

**REQUEST FOR PROPOSAL AMENDMENT**

**RETURN BIDS TO:**  
Environment Canada  
Procurement & Contracting  
867 Lakeshore Road  
P.O. Box 5050  
Burlington, Ontario  
L7R 4A6

**Title:** Grand River Watershed Study

**Date:** 16 December 2013

**Request For Proposal No:** KW405-13-1180  
**Amendment Number:** 001

**Solicitation Closes**

**At:** 14:00:00 HRS.

**On:** 30 December 2013

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**CONTRACTOR NAME & ADDRESS**

(Print or type complete legal entity)

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**Telephone No:** .....

**Facsimile No:** .....

I (We), the undersigned, hereby offer to sell to Her Majesty the Queen in right of Canada, as represented by the Minister of Environment, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the services and/or supplies listed herein and on any attached sheets at the price(s) set out therefor.

.....  
Name and title of person authorized to sign on behalf of vendor (type or print).

.....  
**Signature**

.....  
**Date**

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**Amendment No. 1 is being raised to provide questions and answers in regards to the requirement.**

**Q1.** The RFP doesn't give much information about the existing Stella model upon which the work is to be performed. Would it be possible to obtain some background information about the existing PMDSS model? Knowing a bit more about the existing structure would help us in assessing the level of effort that will be required to work with this model.

**A1.** The PMDSS includes 13 modules, one module for each of the 11 basins in the Grand River watershed plus a module for Lake Erie (the 13th module integrates the results from each of the basin modules, see below for further detail). These modules are essentially independent models for each basin; albeit, the basic structure of each module is similar for each basin. This hierarchically organised structure allows users to easily access the model for individual basins of interest. Within each module, the contents are further organised into "sectors". For example, each module includes a sector for each municipal wastewater treatment plants (WWTP) that is located within the basin. In total, the PMDSS includes sectors for 27 WWTPs distributed among the 11 modules for the individual basins. The number of WWTP sectors in any one module accords with the number of WWTPs that discharge into a given basin.

Each basin module includes up to 40 sectors that include individual routines for everything from P export rates from different land types to P impacts on ecosystem goods and services to the economic impact on different beneficiaries. Each sector is analogous to a module. Various inputs and outputs flow from each sector to another within a module and from one module to another. This structure facilitates the tracking of flows and stocks within a module and among the modules.

The PMDSS is designed to reflect the physical structure of the Grand River watershed. The watershed has been subdivided into 11 major basins plus Lake Erie. Each basin is modelled as an independent entity except for water (and P) flowing in and out. Each major basin corresponds to a sub-model in the PMDSS (Figure 2). Each basin is interconnected with downstream basin modules; if not directly, then indirectly.

An additional module is included; namely, the "Integration" module. The Integration module is where flows between basins are tracked and fed from one module to another. The Integration module is also where P management scenarios are constructed and where the results for individual basins are aggregated to produce watershed-wide results.