# Axiomatization

This section introduces the specifications for Circular Water ontology.

A diagram of different colored circles

Description automatically generated

## Namespaces

The namespace for Circular water ontology has not claimed. For the launch version “Example” domain will be used as follows: <http://www.example.org/cwo/>.

The suggested prefix for circular water ontology is cwo.

## Overview of Classes and Properties

Classes: CircularWater, Distribution, ControlValve, DistributionPipe, Collection, CatchementArea, Gutter, RainBarrel, Downspout, Treatment, FiltrationSystem, DisinfectionSystem, Sedimentation, Sedimentation Tank, Reuse, Non-Potable, Irrigation, Storage, StorageTank, OverflowMechanism, Capacity, Monitoring, WaterQualitySensor, SensorReading, Location, Salinity, Temperature, Transparency, DissolvedOxygen, Ammonium, NitrateAndNitrite, Nitrogen, Phosphate, TotalPhosphorus, DissolvedSilica, TotalOrganicCarbon, ParticulateOrganicCarbon, Energy, EnergyStorageSystem, BatteryArray, BatteryCapacity, EnergyGenerationSystem, HydroelectricSystem, AquaductHydroTurbine, EnergyOutput, OperationalRange, Efficiency, FlowRate, Pressure

Object properties: hasCollection, installedOn, collectedBy, hasTreatment, filteredBy, disinfectedBy, includes, OccursIn, hasDistribution, hasPipe, hasPump, hasValve, hasMonitoring, hasSensor, hasReading, hasLocation, hasReuse, designatedFor, usedFor, hasWaterStorage, hasTank, hasMechanism, hasCapacity, produceEnergy, hasEnergyGeneration, hasHydroelectric, generatesEnergyThough,hasEnergyOutput, hasEnergyStorage, hasBatteryStorage

Datatype properties: hasUnit, hasValue, hasLat, hasLang, efficincyPercentage, hasTime, hasModel