All Fields marked with * are mandatory.

Change Request #:	**334**
Assigned OGC Document #:	**13-124**
Name:	*Jack Lindsey
Organization:	*Environment Canada
Email:	*Jack.Lindsey@ec.gc.ca
Document Name/Version:	*WaterML 2.0: Part 1- Timeseries / 2.0
OGC Project Document:	*10-126r3

If this is a revision of a previous submission and you have a Change Request Number, then check here: ☐

Enter the CR number here: [　　　　　　]

Enter the Revsion Number that you are revising here: [　　　　　　]

Title: 🌐	* [WaterML2.0 SWG] Add a Composite Time Series Encoding to WaterML 2.0: Par
Source: 🌐	*Environment Canada in consultation with Peter Taylor of CSIRO
Work item code: 🌐	
Category: 🌐	* B (Addition of feature) ⬍

Reason for change: 🌐	* WaterML 2.0: Part 1 provides an encoding for simple time series (i.e. a single variable recorded for each data point). While this is ideal for several use cases, it does not support the exchange of datasets containing multivariate time series (i.e. multiple variables recorded for each data point), usually referred to as composite or compound time series. However, this was found to be the most common use case for environmental monitoring groups at Environment Canada, namely air quality, water quantity, water quality, and biodiversity. This currently has to be accommodated by the use of very generic record-field structures in SWE Common Data Model.

Summary of change: ⊘	* Add a composite time series encoding to WaterML 2.0: Part 1 (or potentially TimeSeriesML), which would include support for: â�¢ variable metadata â�¢ variable qualifier metadata (e.g. quality flags) â�¢ variable processes â�¢ multiple data point value qualifiers
Consequences if not approved: ⊘	While the generic SWE Common Data Model structures are well understood, their labels do not explicitly convey the semantics and relationships in use. Therefore, while the current solution is OGC XML compliant, it requires customized interpretation that is much less interoperable than an official purpose-built schema.
Clauses affected: ⊘	* All
Additional Documents affected: ⊘	
Supporting Documentation: ⊘	
Comments: ⊘	CR reviewed and approved by the author, Peter Taylor.
Status: ⊘	Assigned ⬍
Assigned To: ⊘	WaterML2.0SWG ⬍
Disposition: ⊘	Referred ⬍