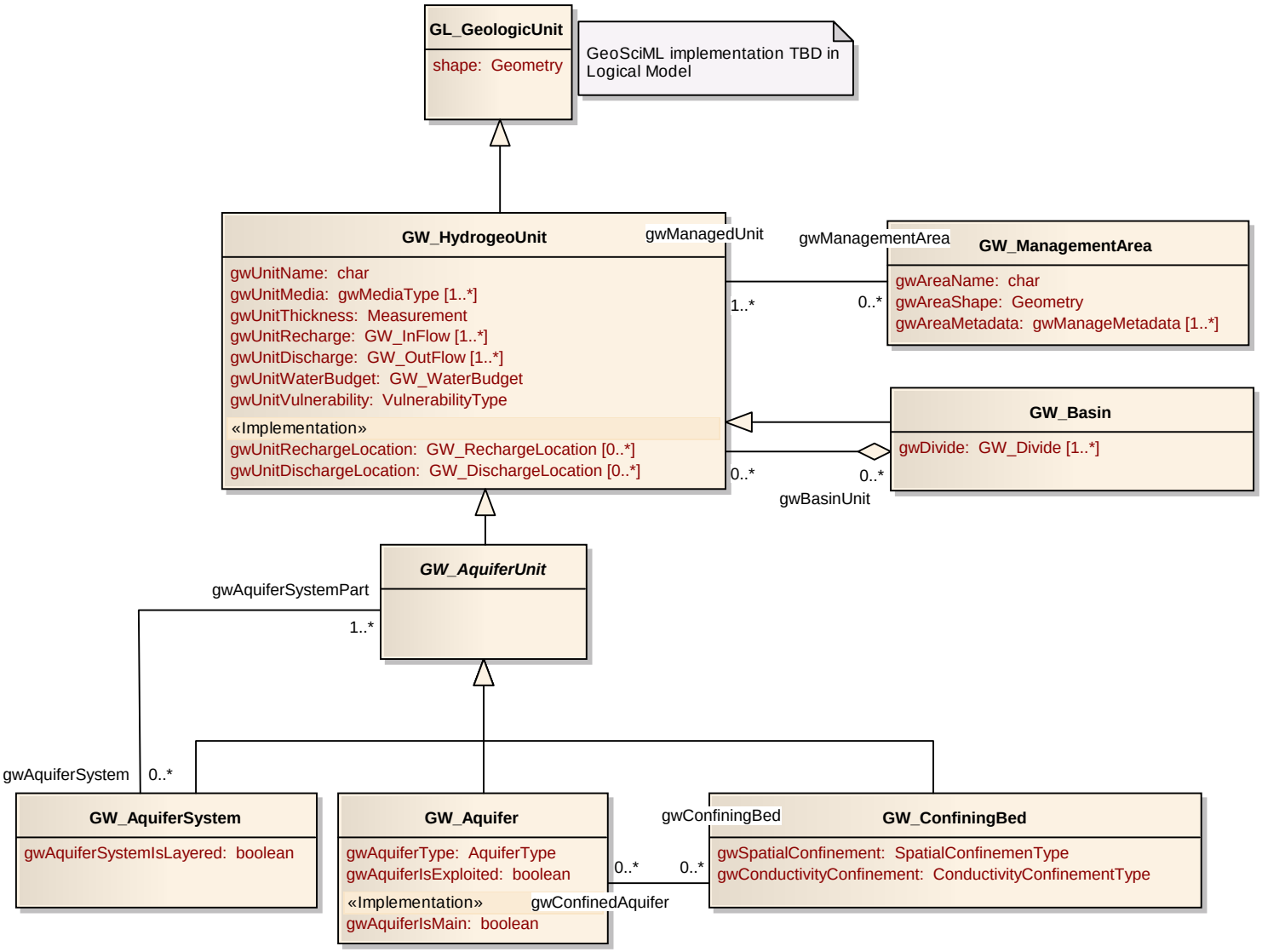
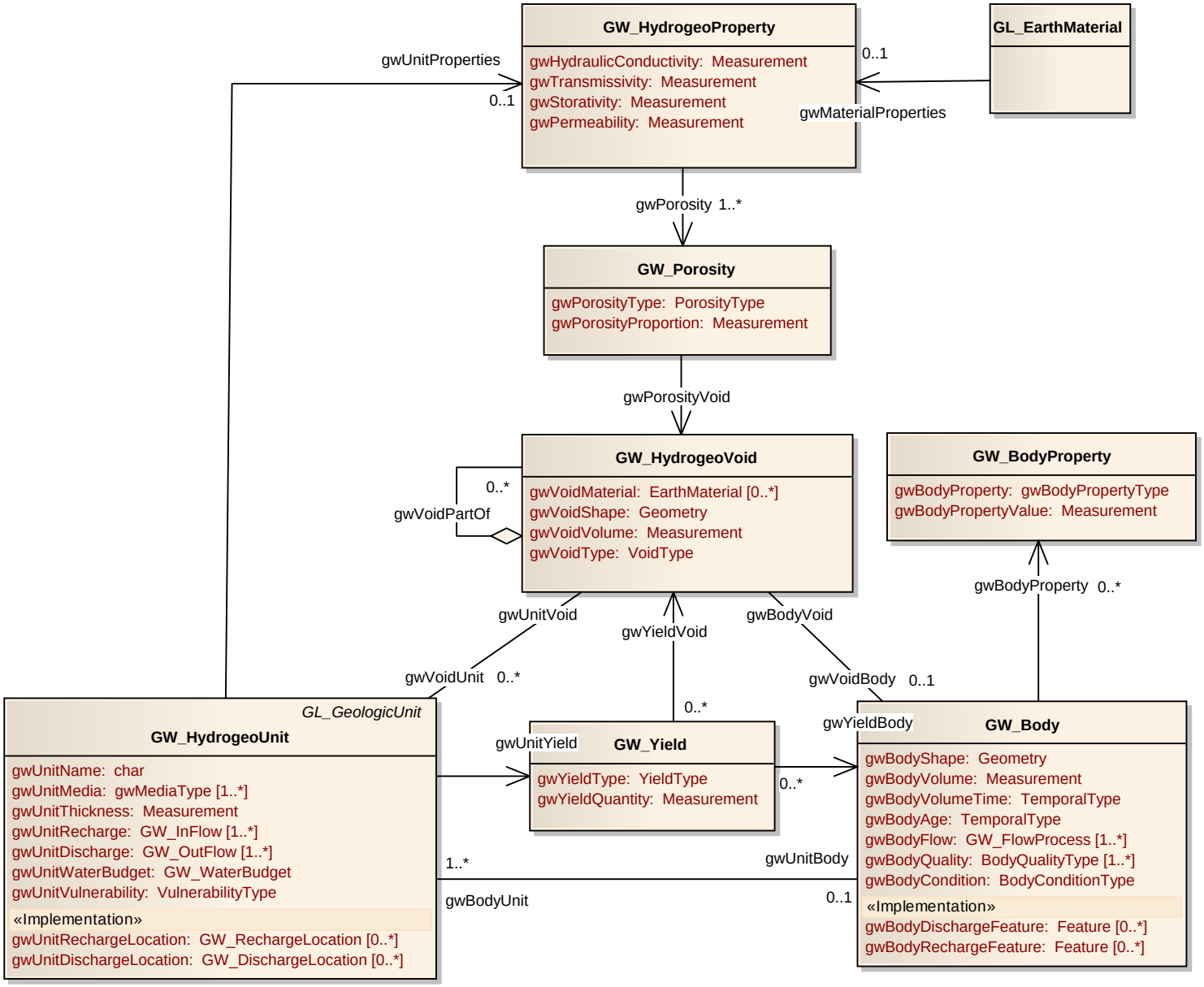

GL_GeologicUnit
shape: Geometry
GeoSciML implementation TBD in Logical Model
GW_HydrogeoUnit
gwUnitName: char
gwUnitMedia: gwMediaType [1..*]
gwUnitThickness: Measurement
gwUnitRecharge: GW_InFlow [1..*]
gwUnitDischarge: GW_OutFlow [1..*]
gwUnitWaterBudget: GW_WaterBudget
gwUnitVulnerability: VulnerabilityType
«Implementation»
gwUnitRechargeLocation: GW_RechargeLocation [0..*]
gwUnitDischargeLocation: GW_DischargeLocation [0..*]
gwManagedUnit
1..*
gwManagementArea
0..*
GW_ManagementArea
gwAreaName: char
gwAreaShape: Geometry
gwAreaMetadata: gwManageMetadata [1..*]
GW_Basin
gwDivide: GW_Divide [1..*]
0..*
0..*
gwBasinUnit
GW_AquiferUnit
gwAquiferSystemPart
1..*
gwAquiferSystem
0..*
GW_AquiferSystem
gwAquiferSystemIsLayered: boolean
GW_Aquifer
gwAquiferType: AquiferType
gwAquiferIsExploited: boolean
«Implementation»
gwAquiferIsMain: boolean
0..*
gwConfinedAquifer
gwConfiningBed
0..*
GW_ConfiningBed
gwSpatialConfinement: SpatialConfinemenType
gwConductivityConfinement: ConductivityConfinementType


GW_HydrogeoProperty
gwHydraulicConductivity: Measurement
gwTransmissivity: Measurement
gwStorativity: Measurement
gwPermeability: Measurement
GL_EarthMaterial
gwUnitProperties
0..1
0..1
gwMaterialProperties
gwPorosity 1..*
GW_Porosity
gwPorosityType: PorosityType
gwPorosityProportion: Measurement
gwPorosityVoid
GW_HydrogeoVoid
gwVoidMaterial: EarthMaterial [0..*]
gwVoidShape: Geometry
gwVoidVolume: Measurement
gwVoidType: VoidType
0..*
gwVoidPartOf
GW_BodyProperty
gwBodyProperty: gwBodyPropertyType
gwBodyPropertyValue: Measurement
gwBodyProperty 0..*
gwUnitVoid
gwYieldVoid
gwBodyVoid
gwVoidUnit 0..*
gwVoidBody 0..1
0..*
GL_GeologicUnit
GW_HydrogeoUnit
gwUnitName: char
gwUnitMedia: gwMediaType [1..*]
gwUnitThickness: Measurement
gwUnitRecharge: GW_InFlow [1..*]
gwUnitDischarge: GW_OutFlow [1..*]
gwUnitWaterBudget: GW_WaterBudget
gwUnitVulnerability: VulnerabilityType
«Implementation»
gwUnitRechargeLocation: GW_RechargeLocation [0..*]
gwUnitDischargeLocation: GW_DischargeLocation [0..*]
gwUnitYield
GW_Yield
gwYieldType: YieldType
gwYieldQuantity: Measurement
0..*
gwYieldBody
GW_Body
gwBodyShape: Geometry
gwBodyVolume: Measurement
gwBodyVolumeTime: TemporalType
gwBodyAge: TemporalType
gwBodyFlow: GW_FlowProcess [1..*]
gwBodyQuality: BodyQualityType [1..*]
gwBodyCondition: BodyConditionType
«Implementation»
gwBodyDischargeFeature: Feature [0..*]
gwBodyRechargeFeature: Feature [0..*]
1..*
gwUnitBody
gwBodyUnit
0..1