

Canada

Environment Environnement Canada

National Wildlife Research Centre b a C F 56645 A & 6 Carleton University / こく つちゃるす 1125 Colonel By Drive (Raven Road) Ottawa, ON K1A 0H3

NWB 4 % K % b % C A Y ~ Y C % N Y 7 5 1 5 ውወ**৯**Γ ΔΓ ω 2, ρυΓ 5 ሌ Φ. ∩∩%b5 σ⊲5 &⊲ 119 ▷⁰~°°, ዾුa>°, X0B 1J0

こってゅうてってゅうよい

 $^{\circ} \cap ^{\circ} \partial^{\circ} \partial^{$ ላጋ∜ነበ∿ ዾ፞፞፞፞፞ዾምር ል∟ሮሊነ የሀገት የመር ርል∖ ° ነ ርሀ ነ ታሚሲር የቀነ ∟ን የመና ርል∖ ° ነ 8WLC-PCE1516.

'ቴ Dr. Grant Gilchrist–」 ′ , የረላσር , ለና ጋሀ Dr. Grant Gilchrist ላቦና ርጭረ L ወላና L ና የሲር ▷ታ የኦሞ ጋወ በቦ° ዉረ ላና ው∜ው √ ወ⊳ና Michael Janssen, Michael Janssen@ec.gc.ca 613-991-9973.

ን ኮ « ሶ ነ ጋ ነ ላ ና ነ ን እ ላ ር ነ የ ነ ት ን ነ በ ና ሩ ነ የ እ ነ ር ነ የ እ ነ ር ነ ነ እ ሲያ ጋԿ ዀበር▷ ላ ° ፞፞፞፞፞፞፞፞፞ዾዀ፞፞፞፞ዾፙለዕጠ፝ ላ ዀና ወጋ ና ለ ▷ « ዺጋ ፩ ለ Ĺ ጏመስ ላ ዀና ወንበለ .

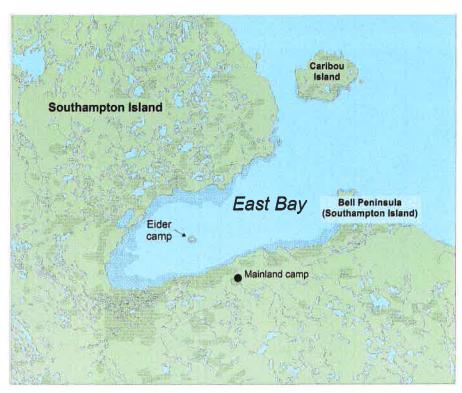
LV9 York

100 PAN

レトイクゥ やマゲィゅし



10140 10 a DOD \$ CD + TO \$ C



o 5 10 Kilometers Eas

East Bay, Southampton Island

Environment Environnement Canada

National Wildlife Research Centre Carleton University 1125 Colonel By Drive (Raven Road) Ottawa, ON K1A 0H3

NWB Manager of Licensing **Nunavut Water Board** P.O. Box 119 Gjoa Haven, NU X0B 1J0

Dear Manager:

Please find attached an application for water use without a license, as well as project descriptions in both English and Inuktitut for research conducted at East Bay, Nunavut. This work was previously covered under Nunavut Water Board License 8WLC-PCE1516.

Please note the approval can be made out to Dr. Grant Gilchrist, however, because Dr. Gilchrist will be away from email until the end of June, any questions you have regarding this application can be directed to myself, Michael Janssen, Michael Janssen@ec.gc.ca 613-991-9973.

Thank you very much for your consideration of this application, and please do not hesitate to contact us with any questions or concerns you may have.

Sincerely.

Michael Janssen Wildlife Technician **Environment Canada**

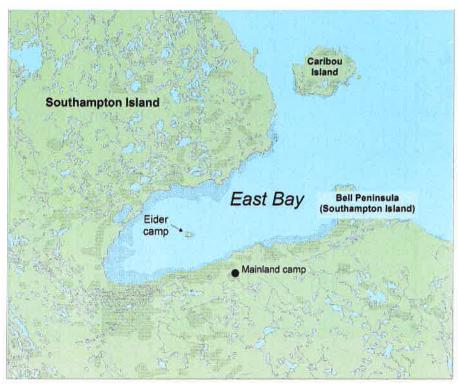


Project Description

The mainland camp is located on a gravel ridge and will be accessed via Twin otter aircraft with Tundra tires which will land on a nearby gravel esker. The crew (up to 7 people) will use an ATV to shuttle gear to the camp which consists of 2 cabin and 2-3 tents. The Island camp is also located on a gravel ridge but accessed by boat/skidoo from the mainland camp, or by helicopter. It consists of 3 cabins and 3 tents and will be occupied by up to 12 people. At both camps, small gas generators will power the laptops and VHF radios and recharge any batteries required.

Water use at both camps is generally restricted to personal/camping use – cooking, drinking and washing; on the mainland it will be hauled to camp using buckets, and on the island it will be collected as needed by melting snow or sea ice and storing the melt water until it is needed. Grey water from washing dishes will be disposed of in gravel sumps >100m from flowing water and buried at the end of the field season. Each camp has a composting toilet for human waste.

The camps are set up to house the researchers who are observing and banding locally nesting birds they are studying, for the duration of the field season. Only a single element of the field work plan will involve working directly with bodies of water and this will involve collecting invertebrate samples by hand from freshwater ponds near the mainland camp to analyze carbon transfer in the food web, in relationship to climate change. Ponds chosen for sampling will contain NO fish, and only negligible amounts of water may be transferred during sampling with a hand held net (<0.5 L per day) via absorption into the net.



East Bay, Southampton Island



P.O. Box 119

GJOA HAVEN, NU XOB 1J0 Tel: (867) 360-6338 FAX: (867) 360-6369 kNK5 wmoEp5 vtmp5 NUNAVUT WATER BOARD NUNAVUT IMALIRIYIN KATIMAYIT OFFICE DES EAUX DU NUNAVUT

APPLICATION FOR APPROVAL FOR THE USE OF WATER OR DEPOSIT OF WASTE WITHOUT A LICENCE

Refer to the <u>Guide to the Approval for the Use of Water or Deposit of Waste Without a Licence</u> (Guide) in completing this Application.

APPLICATION NO: (for NWB use only)				
APPLICANT CONTACT INFORMATION (name, address) Dr. Grant Gilchrist	2. APPLICANT REPRESENTATIVE CONTACT INFORMATION if different from Block 1 (name, address) Michael Janssen			
National Wildlife Research Center 1125 Colonel By Drive Ottawa, Ontario K1S 5B6	National Wildlife Research Center 1125 Colonel By Drive Ottawa, Ontario K1S 5B6			
Phone:613 998-7364 Fax:613 998-0458 e-mail:Grant.Gilchrist@Canada.ca	Phone:613 991-9973 Fax:613 998-0458e-mail:michael.janssen@canada.ca(Attach authorization letter)			
3. NAME OF THE OWNER OF THE LAND THA WATER TO BE USED OR THE WASTE TO E Kivalliq Inuit Association Inuit owned land parcel CH-13	T WILL BE USED IN RELATION TO THE			
 NAME OF PROJECT (consistent with the name of the project issued by other regulatory agencies) Population Studies of Shorebirds and Marine Birds at East Bay, Southampton Island, Nunavut 				
5. LOCATION OF UNDERTAKING				
Project Extents (decimal degree format)				
NW 64.031 81.795 NE 64.00867 81.64 SE 63.95 81.64 SW 63.974 81.814				

Camp	Location(s) (decimal degree f	ormat)			
	ay Mainland Camp	J			
	63.99°N	81.70°\	N		
Fast B	ay Island Camp				
	64.03°N	81.79°\	N		
	01.0011		•		
Name the Gu	of the Water Management Are ide):	a in which	the Undertakii	ng is located. (Ple	ase see Appendix D of
	Northern Southam	pton Island	Watershed / N	JNAVUT-04	
6.	CLASSIFICATION OF UNDER one of the following boxes.	RTAKING -	Indicate the cla	ssification of under	taking by checking
				A	
	☐ Industrial			Agricultural	
	Mining			Recreational	
	➤ Conservation			Power	
	☐ Municipal			Other: (describe))
		·			***************************************
	See Appendix C of the Guide for	r descriptio	ons of classificat	ions of undertaking	S.
7.	DESCRIPTION OF UNDERTA the undertaking including a des depositing waste.				
which v camp v access will be	ainland camp is located on a grawill land on a nearby gravel eskewhich consists of 2 cabin and 2-3 sed by boat/skidoo from the main occupied by up to 12 people. A and recharge any batteries requ	er. The creater. The creater that the camp is the camp is the camp is the came in the came in the came is the came in the came in the came is the came in the came	ew (up to 7 peop e Island camp is , or by helicopte	ole) will use an ATV also located on a g er. It consists of 3 ca	to shuttle gear to the ravel ridge but abins and 3 tents and
on the melting dispose	use at both camps is generally remainland it will be hauled to cam some or sea ice and storing the ed of in gravel sumps >100m fro amp has a composting toilet for	np using bu melt water m flowing v	ckets, and on the until it is neede vater and buried	ne island it will be co ed. Grey water from	ollected as needed by washing dishes will be
studyin working freshwa climate	mps are set up to house the reserg, for the duration of the field set g directly with bodies of water an ater ponds near the mainland cate change. Ponds chosen for sar sferred during sampling with a h	ason. Onled this will in the mp to analymptic mpling will described as a second contract of the mpling will described as a second contract of the mpling will described as a second contract of the mpling will describe as a second contract of the mpling will describe as a second contract of the mpling will describe as a second contract of the mpling will describe as a second contract of the mpling will describe as a second contract of the mpling will be a second contract.	y a single elemen nvolve collecting yze carbon trans contain NO fish,	ent of the field work g invertebrate samp sfer in the food web and only negligible	plan will involve les by hand from , in relationship to amounts of water may
8.	SCHEDULE – Applicants are a term.	dvised that	approvals with	out a licence are iss	sued for a one year
	Proposed Start Date:27 May (Month/Ye		Proposed Cor	mpletion Date: _2 A (M	ugust 2016 lonth/Year)
9.	TYPE OF USE OF WATER WI	THOUT A	LICENCE PRO	POSED - Check the	box that applies

	to the type of water use proposed. If none of the water uses listed below applies to the proposed water use, an application for a water licence will be required. See the NWB's <u>Guide 4</u> — <u>Completing and Submitting a Water Licence Application for a New Licence</u> .
	For an undertaking other than a Power undertaking and for a use of water related to the construction of a structure across a watercourse that is less than 5 metres wide at the ordinary high water mark at the point of construction.
	For an undertaking other than a Power undertaking and for a use of water related to the training of an intermittent watercourse.
	For an undertaking other than a Power undertaking and for a use of water related to the training of a watercourse that involves the infilling of the watercourse, if the watercourse has no inflow or outflow and a surface area of less than 0.5 hectares.
	For an undertaking other than a Power undertaking and for a use of water related to the training of a watercourse that involves removal or placement of less than 100 m ³ of material.
	For an undertaking other than a Power undertaking and for a use of water related to the construction of a temporary structure in a watercourse for the purpose of flood control.
	For an undertaking other than a Power undertaking and for any use of water related to the storage of 2,500 m3 or less.
	For an undertaking other than a Power undertaking and for any use of water less than 50 m ³ per day.
10.	QUANTITY AND QUALITY OF WATER INVOLVED - For each type of water use indicated in
	Block 9, provide the source of water, the estimated quantity to be used in <u>cubic metres per day</u> ,

10.	QUANTITY AND QUALITY OF WATER INVOLVED - For each type of water use indicated in
	Block 9, provide the source of water, the estimated quantity to be used in <u>cubic metres per day</u> ,
	and the periods during which water will be extracted.

Type of Water Use indicated in Block 9	Name of water source	Estimated quantity of water to be used in cubic metres per day	Periods during which water will be extracted
Water use for cooking and washing dishes	Water to be collected using hand-carried buckets from a nearby stream	No more than 0.05 m3 per day	During the daytime.
Invertebrate sampling from ponds, with net. Water filter – not removed from pond;	Local ponds containing no fish	Less than 0.0005 m3 per day	During the daytime.

11	11. TYPE OF DEPOSIT OF WASTE PROPOSED - Check the box that applies to the type of deposit of waste proposed. If none of the deposits of waste listed below apply to the proposed deposit of waste, an application for a water licence will be required. See the NWB's <u>Guide 4</u> —				
	Completing and Submitting a Water Licence Application for a New Licence. For an Industrial undertaking, for an activity related to hydrostatic testing or cleaning of storage tanks and pipelines, and for any deposit of waste resulting from hydrostatic testing or cleaning of unused storage tanks or pipelines.				
	For an Industrial undertaking, for an activity related to quarrying and gravel washing, and for any deposit of waste that is not deposited to surface water and that results from quarrying or gravel washing above the ordinary high water mark.				
	For a Mining undertaking, for an activity related to exploratory work, any deposit of sewage to a sump.				
	For a Power undertaking, any deposit of sewage to a sump.				
	For an Agricultural undertaking, any deposit of sewage to a sump.				
\boxtimes	For a Recreation undertaking, any deposit of sewage to a sump.				
	For any Other type of undertaking not listed above, other than Municipal, any deposit of sewage to a sump.				
2.	QUANTITY AND QUALITY OF WASTE INVOLVED – For each type of waste indicated in Block 11, describe the quantity in cubic metres/day, measures to avoid or mitigate adverse impacts, and periods of deposition.				

Type of Waste indicated in Block 11	Quantity to be deposited in cubic metres per day	Measures to avoid or mitigate any adverse impacts	Periods during which waste will be deposited
Recreational: grey water	0.05 m3 / day	To be poured into a shallow sump and buried at end of field season	Daily
Recreational: Sewage	0.005 m3 / day	Composted in a composting toilet	Daily
Recreational: Solid Waste	0.05 m3 / day	Incineration of burnable items and remove to Iqaluit for disposal of non-burnables and residues	End of field season

13. SIGNATURE				
Grant Gilo	hrist		(print name), certify that the	
I, Grant Gilchrist (print name), certify that the information given on this form is, to the best of my knowledge, correct and complete.				
	X Yes		□No	
	X 163			
		OR		
I, representative of the Applicant,			ame), as an authorized , certify that the	
representative of the Applicant, information given on this form is, to the	ne best of my know	vledge, correct ar	nd complete.	
			∏No	
	Yes		·	
I certify that the Nunavut Planning Co Nunavut Land Claims Agreement hav		se planning requ	irements under Article 11 of the	
	X Yes		□No	
I certify that the Nunavut Impact Revi of the NLCA have been met.	ew Board's develo	pment impact re	view requirements under Article 12	
•	X Yes		∏No ·	
I certify that the proposed water use i further specified by column 3, in response				
	Yes	X NA	□No	
I certify that the proposed deposit of waste is an activity that is set out and then further specified in columns 2 and 3 of Schedule 3 of the Regulations, in respect of an undertaking that is set out in column 1 of Schedule 3. See list in Block 11.				
	☐ Yes	X NA	□No	
I certify that the proposed water use or deposit of waste will not substantially affect the quality, quantity or flow of the watercourse whose waters are used.				
	X Yes		□No	
I certify that the proposed water use of flow of waters flowing through Inuit O		will not substant	ially affect the quality, quantity or	
	X Yes		□No	
I certify that the proposed water use or deposit of waste will not affect the use of waters by a person who would be entitled to compensation under sections 58 or 60 of the <u>Nunavut Waters Nunavut Surface Rights</u> <u>Tribunal Act</u> (Act) if their use of these waters were to be adversely affected by an applicant for a licence.				
	X Yes		□No	
I certify that a licence is not required f	for another use of v	water or deposit	of waste in respect of the proposed	

undert	aking.			
		X Yes	□No	
		X 165	140	
	read and agree to compl inavut Waters Regulation		ons outlined in sections 4(3), 5(4), 5(5	i) and 6 of
1.			ntends to use waters or deposit waste in relatio ction 62 of the <i>Act</i> as if that applicant had a lice	
2.			alteration to the bed or banks of a watercourse the operation of the undertaking.	whose waters
3.	No waste is to be deposited to	o surface water or within 31 met	es of the ordinary high water mark of any body	of water.
4.	The waste shall not contain r hydrocarbon sheen.	nore than 15 milligrams per litre o	of petroleum or petroleum product and must not	have a visible
5.	waste without a licence, which	hever occurs first, the site shall be	of the period authorized for the use of water or e restored — to the extent practicable — to the	
6.	 6. An applicant who is authorized under the Regulations to use waters or deposit waste without a licence shall: a. maintain accurate and detailed books and records of: i. the quantity of water, in cubic metres, used each day, ii. the quantity, in cubic metres, of waste deposited each day, iii. the type of waste deposited each day, iv. where the waste is deposited, v. the concentration of the substance, or substances, in the deposited solid or liquid that has the effect of making the deposit waste, vi. the methodology used to calculate or determine the information referred to in items (i) to (iv), and vii. the measures that were taken to avoid or mitigate any adverse impacts of the deposit of waste. b. keep the books and records on the site of the undertaking during the period of its operation and make them available during that period to an inspector on request; c. submit to the Board a report containing a summary description and supporting photographs of the restoration of the site of the undertaking within 30 days after the earliest of (i) the day on which the undertaking is closed or abandoned, and (ii) the last day of the period authorized for the use or deposit without a licence. and d. d. keep the books and records for two years after submitting the report describing the restoration of the site of the undertaking. Notes: a) A site need not be restored prior to the end of the period authorized for the use or deposit of waste without a licence, as required by Item 5, if the Board issues a licence for the use of water or deposit of waste on that site prior to the end of that period. b) An applicant need not submit the report referred to in Item 6 (c), to the Board if the applicant obtains the Board's approval for a use of water or deposit of waste without a licence, or a licence for a use of water or deposit of waste, on the same site within thirty (30) days after the last			(iv), and waste. ake them restoration of s closed or nd le site of the of waste to f waste on ains the Board's deposit of
		X Yes	□No	
I understand that any approval granted by the Board for the use of water or deposit of waste without a licence will be authorized for a period of one year after the day on which the Board approves the Application. The use or deposit is not authorized until the Board approves the Application and it is only valid as long as the applicant is in compliance with the conditions set out in the declaration above.				
		X Yes	□No	
		ered "No" to any of the abo he use of water or depos	ove statements a water licence is requisit of waste.	ired from the
		X Yes	□No	

Grant Gilchrist	Research Scientist	-66	Feb 12, 2016
Name (Print)	Title (Print)	Signature	Date