

Return Bids to :	Title – Sujet			
Natural Resources Canada Bid Receiving Unit – Mailroom	National Flood Hazard Da	ta Layer		
Loading Dock	Solicitation No. – No de l'invitation NRCan-5000050343		Date January 22, 2020	
588 Booth Street,		Amonda	ment No. – Modification No	
Ottawa, ON, K1A 0E4	Requisition Reference No Nº de la demande	Amenui	nent No. – Mounication No	
Attention: Jinping Wei	156594	001		
Retourner Les Soumissions à :	Solicitation Closes – L'invitation pre	nd fin		
Ressources Naturelles Canada	at – à 02:00 PM (Eastern Standard Time (EST))			
Unité de réception des soumissions - Salle	on – le March 2, 2020			
du courrier				
Quai de chargement 588 rue Booth.	Address Enquiries to: - Adresse tout	es questions	à:	
Ottawa, ON, K1A 0E4	Jinping.wei@canada.ca			
Attention: Jinping Wei	Telephone No. – No de telephone	Fax No. – No	Fax No. – No. de Fax	
1 0				
	343-292-7352			
Request for Proposal (RFP)	(RFP) Destination – of Goods and Services:			
Demande de proposition (DDP)	Destination – des biens et services:			
Proposal To: Natural Resources Canada	580 Booth Street Ottawa, C	N		
We hereby offer to sell to Her Majesty the Queen in right	Ottawa, ON			
of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the	K1A 0E4			
goods, services, and construction listed herein and on				
any attached sheets at the price(s) set out therefor.				
Proposition à: Ressources Naturelles Canada				
Nous offrons par la présente de vendre à Sa Majesté la	te de vendre à Sa Majesté la Security – Sécurité			
Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes	There is no security require	monte see	ociated with this	
ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).	requirement.	here is no security requirements associated with this		
	Vendor/Firm Name and Address			
Comments – Commentaires	Raison sociale et adresse du fournis	seur/de l'entr	epreneur	
	Telephone No.:- No. de téléphone:			
	Facsimile No.: - No. de télécopieur:	to sign on bo	half of Vondor/Eirm (typo or	
Issuing Office – Bureau de distribution	Name and Title of person authorized to sign on behalf of Vendor/Firm (type or print)			
Finance and Procurement Management	Nom et titre de la personne autorisée			
Branch	l'entrepreneur (taper ou écrire en caractères d'imprimerie)			
Natural Resources Canada				
580 Booth St.				
Ottawa, ON				
K1A 0E4				
	Signature		Date	



This solicitation amendment (001) is raised to modify the tasks, deliverables, and milestones; and to correct typos.

#### THE RFP IS AMENDED PER THE FOLLOWING:

### AT: ANNEX "A" – STATEMENT OF WORK, 2.0 BACKGROUND, <u>Flood Hazard and Flood</u> <u>Risk Mapping in Canada</u>

DELETE:In its entiretyINSERT:The following in its entirety:

#### Flood Hazard Mapping in Canada

Flooding is the temporary inundation by water of normally dry land, and it can occur in coastal and lake areas, along rivers, from stream blockages including ice jams, from failure of engineering works including dams, from extreme rainfall, rapid snow/ice melt or poor drainage characteristics, and other sources. Flood mapping that accurately delineates flood hazards, including those impacted by future conditions due to anticipated development or projected changes in climate, serves as the precondition for effective flood risk mitigation activities.

In Canada, flood management is primarily the responsibility of the provinces and territories, and is often delegated to municipalities through legislation. Therefore, most flood management activities including mapping, planning, preparation, response and recovery are executed at the 'local' rather than provincial, territorial or federal levels. Provincial legislation generally includes provisions requiring municipalities to undertake flood mitigation and response actions, including mapping initiatives, deemed necessary in the public interest.

Flood mapping in Canada has occurred under several different programs, including the Flood Damage Reduction Program (1975 – 1996), the National Disaster Mitigation Program (2015 – 2020), and a large number of provincial, municipal, and other initiatives.

The current picture of flood mapping in Canada is that there is little consistency between jurisdictions, and many flood hazard maps are missing or out of date. This presents a challenge for understanding and communicating flood hazard and flood risk across Canada.

Natural Resources Canada (NRCan), through the Canada Centre for Mapping and Earth Observation (CCMEO), Canada's national mapping agency, actively contributes to the development and advancement of flood mapping practices by providing leadership, advice, expertise, and technical resources in the area of Federal Flood Mapping Guidelines Series development, stakeholder engagement and data sharing.

NRCan is also actively collecting information in an effort to fully understand and share knowledge about the state of flood mapping in Canada.

Moreover, during major flood events in Canada, NRCan provides the Government Operations Centre near real-time delineations of inundation extents, derived from satellite imagery.

AT:	ANNEX "A" – STATEMENT OF WORK, 4.1 Tasks
DELETE:	"Date Acquisition"
INSERT:	"Data Acquisition"

AT:ANNEX "A" – STATEMENT OF WORK, 4.3 DeliverablesDELETE:"Prototype as described in Task 6 section 4.4 Tasks"INSERT:"Prototype as described in Task 8 section 4.4 Tasks"



## AT: ANNEX "A" – STATEMENT OF WORK, 4.4 Tasks Schedule

DELETE:Table in its entiretyINSERT:The table below in its entirety

SKS	DELIVERABLES/MILESTONES	TIMING		
Project Kick-off Meeting (with NRCan)	Contractor will participate in a project kick-off meeting with NRCan to discuss the project and clarify expectations. NRCan will lead the call.	Within 1 week of contract award		
Flood Map Inventory and Collection	Contractor will create an inventory of flood maps in Canada and start gathering digital data and map services.	March 20, 2020		
Engagement	Contractor will conduct engagement with contact list provided by NRCan and other parties identified by the contractor to research criteria for a common schema and data format and data exchange mechanisms for the NFHDL	August 01, 2020		
Draft NFHDLS schema	Propose common schema and data format and data exchange mechanisms for the NFHDL	September 01, 2020		
Stakeholder Review	Present proposed schema to stakeholders for feedback. Make proposed changes for final acceptance	September 15, 2020		
Data Submission	Contractor will submit digital flood mapping data to NRCan in an agreed-upon format.	September 30, 2020		
Final Report	Contractor will prepare a final report to present all project findings to NRCan.	December 01, 2020		
Prototype	Contractor will provide a prototype (ie. Data extraction mechanisms, as well as a database with a script that would update/maintain the web services).	March 31, 2021		
	Meeting (with NRCan) Flood Map Inventory and Collection Engagement Draft NFHDLS schema Stakeholder Review Data Submission Final Report	Project Kick-off Meeting (with NRCan)Contractor will participate in a project kick-off meeting with NRCan to discuss the project and clarify expectations. NRCan will lead the call.Flood Map Inventory and CollectionContractor will create an inventory of flood maps in Canada and start gathering digital data and map services.EngagementContractor will conduct engagement with contact list provided by NRCan and other parties identified by the contractor to research criteria for a common schema and data format and data exchange mechanisms for the NFHDLDraft NFHDLS schemaPropose common schema and data format and data exchange mechanisms for the NFHDLStakeholder ReviewPresent proposed schema to stakeholders for feedback. Make proposed changes for final acceptanceData SubmissionContractor will submit digital flood mapping data to NRCan in an agreed-upon format.Final ReportContractor will provide a prototype (ie. Data extraction mechanisms, as well as a database with a script that would update/maintain the web		



# AT:APPENDIX "2" - FINANCIAL PROPOSAL FORMDELETE:Table in its entiretyINSERT:The table below in its entirety

Mile- stone #	Description of Milestone	Milestone Firm Price (applicable taxes excluded)
1	25% of the total price for the work following delivery and acceptance by the Project Authority of the deliverables for Task 1 and Task 2 as described in Annex A.	\$
2	15% of the total price for the work following delivery and acceptance by the Project Authority of the deliverables for Task 3, Task 4 and Task 5 as described in Annex A.	\$
3	20% of the total price for the work following delivery and acceptance by the Project Authority of the deliverables for Task 6 and Task 7 as described in Annex A.	\$
4	40% of the total price for the work following delivery and acceptance by the Project Authority of the deliverables for Task 8 and all previous tasks as described in Annex A.	\$
	Total Firm Price for Financial Proposal Evaluation:	\$