

## NEAP USER DATA CHECKLIST (NEAP V1.0)

Before you start to enter information into NEAP V1.0 it is recommended that you complete the following checklist of essential information. This will ensure that you have everything you need to input to NEAP once you log in.

### 1. Information pertaining to the reservoir, lake or vlei that you wish to model:

- Waterbody name
- Type (Reservoir, Lake, Vlei, Wetland (lacustrine only))
- Province
- River system (on which the waterbody is located, or forms a part of)

### 2. Hydrologic information<sup>1</sup>

- Catchment area (m<sup>2</sup>) [1 km<sup>2</sup> = 1 000 000 m<sup>2</sup> = 100 ha]
- Annual inflow volume (m<sup>3</sup>) [1 m<sup>3</sup> = 1 000 ℓ]
- Surface area (m<sup>2</sup>)
- Volume (m<sup>3</sup>)
- Mean depth (m)
- Annual precipitation (m) [1 m = 1000 mm]
- Annual evaporation (m) [Note: A map of evaporation isohyets is provided in the program]
- Point source water loadings (m<sup>3</sup>) [Note: This refers to additional aggregate volumes of water from identified sources such as wastewater treatment plants]

### 3. Water quality information: Waterbody

- Mean annual in-lake total phosphorus (if available, required for loading back-calculation) (mg m<sup>-3</sup> or ug ℓ<sup>-1</sup>) [1 mg ℓ<sup>-1</sup> = 1000 µg ℓ<sup>-1</sup> = 1000 mg m<sup>-3</sup>]
- Mean annual chlorophyll-a concentration (mg m<sup>-3</sup> or ug ℓ<sup>-1</sup>)
- Mean annual water transparency (m)
- Area covered by organically-rich sediments, if known (ha)

### 4. Water quality information: Catchment

If available, a breakdown of the catchment by area (ha) landuse type, as follows:

- High density urban [1 ha = 10 000 m<sup>2</sup> = 0.01 km<sup>2</sup>]
- Medium density urban
- Low density urban
- Industrial
- Smallholdings
- Horticulture
- Grasslands/pastures
- Row crops
- Forestry
- Other

---

<sup>1</sup> NEAP includes a handy downloadable calculator for unit conversions. Later versions of NEAP will incorporate built-in conversion functionality.

Details of identified point source loadings by volume per source and estimated load of phosphorus per source per annum.[loads in kgs P a<sup>-1</sup>]