| **Input Parameter** | **SiteRecord Name** | **Site Underlying Data** | **For each water body simulated, the following Parameters are required** | **Units** |
| --- | --- | --- | --- | --- |
| Site Name | SiteName | N / A | Site's Name. Used for Reference only. | N / A |
| Max Length (or reach) | SiteLength | Length | Maximum effective length for wave setup | km |
| Vol. | Volume | Volume | Initial volume of site (must be copied into state var.) | m3 |
| Surface Area | SurfArea | Area | Site area | m2 |
| Estuary Site Width | SiteWidth | Width | Width of estuary, **N A for HMS** | m |
| Mean Depth | ZMean | ZMean | Mean depth, (initial condition if dynamic mean depth is selected) | M |
| Maximum Depth | ZMax | ZMax | Maximum depth | M |
| Ave. Temp. | TempMean | TempMean | Mean annual temperature of water | °C |
| Temp. Range | TempRange | TempRange | Annual temperature range of water | °C |
| Latitude | Latitude | Latitude | Latitude | Deg, decimal |
| Altitude (affects oxygen sat.) | Altitude | Altitude | Site specific altitude | m |
| Average Light | LightMean | LightMean | Mean annual light intensity | Langleys/day |
| Annual Light Range | LightRange | LightRange | Annual range in light intensity | Langleys/day |
| Enclosure Wall Area | EnclWallArea | EnclWallArea | Area of experimental enclosures walls; only relevant to enclosure | m2 |
| Mean Evaporation | MeanEvap | MeanEvap | Mean annual evaporation | inches / year |
| Extinct. Coeff Water | ECoeffWater | ExtinctH2O | Light extinction of wavelength 312.5 nm in pure water | 1/m |
| Extinct. Coeff Sediment | ECoeffSed | ECoeffSed | Light extinction due to inorganic sediment in water | 1/(m·g/m3) |
| Extinct. Coeff DOM | ECoeffDOM | ECoeffDOM | Light extinction due to dissolved organic matter in water | 1/(m·g/m3) |
| Extinct. Coeff POM | ECoeffPOM | ECoeffPOM | Light extinction due to particulate organic matter in water | 1/(m·g/m3) |
| Minimum Volume Frac. | Min\_Vol\_Frac | Minimum Volume Frac. | Fraction of initial condition that is the minimum volume of a site | frac. of Initial Condition |
| Auto Select Eqn. for reaeration | UseCovar | Covar | Boolean to determine whether user is entering reaeration coefficient | boolean |
| Enter KReaer | KReaer | KReaer | Depth-averaged reaeration coefficient | 1/d |