All Fields marked with * are mandatory.

Change Request #:	329
Assigned OGC Document #:	13-117
Name:	*Jack Lindsey
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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:⊙	* [WaterML SWG] WaterML 2.0: Part 1: wml2:ObservationProcess/wml2:verticalDa
Source:⊙	*Environment Canada in consultation with Peter Taylor of CSIRO
Work item code: ⊙	
Category:⊙	* [F (Critical correction) ⇕]

Reason for change:⊙	* Unlike Monitoring Point, at the Observation level, it is not possible to define the local gauge zero as a height above a reference datum as required by the specification. This is because of the use of gml:ReferenceType instead of gml:VerticalDatumPropertyType in observationProcess.xsd.
Summary of change:⊙	* observationProcess.xsd – wml2:ObservationProcess/wml2:verticalDatum Replace: element name="verticalDatum" type="gml:ReferenceType" By: element name="verticalDatum"

	type="gml:VerticalDatumPropertyType" Note that gml:VerticalDatumPropertyType is already used in monitoringPoint.xsd for wml2:MonitoringPoint/wml2:verticalDatum to implement the same feature (9.19.10).
Consequences if not approved: ⓘ	Prevents the definition of a height above a reference datum for sensors and gauges, which is a common requirement in hydrology applications and beyond. The only workaround is to reference a custom datum defined by the XML authoring organization.
Clauses affected: ⓘ	* 9.22.3 observationProcess.xsd
Additional Documents affected: ⓘ	
Supporting Documentation: ⓘ	
Comments: ⓘ	CR reviewed and approved by the author, Peter Taylor. Maybe this is not permissible under the OGC rules for generating XML schemas from UML, but I would assert that a schema design best practice should be the global declaration of all elements so that they may be referenced wherever required throughout the namespace (aka Garden of Eden style). This would eliminate the risk of such typing inconsistencies which are almost inevitable with multiple local declarations.
Status: ⓘ	Assigned
Assigned To: ⓘ	WaterML2.0SWG
Disposition: ⓘ	Referred and Posted