**Preliminary proposed schema changes to multi-map GeMS database**

Publish

Publish approve

map x

map y

map z

 map n

Geologic Maps

Geologic Data

Multi-map GeMS

Single Map

map x

±GeMS

*Separate database for each geologic mapping project.*

*Each map stored in separate database schema. Assure GeMS compliance. Archive.*

*Individual map features in single GeMS schema. Overlapping data, NOT compiled into one layer.*

*Map Production and Management System*

**GeMS feature classes, pg 16**

Correlation of Map Units [agree, remove in multi-map database]

Cross Section(s) [agree, remove]

Geologic Map **+ -**

Data Sources

Description of Map Units **+ -**

Geo Material Dict

Glossary

Miscellaneous Map Information **+**

Repurposed Symbols [agree, remove]

Note: Blue highlight shows proposed deletions; yellow highlight proposed additions; **+ -** = proposed addition or deletion of sub-elements. [Comments from the meeting are in square brackets.]

**Geologic Map**

Cartographic Lines [agree, remove]

Contacts and Faults **-**

Data Source Polys

Fossils Points **-**

Generic Points **+ -**

Geochron Points **+ -**

Geologic Lines **+ -**

Overlay Map Unit Polys **-**

Map Unit Polys **-**

Map Unit Points [agree, add]

Map Unit Lines [agree, add]

Orientation Points **+ -**

Overlay Polys **- (**Other Overlay Polys)

Iso Value Lines **+ -**

Stations **+ -**

**Geologic Map**

**Contacts and Faults, pg 23**

* Symbol (references style file, can be calculated) [keep field and use as a reference number referring to symbology look-up number; field could be useful to users]
* Location Confidence (string): accurate, approximate, inferred, unspecified, unknown (pg 10), from this field and map scale, Location Confidence Meters can be calculated [agree, add; NRCAN has this, geos will like this because it is similar to traditional methodology]

**Map Unit Polys, pg 22**

* Symbol (get from Description of Map Units, pg 24)

**Point feature classes, generic, sample, fossil, and others, pg 31**

* Map Unit (only if unit is different from polygon in which it falls) [agree, revise definition?; NRCAN calls this a label; BC uses labels and arcs so this would be redundant as currently defined by documentation; not necessary since it can be calculated]
* Symbol [disagree, keep]
* Plot At Scale [agree, remove]
* Location Confidence (string) [agree, add]

**Map Unit Points [NRCAN has this]**

* Map Unit (important, since can’t get from Map Unit Polys, pg 22) [agree, add; this is the map unit of the point, not the map unit of the surrounding polygon]
* Orientation Points fields, except Orientation Points ID, pg 32 [maybe orientation data shouldn’t also be with Map Unit Points because that causes duplication of orientation data, but there needs to be a link between the structure and the rock type it was taken from; Is there a better way to do this? Maybe using a field station ID or field sample ID? Needs more thought.]
* Location Confidence (string) [agree, add]

**Map Unit Lines**

* Map Unit (important, since can’t get from Map Unit Polys) [agree, add; this is the map unit of the line, not the map unit of the surrounding polygon]
* Location Confidence (string) [agree, add]

**Orientation Points, pg 32**

* Symbol [disagree, keep]
* Plot At Scale [agree, remove]
* Map Unit [agree, revise definition?]
* Location Confidence (string) [agree, add]

**Geochron Points, pg 33**

* Symbol [disagree, keep]
* Plot At Scale [agree, remove]
* Map Unit [agree, revise definition?]
* Location Confidence (string) [agree, add]

**Stations, pg 34**

* Data Source ID (record projection and datum in data source)
* Map Unit (different from Observed Map Unit) [agree, revise definition?]
* Symbol [disagree, keep]
* Plot At Scale [agree, remove]
* Location Confidence (string) [agree, add]

**Geologic Lines, pg 36**

* Symbol [disagree, keep]
* Location Confidence (string) [agree, add]

**Iso Value Lines, pg 37**

* Symbol [disagree, keep]
* Location Confidence (string) [agree, add]

**Overlay Map Unit Polys, pg 38**

* Symbol [disagree, keep]

**Other Overlay Polys, pg 39**

* Symbol [disagree, keep]

**Description of Map Units, pg 24**

* Description General (add field for generalized description) [agree, add]
* Type (surficial, bedrock, engineering, etc.) [agree, add]
* Area Fill RGB (old map; new display calculated based on info in Description of Map Units)
* Area Fill Pattern Description (old map)
* Age From [agree, add; Maybe need a hierarchy key in the domain to be able to roll age subunits up into age units]
* Age To [agree, add]
* Age From Uncertainty: High, medium, low [agree, add; Should this be Age From Confidence to match other fields?]
* Age To Uncertainty: High, medium, low [agree, add; Should this be Age To Confidence to match other fields?]
* Hierarchy Key [agree, keep]
* Paragraph style [agree, remove]
* Symbol (references style file) [disagree, keep]

**Miscellaneous Map Information, pg 58**

* Scale denominator [agree, add; Can be used to customize display of GIS data and symbology]