

river network

Reservoir

- coordinates: Tuple[float, float]
- temperature : MonthlyTemperature
- volume: float
- max_depth: float
- mean_depth: float
- inflow_rate: float
- area: float
- soil_carbon: float
- area_fractions: List[float]
- mean_radiance: float
- mean_radiance_may_sept: float
- mean_radiance_nov_mar: float
- mean_monthly_windspeed: float
- water_intake_depth: float
- name: str

- residence_time() : float
- q_bath_shape() : float
- littoral_area_frac() : float
- thermocline_depth(wind_speed: Optional[float], wind_height: float) : float
- retention_coeff(method: str) : float
- reservoir_conc(inflow_conc: float, method: Optional[str]) : float
- trophic_status(tp_inflow_conc: float, as_value: bool) : Enum|str

(other methods not shown)

Catchment

- area: float: float
- riv_length: float
- runoff: float
- population: int
- slope: float
- precip: float
- etransp: float
- soil_wetness: float
- mean_olsen: float
- area_fractions: List[float]
- biogenic_factors: BiogenicFactors
- name: str

- population_density() : float
- landuse_area(landuse_fraction: float) : float
- discharge() : float
- river_area_before_impoundment(river_width: Optional[float]) : float
- inflow_p_conc(method: str) : float
- inflow_n_conc() : float
- nitrogen_load() : float
- phosphorus_load(method: str) : float

(other methods not shown)

«future» River

- flow : float
- tn : float
- tp : float
- toc : float
- cod : float
- bod5 : float
- tss : float
- vss : float

has

has

returns

uses

uses

has

has

has

has

has

has

constants

Landuse

- BARE
- SNOW_ICE
- URBAN
- WATER
- WETLANDS
- CROPS
- SHRUBS
- FOREST
- NODATA

SoilType

- MINERAL
- ORGANIC
- NODATA

TreatmentFactor

- NONE
- PRIMARY
- SECONDARY
- TERTIARY

Climate

- BOREAL
- SUBTROPICAL
- TEMPERATE
- TROPICAL
- UNKNOWN

Biome

- DESERTS
- MEDFORESTS
- MONTANEGRASSLANDS
- TEMPERATEBROADLEAFANDMIXED
- TEMPERATECONIFER
- TEMPERATEGRASSLANDS
- TROPICALDRYBROADLEAF
- TROPICALGRASSLANDS
- TROPICALMOISTBROADLEAF
- TUNDRA

LanduseIntensity

- LOW
- HIGH

TrophicStatus

- OLIGOTROPHIC
- MESOTROPHIC
- EUTROPHIC
- HYPER_EUTROPHIC