduct Rafting Trips for the outfitter;

"**Rafting Trip**" means a commercial river rafting trip consisting of one or more rafts that are travelling together;

"**Registrar**" means the Registrar of Commercial River Rafting;

"**Special Provisions**" means the terms and conditions relating to the operation of a Rafting Trip on a particular river which are attached by the Registrar to an Outfitter Permit; and

"**Trip Leader**" means the holder of a valid and subsisting Trip Leader Licence.

Operational Requirements

1. A Trip Leader must be in charge of a Rafting Trip except where the Special Provisions permit a Guide to be in charge of a Rafting Trip.
2. A Guide or Trip Leader must be in charge of each raft used in a Rafting Trip.
3. All Guides and Trip Leaders must carry a knife, in good working condition, with them on every Rafting Trip.

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4. Prior to the commencement of every Rafting Trip, a Licenced Guide/Trip Leader must give a safety orientation briefing to every person who will be transported down the river on that Rafting Trip and that briefing must include
 - a) an explanation of the operation of the Rafting Trip and the hazards of the river which is to be run,
 - b) general safety precautions,
 - c) the use and wearing of lifejackets
 - d) seating assignments
 - e) procedures to be followed in all emergencies including casualties, swamping, capsizing and persons overboard, and
 - f) where the Special Provisions permit the Rafting Trip to be undertaken by one raft, an explanation of the particular risks presented by that type of Rafting Trip.

5. The Guide or Trip Leader in charge of a raft used in a Rafting Trip must ensure that
 - a) every person onboard the raft is wearing a lifejacket approved for use by the Outfitter Permit,
 - b) when the raft is approaching a rapid or series of rapids in the river, the passengers onboard the raft are advised of that fact and are instructed of the precautions to be taken by them in order to travel over that portion or portions of the river,
 - c) where outrigger pontoons are attached outside of the raft, no person onboard the raft is permitted to ride on those outrigger pontoons when the raft is passing through a rapid or series of rapids in the river,
 - d) all loose equipment, storage boxes, fuel tanks and other objects stowed onboard the raft are properly stowed, secured in place and covered, wherever necessary, so that the equipment, storage boxes, fuel tanks and other objects do not move about the raft and cause injury to the passengers onboard the raft,
 - e) no controlled substance, illegal drug or alcohol, is consumed by any passenger onboard the raft during the Rafting Trip,

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- f) no person is permitted to participate in a Rafting Trip if, in the opinion of the guide or Trip Leader,
- (i) that person is physically or psychologically incapable of participating in the Rafting Trip, or
 - (ii) that person is under the influence of drugs or alcohol,
- g) except in an emergency, no Rafting Trip is undertaken in hours of darkness,
- h) no raft is refuelled while passengers are onboard the raft,
- i) every Rafting Trip is undertaken with due regard being given to river conditions and all other conditions that may endanger the safety of the passengers onboard the raft, and
- j) in running a river, they comply with the Special Provisions in effect for the river they are running.

6. Prior to the commencement of each day's operation, the Guide must check each chamber of the raft that he or she will be in charge of during that day at its rated working pressure and must visually inspect the entire exterior of the raft to ensure that the raft is in working condition.

Record of Service

1. All Guides and Trip Leaders must maintain a record of service for each Rafting Trip undertaken by them and that record of service must include
 - a) the date of the Rafting Trip,
 - b) the route of the Rafting Trip,
 - c) whether they undertook the Rafting Trip as a Guide or Trip Leader (and, if as a Guide, the name of the Trip Leader),
 - d) the type of raft(s) they were in charge of on that Rafting Trip and whether the raft was propelled by oar, paddle or motor,

GUIDES and TRIP LEADERS TERMS and CONDITIONS OF LICENCE			
Effective Date April 1, 1989	Amendment February 1, 1999 March 31, 2003	Approved: _____ <i>John Block, Registrar of Commercial River Rafting</i>	Page 4 of 4

- e) the duration of the Rafting Trip,
 - f) if the Rafting Trip was undertaken by a Guide, the number of passengers onboard the raft,
 - g) if the Rafting Trip was undertaken by a Trip Leader, the number of people transported down the river on that Rafting Trip, and
 - h) all accidents that occur on the Rafting Trips.
2. At the completion of each Rafting Trip, or as soon after that as practicable, the record of service must be certified correct and signed by the outfitter who has employed the Guide or Trip Leader to conduct Rafting Trips for the outfitter.
 3. The record of service must indicate the date of issue of all first aid certificates held by the Guides, Trip Leader, and/or other staff member.
 4. The record of service must be produced, upon request, to an inspector (as defined in the Act).
 5. The discovery, by the Registrar, of any falsification of the record of service of a Guide or Trip Leader will be grounds for suspension or cancellation of the Guide Licence or Trip Leader Licence, respectively.
7. First Aid Requirements
- Guides (class 1 waters), Guides, Senior Guides and Trip Leaders must hold and provide proof, on site, a valid Standard First Aid Certificate (minimum 16 hours) with level "C" CPR or any other first aid course certificate approved by the Registrar.

*CPR must be recertified when certification expires.

Appendix Three

**Commercial River Rafting
Safety Act**

COMMERCIAL RIVER RAFTING SAFETY ACT

[RSBC 1996] CHAPTER 56

[Updated to September 6, 2000]

Contents

Section

- 1 Definitions
- 2 Registrar
- 3 Registration and licences
- 4 Application for registration or a licence
- 5 Suspension and cancellations
- 6 Appeals
- 7 Permits
- 8 Safety standards
- 9 Inspections
- 10 Unsafe trips
- 11 Offences
- 12 Officials not liable
- 13 Power to make regulations

Definitions

1 In this Act:

"commercial river rafting" means the carrying on of a business in which an outfitter supplies equipment and personnel to transport a person down a river on a raft;

"guide" means an individual who is in charge of a raft used in commercial river rafting;

"inspector" means a person designated as an inspector by the minister and includes the registrar, a police constable and a person designated as a conservation officer under the *Environment Management Act*;

"outfitter" means a person who carries on commercial river rafting;

"raft" means a vessel designed to carry passengers and that is supported by inflatable sections on its perimeter and propelled by oar, paddle or motor, but does not include a vessel that is exempt by regulation;

"registrar" means the Registrar of Commercial River Rafting and includes a person authorized in writing by the registrar to perform the registrar's duties under this Act;

"trip leader" means an individual who is in charge of a commercial river rafting trip consisting of one raft or of 2 or more rafts that are travelling together.

Registrar

2 (1) The minister must appoint a person under the *Public Service Act* or must designate a person employed in the ministry as Registrar of Commercial River Rafting.

(2) The registrar has the powers and must perform the duties conferred or imposed on the registrar by this Act and the regulations.

(3) The registrar must

(a) maintain a current list of all persons who are registered or licensed under this Act, and

(b) mail a copy of the list, or the latest additions to it, to a person requesting it.

Registration and licences

3 (1) A person must not act as an outfitter or hold himself or herself out as qualified to act as an outfitter unless registered under this Act.

(2) A person must not act as a guide or hold himself or herself out as qualified to act as a guide unless he or she holds a valid guide's licence issued under this Act.

(3) A person must not act as a trip leader or hold himself or herself out as qualified to act as a trip leader unless he or she holds a valid trip leader's licence issued under this Act.

Application for registration or a licence

4 (1) An application for registration as an outfitter or for a licence as a guide or trip leader must be

(a) in the form approved by the registrar, and

(b) accompanied by the prescribed fee.

(2) An applicant for registration as an outfitter or for a licence as a guide or trip leader must meet the criteria established by the registrar for registration or for the appropriate licence.

(3) For the purposes of subsection (2), the registrar may establish more than one class of guide or trip leader with different criteria for each class.

(4) If the registrar is satisfied that an applicant meets the criteria, the registrar may, subject to section 5 (4), issue a certificate of registration or a licence to the applicant for a period of time, up to 3 years, that the registrar indicates on the certificate of registration or licence.

(5) In granting registration or a licence under this section, the registrar may attach to it terms and conditions the registrar considers necessary.

(6) A certificate of registration or a licence is valid from the date of its issue and for the period of time indicated on it.

(7) Subject to this Act, a certificate of registration or a licence may be renewed on payment of the prescribed fee and subsection (4) applies.

Suspension and cancellations

5 (1) The registrar may suspend or cancel a registration or licence if the person

(a) knowingly gave false information on his or her application for registration or for a licence, or

(b) fails to comply with

(i) a term or condition attached to the registration or licence,

(ii) a term or condition attached to a permit issued under this Act, or

(iii) an operating plan required by this Act.

(2) The registrar may suspend or cancel a permit if the outfitter fails to comply with a term or condition attached to it.

(3) If the registrar lifts a suspension of a registration, licence or permit, the registrar may attach additional terms or conditions to it.

(4) If a person has been registered or has possessed a licence in the past, and the registration or licence was suspended or cancelled, the registrar may refuse to register the person or issue a new licence to the person.

Appeals

6 (1) If the registrar suspends or cancels a registration, licence or permit or refuses to register or issue a licence, the person may appeal to the Environmental Appeal Board established under the *Environment Management Act*.

(2) Section 40 (2) to (7) of the *Water Act* applies to an appeal under subsection (1).

Permits

7 (1) An outfitter must not operate on a river without a permit authorizing the outfitter to do so.

(2) A permit must be for one or more rivers as specified in the permit.

(3) An application for a permit must be

(a) in the form approved by the registrar, and

(b) accompanied by the prescribed fee.

(4) The outfitter must submit with the application an operating plan for each river for which the outfitter is seeking a permit.

- (5) If the registrar is satisfied with the operating plan, the registrar may issue a permit to the outfitter to operate on the river or rivers to which the permit relates for a period of time, up to 3 years, that the registrar indicates on the permit.
- (6) If the registrar issues a permit under subsection (5), the registrar may attach the terms and conditions to the permit that the registrar considers necessary.
- (7) A trip leader must
- (a) carry, at all times during a trip, a copy of the permit and operating plan for the river on which he or she is operating, and
 - (b) produce the copies referred to in paragraph (a) on the request of an inspector.
- (8) The registrar may, at any time, by notice in writing served personally on or sent by registered mail to the outfitter at the outfitter's last known business address, alter a term or condition attached to a permit.
- (9) A notice sent by registered mail is deemed to have been received 14 days after the date it was mailed.
- (10) A permit is valid from the date of its issue and for the period of time indicated on it.
- (11) The registrar may, on the application of an outfitter and on the outfitter complying with subsection (4), add a river or rivers to a permit during the term of the permit without the outfitter paying a further fee.
- (12) A permit may be renewed on payment of the prescribed fee and subject to any changes in the terms and conditions or changes to the operating plan that the registrar may require.

Safety standards

- 8** (1) Without limiting section 7 (5) and (6), the registrar may establish safety standards for commercial river rafting on a river or portion of a river.
- (2) Without limiting subsection (1), the registrar may establish one or more of the following:
- (a) standards respecting equipment, personnel or any other factor relating to safety;
 - (b) standards based on water flow rates;
 - (c) requirements to observe and record water flow rates measured on water flow gauges established at specified points on a river;
 - (d) a prohibition against commercial river rafting if a water flow gauge established on a river is not functioning;
 - (e) restrictions on or a prohibition against commercial river rafting if water flow rates are greater or less than a specified rate.
- (3) Compliance with the standards established under subsections (1) and (2) is deemed to be a condition attached to each permit issued by the registrar.

(4) The registrar must

- (a) make a copy of the standards established under this section available for inspection at the registrar's office, and
- (b) on payment of the prescribed fee, supply a copy to a person who requests one.

Inspections

9 (1) An outfitter, trip leader or guide must, on the request of an inspector,

- (a) permit the inspector to examine a raft or any equipment being used or available for use on a commercial river rafting trip,
- (b) produce his or her certificate of registration or licence, as the case may be,
- (c) in the case of a trip leader, produce a copy of the permit and operating plan for the river on which he or she is then in charge of a commercial river rafting trip, and
- (d) state his or her name and address.

(2) An inspector may at any reasonable time enter the business premises of an outfitter for the purpose of inspecting equipment to determine whether or not it complies with the requirements attached to the outfitter's registration or to the permits issued to the outfitter.

(3) If it is safe to do so, an inspector may require a person who is in control of a raft to stop the raft and bring it to shore so that the inspector can determine whether or not the raft is being used for a commercial river rafting trip and, if it is being so used, so that the inspector can determine whether or not it is being operated in accordance with this Act or not.

Unsafe trips

10 (1) If an inspector has reasonable and probable grounds for believing that the persons on a commercial river rafting trip may be in imminent danger of loss of life or serious injury if the trip were to continue, the inspector may order the trip leader to immediately discontinue the trip, and the trip leader must immediately comply with the order.

(2) If a trip leader fails or refuses to comply with an order under subsection (1) or the inspector believes the trip leader will continue the trip as soon as an opportunity occurs to do so, the inspector may impound the raft and its equipment and remove it to a safe place.

(3) If it is necessary to do so, an inspector may use reasonable force to impound a raft and its equipment under subsection (2).

(4) If an inspector has impounded a raft and its equipment, the inspector must release it to the outfitter or the outfitter's agent on being satisfied that there will no longer be imminent danger of loss of life or serious injury by doing so.

Offences

11 (1) Section 5 of the *Offence Act* does not apply to this Act or the regulations.

(2) A person who contravenes section 3, 7 (1) or (7), 9 (1) or 10 (1) commits an offence.

- (3) An outfitter, trip leader or guide who contravenes a term or condition of his or her registration or licence commits an offence.
- (4) A trip leader or guide who contravenes a term or condition of
 (a) the permit, or
 (b) the operating plan
 for the river on which he or she is operating commits an offence.
- (5) An outfitter, trip leader or guide who, after his or her registration or licence has been suspended or cancelled, continues to act or hold himself or herself out as qualified to act as an outfitter, trip leader or guide, as the case may be, commits an offence.
- (6) A person who is in control of a raft and fails to immediately stop it and bring it to shore when signaled or requested to do so by an inspector who is a conservation officer or a police constable and who is in his or her uniform of office commits an offence.
- (7) A person who resists or obstructs an inspector in the exercise of his or her powers under this Act commits an offence.
- (8) If a trip leader or guide commits an offence under subsection (4), the outfitter who has employed or retained the trip leader or guide commits an offence unless the outfitter establishes that he or she exercised all due diligence to prevent its commission.
- (9) A person who knowingly gives false information in connection with an application for registration, a licence or a permit commits an offence.
- (10) If a corporation commits an offence under this Act, an employee, officer, director or agent of the corporation who authorized, permitted or acquiesced in the offence commits an offence even though the corporation is convicted.
- (11) A person who commits a second or subsequent offence is liable to a penalty of not more than \$5 000 or 6 months in jail or both.

Officials not liable

2 The minister, the registrar, an inspector and their agents, officers, employees, representatives and persons acting on their behalf are not liable in their personal or official capacities for loss or damage suffered by a person by reason of anything done or omitted to be done in good faith in the exercise or purported exercise of powers given by this Act.

Power to make regulations

13 (1) The Lieutenant Governor in Council may make regulations referred to in section 41 of the *Interpretation Act*.

(2) Without limiting subsection (1), the Lieutenant Governor in Council may make regulations as follows:

- (a) prescribing fees for registration, licences and permits;
- (b) authorizing the registrar, by order, to exempt a person from the payment of a fee;
- (c) establishing minimum levels of insurance to be carried by an outfitter;
- (d) providing for the reporting of accidents and fatalities;
- (e) exempting a raft or a class of rafts from the application of this Act or the regulations or any provision of this Act or the regulations.

(3) A regulation under subsection (2) (a) may prescribe different fees for different persons or classes of persons, different rivers or classes of rivers and different types or numbers of rafts.

Infobase: (Shadow) 1997 Acts
Query: raft*

BILL 14 – CHAPTER 18 – 1997

ENVIRONMENT, LANDS AND PARKS

STATUTES AMENDMENT ACT, 1997

Royal Assent given on the 28th day of July, 1997

Certified correct as passed Third Reading on the 17th day of July, 1997

- Ian D. Izard, Law Clerk

Minister of Environment,
Lands and Parks

HER MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of British Columbia, enacts as follows:

Commercial River Rafting Safety Act

1. *Section 6 (2) of the Commercial River Rafting Safety Act, R.S.B.C. 1996, c. 56, is repealed and the following substituted:*

(2) Section 40 (2) to (7) of the *Water Act* applies to an appeal under subsection (1)

Appendix Four

**Commercial River Rafting
Safety Regulations**

PROVINCE OF BRITISH COLUMBIA

ORDER OF THE LIEUTENANT GOVERNOR IN COUNCIL

Order in Council No. 438, Approved and Order April 9, 1999

Executive Council Chambers, Victoria

On the recommendation of the undersigned, the Administrator, by and with the advice and consent of the Executive Council, orders that the Commercial River Rafting Safety Regulation, is repealed and the Commercial River Rafting Safety Regulation in the attached Schedule is made.

Original signed by Minister of Environment, Lands and Parks and the Presiding Member of the Executive Council.

Act and section: Commercial River Rafting Safety Act, R.S.B.C. 1996, C.56,22 8 (4) (B), 13

Other (specify): Interpretation Act, R.S.B.C. 1996, c 238, 2.41 (1) (e): OC 1438/88

SCHEDULE

COMMERCIAL RIVER RAFTING SAFETY REGULATION

Reporting loss of life

- 1 If an incident occurs respecting a person on a commercial river rafting trip and the incident involves loss of life, the outfitter must, as soon as practical, report the incident using the form in the Schedule, to an officer of the Royal Canadian Mounted Police and to the registrar.

Reporting other matters

- 2 **If an incident occurs respecting a person on a commercial river rafting trip and the incident involves any of the following, the outfitter must, within 48 hours after the trip ends, report the incident to the registrar using the form in the Schedule:**
- (a) **stoppage of breathing;**
 - (b) **injury requiring hospitalization for more than 24 hours.**

Exemption

- 3 **The *Commercial River Rafting Safety Act* and this regulation do not apply to the use of the following:**
- (a) **an inflatable kayak;**
 - (b) **a cataraft with two tubes and connecting oar frame, if the cataraft is designed to carry only one person;**
 - (c) **a rigid hull inflatable boat with transom;**
 - (d) **an inflatable canoe;**
 - (e) **a raft with transom, rig floor and fixed bench seats.**

Offence

- 4 A person who contravenes section 1 or 2 commits an offence and on conviction is liable to a fine of not more than \$2000 or to imprisonment for not more than 6 months or to both.

Prescribed fees

- 5 The following fees are prescribed fees for the purposes of the *Commercial River Rafting Safety Act*:
- (a) for rivers of Class 1 as measured on the International River Grading System proposed by the International Canoe Federation (the "International System"),
 - (i) on application for an annual registration as an outfitter; \$1
 - (ii) on application for an annual licence as a trip leader or guide: \$1
 - (b) for all other classes of river as measured on the International System,
 - (i) on application for an annual registration as an outfitter \$600
 - (ii) on application for an annual licence as a trip leader or guide \$50

Bill 74 – 1999 MISCELLANEOUS STATUTES AMENDMENT ACT (No. 2) 1999

Registrar of Commercial River Rafting
 Ministry of Water, Land and Air Protection

11. *The Building Safety Standards Act, R.S.B.C. 1996, c. 42, is repealed.*

Building Safety Standards Act, S.B.C. 1981, c.11, are repealed.

12. *Section 38 to 44 of the Building Safety Standards Act, S.B.C. 1981, c 11, are repealed.*

Commercial River Rafting Safety Act

13. *Section 4 of the Commercial River Rafting Safety Act, R.S.B.C. 1996, c.56, is amended*

(a) by repealing subsection (4) and substituting the following:

- (3) If the registrar is satisfied that an applicant meets the criteria, the registrar may, subject to section 5 (4), issue a certificate of registration or a licence to the applicant for a period of time, up to 3 years, that the registrar indicates on the certificate of registration or licence, *and*

(b) by repealing subsection (6) and substituting the following:

- (6) A certificate of registration or a licence is valid from the date of its issue and for the period of time indicated on it.

- (6) Subject to this Act, a certificate of registration or a licence may be renewed on payment of the prescribed fee and subsection (4) applies.

14. *Section 7 is amended*

(a) by repealing subsection (5) and substituting the following:

- (4) If the registrar is satisfied with the operating plan, the registrar may issue a permit to the outfitter to operate on the river or rivers to which the permit relates for a period of time, up to 3 years, that the registrar indicates on the certificate of registration or licence., *and*

(b) by repealing subsection (10) and substituting the following:

- (10) A permit is valid from the date of its issue and for the period of time indicated on it. , *and*

(c) by adding the following subsection:

- (12) A permit may be renewed on payment of the prescribed fee and subject to any changes in the terms and conditions or changes to the operating plan that the registrar may require.

PROVINCE OF BRITISH COLUMBIA

ORDER OF THE LIEUTENANT GOVERNOR IN COUNCIL

Order in Council No. 73 Approved and Ordered Jan 27, 2000

Signed by the Lieutenant Governor

Executive Council Chambers, Victoria

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and consent of the Executive Council, orders that

- (a) sections 13, 14, 35, 37 to 43, 71 and 72 of the *Miscellaneous Statutes Act* (No 2), 1999, S.B.C. 1999, c.38, are brought into force by this regulation.
- (b) Sections 1 (b), (f), (j), 3, 6 and 10 of B.C. Reg. 447/98, the Designated Acts Regulation are repealed, and
- (c) B.C. Reg. 107/99, the Commercial River Rafting Safety Regulation, is amended as set out in the attached Schedule.

Signed by the Minister of Environment, Lands and Parks and the Presiding Member of the Executive Council and Minister of Small Business, Tourism and Culture.

SCHEDULE

- 1 Section 5 of B.C. Reg. 107/99, the Commercial River Rafting Safety Regulation, is amended*
- (a) by adding ‘for each year of a registration period or licence period’ “after” are prescribed fees’.*
 - (b) in paragraphs (a) (I) and (b) (I) by striking out “an annual”.*
 - (c) in paragraphs (a) (ii) and (b) (ii) by striking out “an annual” and substituting “a”.*
 - (d) by renumbering the section as section 5 (1), and*
 - (e) by adding the following subsection:*
 - (2) The fee for a registration period or licence period must be prorated for a period that includes part of a year.*

ACCIDENT / INJURY REPORT
(Commercial River Rafting Safety Act)

[If more space is required for any information, attach additional pages]

Company _____
 Address _____
 Reg./Lic. No. _____
 Company owner _____
 Trip leader* _____ Guide _____
 Date of occurrence _____
 River _____ River Route _____
 Location on route _____

Type of Injury Loss of life
 Stoppage of breathing
 Hospitalization for 24 hours or more

Injured Persons:

	Name	Address	Telephone No.
1.	_____	_____	(____) _____
2.	_____	_____	(____) _____
3.	_____	_____	(____) _____

Description of Injury:

1. _____
 2. _____
 3. _____

Description of Occurrence:

Water Flow (cms) - high, medium, low _____

 (Outfitter Signature)

 (Date)

 (Investigating Officer)

 (Date)

*The person in charge of trip, may be a guide.

Appendix Five

**Examination Registration
Form**

**2002 EXAMINATION REGISTRATION FOR
Commercial River Rafting Guide Examination**

NAME: _____ PHONE: _____

(please print)

ADDRESS: _____

EXAMINATION LOCATION: _____

ON DATE(S): _____ ALTERNATE: _____

<i>Written:</i>		<i>FEE</i>	
MODULE ONE	Common Skills & Knowledge (mandatory)	\$35	[]
MODULE TWO	Common Skills & Knowledge (If you have attempted and failed Module One)	\$40	[]
MODULE ONE (a)	Common Skills & Knowledge (If you have attempted and failed Module Two)	\$40	[]
MODULE THREE	Paddle Endorsement (mandatory for paddle endorsement)	\$35	[]
MODULE FOUR	Oar Endorsement (mandatory for oar endorsement)	\$35	[]
MODULE FIVE	Motor Endorsement (mandatory for motor endorsement)	\$35	[]
MODULE SIX	Advanced Skills & Knowledge (mandatory for Trip Leaders)	\$35	[]
<i>Practical:</i> (PC's 6 - 8)	Paddle Endorsement	\$35	[]
	Oar Endorsement	\$35	[]
	Motor Endorsement	\$35	[]
	PC's 1 - 5 (mandatory)	\$35	[]

Payment Information

Cheque Visa MasterCard Amount \$ _____

Make cheques and money orders payable to Capilano College

Visa/MasterCard Number: _____ Expiry Date: _____

Signature: _____ Date: _____

Phone Registration with Visa/MasterCard: (604) 984-4901; FAX with Visa/MasterCard (use this form): (604) 983-7545, Mail Registration to:
Capilano College Continuing Education, 2055 Purcell Way, North Vancouver, BC V7J 3H5.
(604) 984-4901

Since all sites have limited capacity, it is strongly recommended that you register two weeks in advance to secure your place for the site you have chosen. Remember – You are NOT registered until you have paid your examination fees.

PROVINCE OF BRITISH COLUMBIA COMMERCIAL RIVER RAFTING
--

DECLARATION OF RAFTING EXPERIENCE FORM

GUIDE QUALIFICATION

Must have completed (in control of a raft) 60 hours (12 days) in any one type of craft (paddle/oar/motor) under the supervision of a qualified trip leader in the grade of whitewater similar to that as you expect to guide commercial raft trips. This must be completed prior to taking the examination. For additional exams in a second or third type of craft – the applicant must have a minimum of 25 hours (5 days) of rafting experience for each type of craft. Applicants must sign, at the exam site, a “Declaration” signifying rafting experience.

EXAMPLE

If you want to do the paddle exam, you require 12 days, all of which have been in a paddle boat. If you also want to take the oar exam, you require 17 days, 5 of which have been in an oar boat. If you want to do the paddle, oar and motor, a minimum of 12 days in one type of craft and an additional 5 days in each of the other types of craft is required for a total of 22 days minimum.

DECLARATION

I, _____, do hereby declare that I have completed
(Print name)

the minimum hours as per the noted Guide Qualification above.

(Applicant's Signature)

Date: _____ of _____, 2003
Day) (Month)

Appendix Six

Practical Marking Sheets

PRESENT A SAFETY BRIEFING

PC 1 – P
PC 1 – 0
PC 1 – M

To Be Completed By Examiner

Date: _____

Location: _____

Guide Name: _____
(print)

Attempt Number: (X) [] 1 [] 2

Results: (X) [] Pass [] Fail

Remarks: _____

Examiner's Signature: _____

Print name, here please: _____

MARKING GUIDE

FOR

PERFORMANCE CHECK ONE

Performance Present a Safety Briefing

Conditions

- Given**
1. Fully-equipped river raft
 2. River trip plan sketch

- Denied**
1. Assistance

Criteria

In accordance with standard format, content and demonstrations; 30 minutes; one attempt; and for:

- Paddle (P) 38 of 47 Briefing points; or
Oar (O) 38 of 47 Briefing points; or
Motor (M) 38 of 47 Briefing points.

Marks	Observed Yes/No
1. Describe nature, difficulty and general hazards of the trip clearly enough to help the guests make a more informed choice	[]
2. Confirm guests have read, understood and signed the waiver form.	[]
3. Question guests about medical conditions.	[]
4. Question guests about swimming ability	[]
5. Confirm that guests are not using drugs or alcohol.	[]
6. Check that guests are properly dressed/equipped: footwear, life jacket, helmet, thermal protection, glasses strap, jewelry.	[]
7. Demonstrate proper fitting of life jacket.	[]
8. Instruct guests to wear their life jacket at all times.	[]
9. Check guests' life jackets.	[]
10. Explain how to properly fit a helmet.	[]
11. Demonstrate how to enter, exit and move in a raft.	[]
12. Describe hazards while moving in a raft including slippery fabric, movement of raft, hard objects, etc.	[]
13. Demonstrate correct seating position in a raft.	[]
14. Demonstrate correct foot position and handholds.	[]
15. Explain the procedures and identify who will be handling lines and holding on to the raft when arriving at or leaving the riverbank.	[]
16. Explain that clients should expect the raft to spin and move sideways and/or backwards.	[]
17. Demonstrate what is expected from a hold on command (including how to place the paddle while holding on if applicable).	[]
18. Demonstrate what is expected from a lay low command as an aid in staying in the raft.	[]
19. Explain how clients should secure their personal equipment including hats, glasses strap, and jewelry.	[]
20. Demonstrate use of a bailing bucket or explain self-bailing features as applicable	[]
21. Explain the buddy system (before and after the buddy falls overboard).	[]

Marks (<i>continued</i>)	Observed YES/NO
22. Instruct guests to stay calm, to not panic, and to be prepared for the gasp reflex if they should fall overboard.	[]
23. Explain the use of the perimeter line.	[]
24. Demonstrate how to assist swimmer back into raft.	[]
25. Describe how to offensively swim back to the boat and the importance of doing so.	[]
26. Demonstrate the paddle reach assist (even if this is an oar or motor safety talk).	[]
27. Demonstrate use of the throw bag/rope.	[]
28. Describe the safety kayak assist (even if this is an oar or motor safety talk).	[]
29. Explain defensive swim procedure and breathing techniques.	[]
30. Explain the importance of avoiding wood hazards as a swimmer	[]
31. Demonstrate how to avoid swimming into wood hazards.	[]
32. Demonstrate what to do if you swim into a wood hazard and explain the importance of doing it properly/having the correct body position.	[]
33. Explain how to get to shore if swimming and describe how to avoid foot entrapment.	[]
34. Explain procedure for raft hitting rocks or similar solid hazards and demonstrate what is expected from a high side command	[]
35. Explain procedure for raft hitting submerged wood hazards (i.e. Logjams/strainers).	[]
36. Explain procedure for raft hitting above water wood hazards (i.e. Sweepers)	[]
37. Explain flipped raft procedure	[]
38. Demonstrate how to get out from underneath a raft	[]
39. Explain how and why swimmers should avoid getting caught downstream of a raft.	[]

	Paddle	Oar	Motor
40. []	Demonstrate how to hold the paddle and describe the hazards of the T grip	Describe hazards posed by oars.	Describe physical hazards posed by the motor
41. []	Demonstrate the basic paddle commands including forward, back, stop, left turn and a right turn.	Describe hazards posed by the oar frame	Describe difficulty of communicating over the sound of the motor and how to compensate accordingly.

Summary

42. Elicit guest's questions often enough. []
43. Effectively demonstrate points using appropriate "props"/equipment. []
44. Effectively demonstrate points using appropriate body positions/movement. []
45. Deliver briefing with confidence []
46. Deliver briefing in an organized manner []
47. Deliver briefing with clarity. []

Candidate Guide Name _____
(please print)

Exam Location _____
(please print)

Performance Check 2: Rescue An Endangered Person

Conditions:

Given: Three throw bags (or candidates may use their own)
 Three endangered persons (simulated – lifejackets set upon the ground approximately 11 metres away with a 1.5 metre piece of rope placed and centred across at front edge of target [laid at right angle to flight path of throw bag]).

Denied: References/Assistance

Criteria: Demonstrate the simulated rescue of three endangered persons:

Three successful throws within 30 seconds.

A maximum of four attempted throws.

Throw bags must hit or cross the piece of 1.5 metre rope laid at right angle in front of the target.

If one throw is not successful the candidate may recoil and throw one more time (provided it can be done within the 30 second total time for all throws).

CIRCLE ONE: PASS FAIL

Performance Check 3: Rescue Endangered Equipment

Conditions:

Given: A rescue scenario
 Rescue equipment (2 prusiks, 4 carabiners, 2 pulleys, webbing, 1 length of static rescue rope).
 Simulated endangered equipment.

Denied: References/Assistance

Criteria Demonstrate the set-up and operation of a Zdrag.
 One attempt
 Utilize multiple equalized attachment points on simulated endangered equipment.
 Within ten minutes.

CIRCLE ONE: PASS FAIL

PERFORMANCE CHECK 4: Re-Flip Drill

CONDITIONS:

Given: An overturned raft equipped with perimeter line.
Paddle.
Personal rafting wear (candidate supplies) including flip line
(and 'stirrup' if desired).
Assistance from examiner (in form of more body weight) by following
candidates
direction in the case of a small candidate and large raft.

Denied: References/Assistance

CRITERIA: Demonstrate the set up and re-flip techniques.
One attempt.
Within five minutes

CIRCLE ONE: PASS FAIL

PERFORMANCE CHECK 5: Whitewater Swim

CONDITIONS:

Given: An assigned section of whitewater (less than 200 metres).
A designated series of safe eddies to reach.
Personal swimming wear (wetsuit/drysuit, lifejacket, and helmet
- candidate supplies)

Denied: References/Assistance

CRITERIA: Demonstrate the capability to swim offensively and defensively and catch
designated eddies safely.

CIRCLE ONE: PASS FAIL

EXAMINER: _____ **SIGNATURE** _____
(please print)

(please print)

Motor Practical Exam Attempt #: One Two

Candidate Guide Name: _____

Exam Location: _____ Date: _____

1. Pre-Trip (Circle Score)
Leadership

Organization

Communication

Total

0 1 2

0 1 2

0 1

/5

2. Maneuvers (Circle Errors; Missed Eddy = 0 Points, 3 Missed = Fail)

River Section	Points, (subtract value or portion thereof)					Eddy	Points	
Start – Eddy 1	Exit (1)	Control (3)	Enter (4)	Hold (1)	Other (1)	Y	N	/10
Eddy 1 – Eddy 2	Exit (1)	Control (3)	Enter (4)	Hold (1)	Other (1)	Y	N	/10
Eddy 2 - Eddy 3	Exit (1)	Control (3)	Enter (4)	Hold (1)	Other (1)	Y	N	/10
Eddy 3 – Eddy 4	Exit (1)	Control (3)	Enter (4)	Hold (1)	Other (1)	Y	N	/10
Eddy 4 - Eddy 5	Exit (1)	Control (3)	Enter (4)	Hold (1)	Other (1)	Y	N	/10
Eddy 5 - Eddy 6	Exit (1)	Control (3)	Enter (4)	Hold (1)	Other (1)	Y	N	/10
Eddy 6 - Eddy 7	Exit (1)	Control (3)	Enter (4)	Hold (1)	Other (1)	Y	N	/10
Eddy 7 - Eddy 8 /80	Exit (1)	Control (3)	Enter (4)	Hold (1)	Other (1)	Y	N	/10

3. Surfing: (Circle Score)

Initiation: 0 1 2
/5

Control: 0 1 2

Adaptability: 0 1

4. Techniques: (Circle Score)

Correct: 0 1 2 3 Efficiency: 0 1 2 3 Control: 0 1 2 3 Recovery: 0 1
/10

___ Pass – Guide Level ___ Provisional Pass ___ Fail /100

Examiner Name: _____ SIGNATURE _____

(please print)

PLEASE NOTE:

Provisional Pass – Score 75 – 84. Requires additional days training under a Trip Leader and two Trip Leaders to sign supplied form indicating Apprentice Guide is competent to carry passengers prior to Guide License issue.

0 – 70	fail (a second attempt permitted at another exam site only)
71 – 74	fail (a second attempt permitted at same exam site)
75	Provisional Pass 13 days of training required, minimum
76	Provisional Pass 12 days of training required, minimum
77	Provisional Pass 11 days of training required, minimum
78	Provisional Pass 10 days of training required, minimum
79	Provisional Pass 9 days of training required, minimum
80	Provisional Pass 8 days of training required, minimum
81	Provisional Pass 7 days of training required, minimum
82	Provisional Pass 6 days of training required, minimum
83	Provisional Pass 5 days of training required, minimum
84	Provisional Pass 4 days of training required, minimum
85 - 100	Pass

Second attempt practical exam:

A second attempt at the same test site is permitted for scores 71 – 74.

Scores less than 71 must be taken at another site.

Passes on a second attempt when the first attempt score is less than 71 need a minimum of 13 more days training under a trip leader and the supplied form signed by 2 trip leaders prior to a guide license issue.

Failure of any second attempt requires one year before the exam can be re-taken.

Appendix Seven

**Guide Licence
Application Form**



**Ministry of Water,
Land and Air Protection**

Commercial River Rafting Safety Act

**Application Form for
Guide, Senior Guide or Trip Leader Licence and
Guide of Class I Waters (as measured on
the International River Grading System)**

In accordance with the *Commercial River Rafting Safety Act*, you may not act as a Guide or Trip Leader, or Guide of Class I Waters, or hold yourself out as qualified to act as a Guide or Trip Leader or Guide of Class I Waters, until you have been issued a Guide Licence, a Trip Leader Licence, or Guide Licence for Class I Waters respectively.

Please Note: All licences are valid for a term of three years from the date of issue.

OFFICE USE ONLY			
\$150.00 Fee Paid	_____		
Tat/Alsek Guide	_____		
Written Exams:	P/F	1/2	
Common Skills	_____	_____	
Paddle	_____	_____	
Oar	_____	_____	
Motor	_____	_____	
Advanced	_____	_____	
Practical Exams:			
Paddle	_____	_____	
Oar	_____	_____	
Motor	_____	_____	
LICENCE NO.	_____		
CG	G	SG	TL
	P	O	M
81000-50\	_____		

Name: _____ Date of Birth: _____
(Please print) (Y/M/D)

Licence Mailing Address: _____

E-mail address: _____ Telephone Number: () _____
 Fax number: () _____

Name of Outfitter you plan to work for this season: _____

Rivers you plan to run this season: _____

Have you ever received a BC Rafting licence before? Yes / No *(circle one)*

If no, what is the date and location of your exams?

If yes, what was the last year you held a valid licence? _____

What is your licence number? _____

I AM APPLYING FOR THE FOLLOWING:

(Check as applicable)

- | | | | |
|---|--------|-------|-------|
| 1. One of the following classes of Guide Licence: | Paddle | Oar | Motor |
| (a) Class I Guide | _____ | _____ | _____ |
| (b) Guide | _____ | _____ | _____ |
| (c) Senior Guide | _____ | _____ | _____ |
| 2. Trip Leader Licence | _____ | _____ | _____ |

PREREQUISITES TO ISSUANCE OF LICENCE

Certificates and Examinations

All Guides and Trip Leaders must hold and be able to provide proof (on site) of a valid standard first-aid certificate (minimum 16 hour) or any other first-aid course approved by the Registrar AND a valid Level C, CPR.

1. Trip Leader Licence

BC River Rafting Guide Certification Examination (Regulatory Knowledge) *[N.B.: If you have not completed this examination, please complete the Registration form in the Certification Manual and submit it to Capilano College].*

2. Guide Licence (Senior Guide and Guide)

BC River Rafting Guide Certification Examination (Common Skills and appropriate Modules). *[N.B.: If you have not completed this examination, please complete the Registration form in the Certification Manual and submit it to Capilano College].*

3. Guide License (Class I waters)

BC River Rafting Guide Certification Examination (Common Skills) *[N.B.: If you have not completed this examination, please complete the Registration form in the Certification Manual and submit it to Capilano College].*

I have/have not (*circle the applicable statement*) successfully completed the examination(s) which are a prerequisite to the issuance of the licence or class of licence for which I have applied. *[N.B.: If not, please circle below the appropriate examination that you have not successfully completed.]*:

Written Exam (Common Skills, Paddle, Oar, Motor, Regulatory Knowledge)

Practical Exam (Paddle, Oar, Motor)

IMPORTANT NOTE **First Aid and River Rescue Requirements**

Requirements for First Aid and River Rescue have been removed from the Guide and Trip Leader licence qualifications and placed in the Safety Standards for Operators and the Terms and Conditions for Guides and Trip Leaders [see Certification manual].

FAMILIARIZATION TRIPS

The Registrar of Commercial River Rafting requires you to complete the number of familiarization trips on the river or portion of a river that you will be running this season that are set out in the "Special Provisions" for that river or portion of a river.

Circle the applicable statement:

I have/have not completed the number of required familiarization trips for each of those rivers or portions of a river that I will be running this season.

EMPLOYMENT AUTHORIZATION

If you are not a Canadian Citizen or permanent resident of Canada, a copy of the Employment Authorization issued to you by Employment and Immigration Canada must be submitted with this Application. If not, this Application will be incomplete and will not be considered by the Registrar of Commercial River Rafting.

Circle applicable statement

I am/am not a Canadian citizen or permanent resident of Canada and, if not, **I have/have not** submitted a copy of my Employment Authorization with this Application.

FEES AND WARRANTIES AND REPRESENTATIONS

1. If applying for Guide (Class 1 waters), a fee of \$1.00 must accompany this Application. On application for a replacement licence, the fee is \$25.00.
2. If applying for a Guide or Trip leader Licence, a fee of \$50.00 must accompany this Application. On application for a replacement licence or endorsement amendment, the fee is \$25.00.

All fees may be paid by way of cheque or money order made payable to the *Minister of Finance and Corporate Relations* (a \$20.00 service charge will be charged for dishonoured cheques). **DO NOT SEND CASH.** [*N.B.: If the fee is not included with this Application, this Application will be incomplete and the Registrar of Commercial River Rafting will not consider it.*]

3. The Applicant warrants and represents to the Province that

Circle applicable statement

- (a) **I am/am not** a competent swimmer;
- (b) **I have/have no** knowledge of the construction of a raft and am capable of effecting repairs and replacement parts of the raft;
- (c) **I have/have no** knowledge of safety, emergency procedures and the hazards associated with the rivers I will be rafting;
- (d) all information given to the Province in this Application is true and accurate; and
- (e) no previous licence issued to me was suspended or cancelled by the Registrar of Commercial River Rafting except as may be set out below:

[N.B.: In accordance with section 5 of the Commercial River Rafting Safety Act, the giving of false information in this Application is a ground for suspension or cancellation of a licence.]

This application must be signed or it will be considered incomplete.

Date

Signature of Applicant

This Application must be completed in full, dated and signed, and must be accompanied by the fee and two (2) recent photographs, passport style (approximately 1" by 1", head and shoulders only, no action shots, no hats or sunglasses, no old license pictures) and delivered to the following address:

Addresses:

Val Smith
Marine Safety (AMSR)
Tower C, Place de Ville, 330 Sparks St. 11th Fl.
Ottawa, ON, K1A 0N7

Capt. Raymond Krick
Regional Director Marine Safety, Ontario Region
100 Front Street, 2nd Floor
Sarnia, Ontario, Canada, N7T 2M4

Telephone (519) 383-1825, Fax (519) 383-1997

NOTE: *The required fee (\$150.00) and photos must accompany application. PLEASE DO NOT FAX APPLICATION.*

**PLEASE ALLOW TWO WEEKS FOR
PROCESSING AND MAILING**

Did you enclose?

Two photographs - passport style, head and shoulder, no sunglasses, no hat

\$1.00 fee? (Class 1 only) or

\$150.00 fee? (Guide, Senior Guide and Trip Leaders)

Copy of the Employment Authorization issued to you by Employment and Immigration Canada? (If you are not a Canadian Citizen or permanent resident of Canada)

Is application signed and dated?