



SCUBA DIVING SAFETY MANUAL

TABLE OF CONTENTS

Preamble	3
Disclaimer	3
Abbreviations	3
Definitions	3
General Requirements	4
Additions	4
CAUS 3.1 Organization Requirements	4
3.1.2 Diving Safety Committee	4
CAUS 3.1.3.2(i) Dive Project Review and Approval	5
CAUS 3.1.9 Reciprocity and Visitors	5
CAUS 3.2.1.1 Medical Requirement	5
CAUS 3.2.2.1 Minimum Entry Requirements	5
(e) Signed Waiver and Release Forms	5
CAUS 3.2.3.6 Visiting Diver	5
CAUS 3.2.4 Special Circumstances and Equipment	5
CAUS 3.3.1 Diver's Personal Logbook	6
CAUS 3.3.2 Daily Record	6
CAUS 3.4 General Dive Procedures	6
CAUS 3.5.3 Underwater Power Tools	6
CAUS 5 General Equipment Requirements	6
CAUS 8 Incident and Accident Reports	6
Flying After Diving	6

FORMS

FORM A	Release and Waiver
FORM B	UNB Dive Project Review & Approval Form
FORM C	CAUS Request for Diver Reciprocity
FORM D	Diver's Personal Logbook
FORM E	Daily Record (Excel fillable-form available from the DSO)
FORM F	Dive Emergency Assistance Plan - Bay of Fundy

PREAMBLE

It is the policy of the University of New Brunswick to promote safe Scientific Diving based upon the guidelines set out by The Canadian Association for Underwater Science Standard of Practice for Scientific Diving and additional safety policies deemed to be necessary by the University of New Brunswick Diving Safety Committee.

The UNB Diving Safety Committee is responsible for communicating the standards for scientific diving to the University research community. Scientific divers are responsible to ensure that they meet these standards in all diving conducted on behalf of the University of New Brunswick. All dive activities must be pre-approved by the Diving Safety Officer and all other duties and responsibilities must be completed in compliance with The Canadian Association for Underwater Science Standard of Practice for Scientific Diving and additional safety policies deemed to be necessary by the University of New Brunswick. Duties and responsibilities of Diving Project Directors, On-site Diver-In-Charge and Dive Team Members similarly must be in compliance with The Canadian Association for Underwater Science Standard of Practice for Scientific Diving and additional safety policies deemed to be necessary by the University of New Brunswick.

The purpose of this Manual is to provide a safety framework to cover all diving activities undertaken by the University of New Brunswick.

DISCLAIMER

The University of New Brunswick and its Board of Governors or appointees shall not be liable for any injury (fatal or otherwise), loss or damage sustained either directly or indirectly through the use of this Diving Safety Manual including loss or damage resulting from negligence. Each diver shall engage in diving activity strictly voluntarily and shall assume all risks consequences and potential liability for his/her own actions (acknowledged by completing FORM A).

ABBREVIATIONS

CAUS: Canadian Association for Underwater Science

UNB: University of New Brunswick

DEFINITIONS

Definitions used in the University of New Brunswick SCUBA diving safety manual adhere strictly to those in the CAUS Standard of Practice for Scientific Diving Section 2 unless otherwise indicated below.

There are currently no exceptions.

GENERAL REQUIREMENTS

Scientific diving activities will only be permitted at UNB if they are in full compliance with the CAUS Standard of Practice for Scientific Diving including any ADDITIONS noted in this document and as supervised by the Diving Safety Committee of UNB.

For a dive project to be approved by the Dive Safety Officer it must be in full compliance with the CAUS Standard of Practice for Scientific Diving.

To qualify to dive under the auspices of UNB, a diver must comply with the CAUS Standard of Practice for Scientific Diving.

The following ADDITIONS serve to provide details specific to UNB where those are not specifically indicated in the CAUS Standard of Practice for Scientific Diving. The section numbers indicated below correspond to those outlined in the CAUS Standard of Practice for Scientific Diving.

ADDITIONS

CAUS 3.1 Organization Requirements

3.1.2 Diving Safety Committee

In accordance with CAUS guidelines the UNB dive Safety Committee shall be appointed by the organization's Chief Executive Officer to consist of:

Composition	Current Appointees
Organization's Chief Executive Officer or designee	David Gillespie Environmental Health, Safety & Security Manager UNBSJ
Diving Safety Officer	Gary Saunders Dive Master (PADI)
Diving Project Directors	Heather Hunt Marie Josée Maltais Rémy Rochette Gary Saunders

CAUS 3.1.3.2(i) Dive Project Review and Approval

Scientific dive activities through UNB are NOT permitted until a Dive Project Plan is submitted and approved by the Diving Safety Officer (FORM B). Refer to CAUS section 3.4 General Dive Procedures.

Dive proposals that exceed the no decompression limits will not be approved for Scientific Diving activities at UNB.

CAUS 3.1.9 Reciprocity and Visitors

Faculty, staff, postdoctoral fellows and students of UNB are not to undertake scientific diving activities outside of projects approved for UNB Diving Project Directors unless they are with institutions recognized as CAUS compliant by, and provided with a letter of reciprocity from, UNB's Diving Safety Officer (FORM C).

CAUS 3.2.1.1 Medical requirement

As per CAUS guidelines medicals must be performed by a licensed physician trained in diving medicine. The Diving Safety Committee maintains a list of physicians acceptable for this purpose in the local area.

CAUS 3.2.2.1 Minimum entry requirements

(e) **signed waiver and release forms** for UNB are included here as FORM A.

CAUS 3.2.3.6 Visiting Diver

All Visiting Divers to UNB shall have a letter of reciprocity provided by his/her institutional Diving Safety Officer, sign a release holding UNB harmless from any claims which may arise in connection with any diving operation (FORM A) and be requested to complete any aspects of the CAUS 3.2.2 Scientific Diver Competency specifications as deemed necessary by UNB's Diving Safety Officer.

CAUS 3.2.4 Special Circumstances and Equipment

Any and all proposed activities falling under this category in the CAUS Standard of Practice for Scientific Diving must be clearly indicated in the UNB Dive Project Review & Approval Form (FORM B). The Diving Safety Officer reserves the right to request

additional training and or qualifications as deemed necessary prior to approval of such activities.

CAUS 3.3.1 Diver's Personal Logbook

An example logbook is provided as FORM D and indicates the minimal information that must be recorded pursuant with CAUS guidelines. For purposes of dive activities at UNB the following defaults apply: Diving mode = Free swimming scuba; Gas = Air; Dive table = DCIEM. Exceptions to the previous should be indicated in the "Notes" field with all pertinent information included.

CAUS 3.3.2 Daily Record

Daily records to be filed by the Diver-in-Charge should use FORM E.

CAUS 3.4 General Dive Procedures

FORM F is provided to facilitate safety planning for dive activities. It is specific to local activities for the Bay of Fundy, but can be modified for any diving in Canadian waters.

All standard fieldwork procedures as required by the various units at UNB (e.g., the Faculty of Science UNBF FIELDWORK PLANNING RECORD) must also be followed as per unit guidelines.

CAUS 5 General Equipment Requirements

Given the typically seasonal nature of diving at UNB, each year before dive activities commence (typically April – June) ALL regulators, buoyancy compensation devices, gauges and tanks (visual inspection) must be inspected with the reports provided to the Diving Safety Officer. This does not obviate the need to follow CAUS guidelines regarding the frequency of these tests as outlined in sections 5 and 6.7.

CAUS 8 Incident and Accident Reports

In addition to the procedures outlined in the CAUS guidelines, the Diver-in-Charge must submit a UNB Accident Report Form to the appropriate Health and Safety Office on his/her campus.

Flying After Diving

As recommended by DAN, a period of 18 hours should elapse between diving and flying.

FORM A

RELEASE OF LIABILITY, WAIVER OF CLAIMS, ASSUMPTION OF RISKS AND INDEMNITY AGREEMENT FOR VISITING SCUBA DIVERS

WARNING: BY SIGNING THIS DOCUMENT YOU WILL WAIVE CERTAIN RIGHTS, INCLUDING THE RIGHT TO PURSUE LEGAL ACTION.

PLEASE READ CAREFULLY!

TO: THE MEMBERS OF THE BOARD OF GOVERNORS OF THE UNIVERSITY OF NEW BRUNSWICK

NAME OF PARTICIPANT: _____

ADDRESS OF PARTICIPANT: _____

ASSUMPTION OF RISK

I am aware that participating in SCUBA DIVING has many inherent risks, including but not limited to:

- 1. Any manner of injury of illness resulting from exposure to cold and wet weather or the effects of heat and sun light.**
- 2. Any manner of injury resulting from use, misuse, non-use of failure of equipment.**
- 3. Injury resulting from encounters with sea life, inclement weather, entanglement in fishing/aquaculture gear or other obstacles.**

I freely accept and fully assume all such risks, dangers and hazards and the possibility of personal injury, death, property damage or loss resulting therefore.

RELEASE OF LIABILITY, WAIVER OF CLAIMS, ASSUMPTION OF RISKS AND INDEMNITY AGREEMENT FOR VISITING SCUBA DIVERS

In consideration of approval to participate in SCUBA DIVING, I agree as follows:

- 1. TO WAIVE ANY AND ALL CLAIMS that I may have in the future against the Governors of the University of New Brunswick, the directors, officers, employees, students, agents and representatives (all of whom are hereinafter collectively referred to as “the Releasees”).**
- 2. TO RELEASE THE RELEASEES from any and all liability, for any loss, damage, injury or expense that I may suffer, or that my next of kin may suffer as a result of my participation in SCUBA DIVING due to any cause whatsoever INCLUDING NEGLIGENCE, BREACH OF CONTRACT, BREACH OF ANY STATUTORY OR OTHER DUTY OF CARE. It is my responsibility to abide by the laws of the country and to ensure adequate medical, personal health, dental and accident coverage, as well as protection of my personal possessions. _____ (Initial)**

3. TO HOLD HARMLESS AND INDEMNIFY THE RELEASEES from any all liability for any damage to the property of, or personal injury to, and third party, resulting from my participation in the SCUBA DIVING trip; and

4. This agreement shall be effective and binding upon my heirs, next to kin, executors, administrators, assigns and representatives in the event of my death or incapability.

In entering into this Agreement, I am not relying upon any oral or written representations or statements made by the Releasees other than what is set forth in this Agreement. I HAVE READ AND UNDERSTOOD THIS AGREEMENT AND I AM AWARE THAT BY SIGNING THIS AGREEMENT I AM WAIVING CERTAIN LEGAL RIGHTS WHICH I OR MY HEIRS, NEXT OF KIN, EXECUTORS, ADMINISTRATORS AND ASSIGNS MAY HAVE AGAINST THE RELEASEES.

Signed this _____ Day of _____

SIGNATURE OF PARTICIPANT

SIGNATURE OF WITNESS

IF PARTICIPANT IS UNDER 18 YEARS OF AGE, SIGNATURE OF LEGAL GUARDIAN

RELATIONS TO MINOR

This agreement must be completed in full, signed, dated, witnessed and paragraph 2 must be initialed before the participant may participate in SCUBA DIVING.

FORM B

UNB Dive Project Review & Approval Form

--	--	--

Diving Project Director

Campus

Date

Brief outline of Research Requiring Dive Project Activity

--

Non-diving alternatives have been explored – diving is a safe, and the most effective means, to meet the research objective (indicate yes or no as appropriate):

--

Dive date(s) or Dive window (condition dependent) with number of dive days in window:

--

Dive team (see CAUS guide; minimum team size of 3 including designated Diver-in-Charge:

--

Daily dive plan: site; type (boat, shore, buddy or tethered, etc.); repetitive; time/depth/SI:

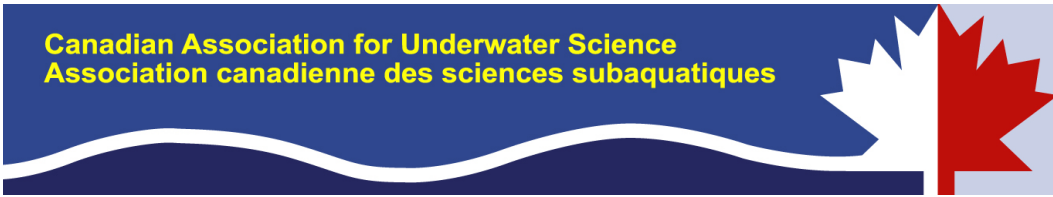
Emergency action plan / special considerations (e.g., site-specific-hazards, special tools/tasks):

DSO signature of approval:

Date:

Dive Project approval number: UNB2011-xxx

FORM C



CAUS Request for Diver Reciprocity

Diver: _____ **Date:** _____

Institutional Member: _____

This letter verifies that the above person has met the training and pre-requisites as indicated below, as described in the CAUS *Standard for Scientific Diving Safety* and has demonstrated competency in the indicated areas.

Diving Status:

Expired/ Inactive Diver-In-Training Scientific 1 Scientific 2

Depth Restriction:

40ft/12m 60ft/18m 80ft/24m 100ft/30m 120ft/36m Other- _____

Supervising Status:

Inactive Active-60ft/18m Active- _____

Required training/qualifications:

Item	Date	Expiry	Comments
Diving Medical Examination and Type (2 yr)	_____	_____	_____
CPR Certification and Agency	_____	_____	_____
First Aid Certification and Agency	_____	_____	_____
Oxygen Administration (2 yr)	_____	_____	_____
CAUS Diving Theory Exam	_____	_____	_____
Highest Diving Certification	_____	_____	_____
Equipment Service (1 yr)	_____	_____	_____
Last Diving Skills Evaluation (1 yr)	_____	_____	_____
Diver Rescue and Accident Management (1yr)	_____	_____	_____
Last Dive in Records	_____	_____	_____
No. of dives in last 12 months	_____	_____	_____
Swimming/ Watermanship	_____	_____	_____

Dive experience: Please list the number of dives in the following modes/environments:

Environment	Equipment /Modes
Deep (>66 ft/20m) _____	Full-Face Mask _____
Current _____	Enriched Air/Mixed gas _____
Swell _____	Drysuit _____
Blue Water _____	Weight integrated _____
Cold (>10 C) _____	Aquarium with Tank _____
Ice/overhead _____	
Boat dives _____	

Comments/ special endorsements/ restrictions:

Diving Officer: _____
 Signature: _____ Date: _____ Email _____
 address _____ Phone: _____