

# GRADUATE STUDENT INTERNSHIP / CO-OP PROJECT FORM

<b>PROJECT</b>	<b>TITLE:</b>	Addition of Wetland and Riparian Ecological Values to a Relative Ecological Assessment of Conservation Land in British Columbia		
	<b>LOCATION:</b>	North Vancouver		
	<b>TERM:</b>	3 months starting in Spring 2017	<b>FROM:</b> Flexible	<b>TO:</b> Flexible
<b>PROJECT SPONSOR</b>	<b>NAME:</b>	Leanna Warman	<b>TITLE:</b>	Ecosystem Specialist
	<b>ORGANIZATION:</b>	The Nature Trust of British Columbia	<b>BRANCH / SECTION:</b>	
	<b>ADDRESS:</b>	260 – 1000 Roosevelt Crescent, North Vancouver, BC, V7P 3R4		
	<b>EMAIL:</b>	<a href="mailto:lwarman@naturetrust.bc.ca">lwarman@naturetrust.bc.ca</a>		
	<b>PHONE:</b>	604-969-3246	<b>FAX:</b> 604-924-9772	
<b>TOPIC OR RESEARCH QUESTION:</b> <small>(Briefly describe the research question being addressed through this project)</small>	The Nature Trust of British Columbia has developed an automated GIS tool to aid in identifying the most ecologically significant lands for conservation in the province using available province-wide data layers. To increase the usefulness of this evaluation, The Nature Trust of BC would like to add ecological values of provincial riparian and wetland features to the automated GIS assessment tool. Since ecological values for riparian and wetland features have not been assessed for the province as a whole, The Nature Trust of BC proposes to review existing methods used for regional wetland and riparian ecological evaluation and develop a procedure for assessing the ecological value of spatially mapped wetland and riparian features at a provincial scale.			
<b>KEYWORDS:</b> <small>(List key words to describe the field of study and project)</small>	wetlands, riparian, GIS, conservation prioritization			
<b>PROJECT DESCRIPTION &amp; RELEVANCE:</b> <small>(Provide an overview of the context for the internship and why it is important. Describe the project, its tangible, intended outcomes and the role of the student.)</small>	<p><b>Overview:</b> The Nature Trust of British Columbia is a leading land conservation organization in BC. Since 1971 we have dedicated our efforts to securing and managing ecologically significant land. The Nature Trust of British Columbia receives requests for acquiring potential properties throughout the province. The Relative Ecological Assessment Tool provides an automated process to assess the relative ecological value of potential acquisitions and compare them to our existing portfolio of properties to help determine the priorities for securement of other properties.</p> <p><b>Project Details:</b> The Nature Trust of British Columbia has developed a GIS assessment of potential acquisitions using available data layers for the province. However, the assessment requires some modification to include ecological values for riparian and wetland features. We would like a student to review existing methodology for evaluating conservation value of riparian and wetland features to determine if there is scientifically accepted methodology that can be applied to riparian and wetland features mapped at a provincial scale. We would like the student to have knowledge related to assessing conservation or ecological value of features associated with wetland and/or riparian ecosystems and/or the ability to research literature and contact appropriate agencies/individuals to identify a useful and practical procedure(s) for evaluating ecological value. Since the riparian and wetland features will be based on spatial data, it would be helpful if the student has GIS skills to be able to work with the GIS layers. Some ArcGIS training will be provided, as necessary. However, this is not an essential skill, as the feature database can be used to develop an evaluation procedure without using the spatial component of the data. Guidance and feedback on the ecological evaluation procedure and ArcGIS support will be provided by Leanna Warman. We would like the student to spend some time in the North Vancouver office to become acquainted with The Nature Trust of BC's operations and for face to face meetings with Leanna. However, the student is welcome to perform some of the tasks required for this project at external locations. Dr. Peter Arcese, Chair of The Nature Trust of BC and Professor and Forest Renewal BC Chair in Conservation Biology at UBC, will provide some guidance and expertise during the course of the project, as appropriate.</p>			
<b>Funding Requested from BRITE</b>	<b>AMOUNT: \$6000</b>			
<b>AVAILABLE FUNDING (to match BRITE funding):</b>	<input type="checkbox"/> NO <input checked="" type="checkbox"/> YES		IF YES, THEN LIST AMOUNT:	<b>\$5000</b>
<b>PROJECT TYPE (Check the relevant type(s) of work to be undertaken for this internship / co-op project)</b>				
<input type="checkbox"/>	FIELD WORK	<input checked="" type="checkbox"/>	GIS ANALYSIS (potentially if the student has the skills and interest)	
<input type="checkbox"/>	RESEARCH PROPOSAL DEVELOPMENT	<input type="checkbox"/>	POLICY ANALYSIS	
<input type="checkbox"/>	LITERATURE REVIEW	<input type="checkbox"/>	SURVEY DESIGN	
<input checked="" type="checkbox"/>	SHORT STUDY / ASSESSMENT	<input checked="" type="checkbox"/>	MODEL DEVELOPMENT (research prioritization framework)	
<input type="checkbox"/>	DATA COLLECTION	<input checked="" type="checkbox"/>	OTHER please describe: review and collate spatial data and methods used to identify ecological value of riparian and wetland attributes	
<input type="checkbox"/>	DATA / STATISTICAL ANALYSIS			
<b>EXPECTED DELIVERABLES:</b> <small>(Summarize the intended project deliverables, e.g., research report, data analyzed, and presented in a spreadsheet format, etc.)</small>	GIS layer of riparian features and ecological values for the province. GIS layer of wetland features and ecological values for the province. Report describing methods used to develop the layers, including the procedure(s) for assigning ecological value.			