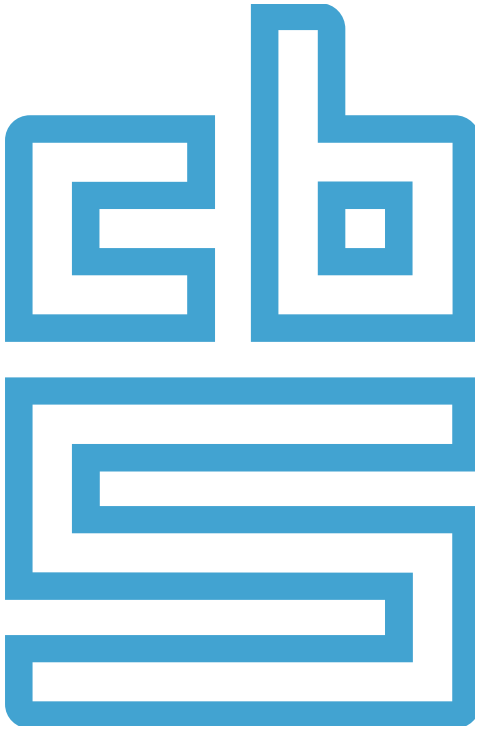


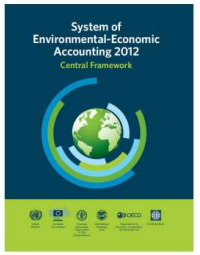
Extent Accounting in the revised SEEA EEA

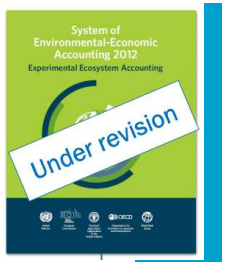
Sjoerd Schenau

Content

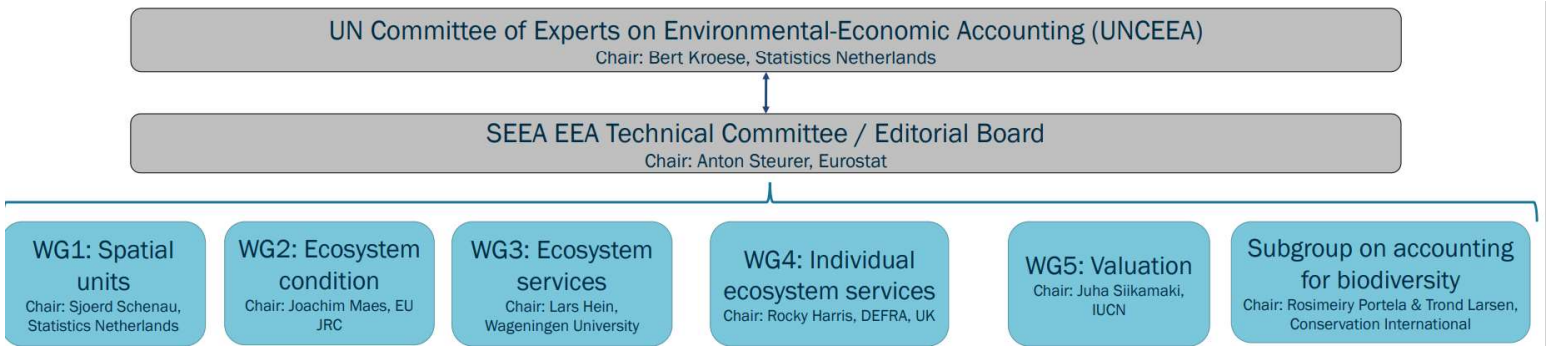
1. SEEA EA revision process
2. Key revision issues for spatial units
3. Spatial units in SEEA EA
4. Some conceptual highlights from the revised SEEA EA

SEEA EA revision process





- Launched in March 2018 with the aim to finish by the beginning of 2021
- Seek for broad involvement of partners and experts in the process – over 100 experts contributed to drafting of the discussion papers and more than 600 reviewed the papers
- Ambition is to elevate it to an agreed methodological document – international statistical standard



Key revision issues for spaital units

1) Development of a **reference classification** that better represents the concept and coverage of ecosystems

2) Delineation of **urban areas** and treatment of their ecosystem assets

3) Treatment of the **atmosphere and marine areas**

An ecosystem type classification for SEEA EEA

- A classification describing the ecosystem types and a map are **essential components** of ecosystem accounting
- It is expected that countries will use their national ecosystem maps and classifications as the basis for SEEA ecosystem accounting.
- However, for international comparability, these classifications should be linked to a **reference classification**.
- **A key revision issue** for SEEA EEA is to develop a proposal for a reference classification that better represents the concept and coverage of ecosystems

Design criteria

1. The classification typology should **represent ecosystems**
2. The classification units can be **spatially delineated**
3. The classification units are **geographically and conceptually exhaustive**, and **comprehensive** across all environmental domains
4. The classification types are **mutually exclusive**, both conceptually and geographically.
5. The classification should be **practicable**
6. The classification should be **linkable** to other established classification systems

Review of existing classification schemes

	IUCN ET	USGS/Esri	MAES / Eosystems types for Europe	IUCN habitat	EUNIS habitat	WWF Biomes	FAO LCCS	Corine (CLC) level 2	GLC2000
1) Ecological base	ecosystems	Biophysical Settings	ecosystems	habitat	habitat	Biomes	Land cover	Land cover	Land cover
2) Spatial delineation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3) Domain comprehensive and exhaustive	Yes	Yes	Yes?[1]	Yes	Yes?[1]	No	Focus on land	No detail for marine	Focus on land
4) Mutally exclusive classes	Yes	Yes	Yes	Yes	Yes	?	Yes	Yes	Yes
5) Practical	Yes	Yes	Yes	?	Yes	?	Yes	Yes	?
6) Linkable to other classifciations	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes	Yes
Number of levels in hierarchy	6	variable	2 or 3	2	3	2	variable	3	2

1 As these are European classification schemes, it is not clear whether they are comprehensive and exhaustive on a global scale

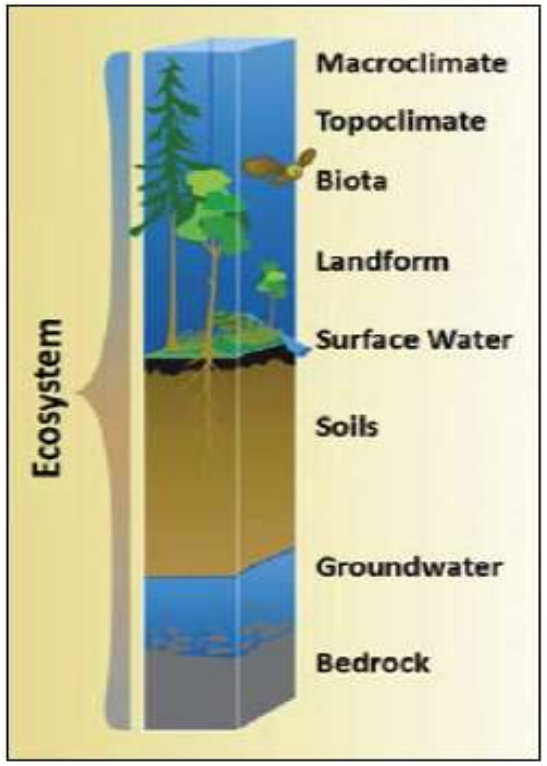
Key outcome SEEA revision process

- During the June 2019 Meeting of Experts in Glen Cove (NY), **consensus was reached that the IUCN Global Ecosystem Typology (GET) level 3 units (EFGs) will be proposed as the basis of the revised SEEA-EEA ecosystem type classification**
- The **USGS/Esri World Ecosystems maps** (and underlying data) may provide a method to map some EFGs, especially when no ground observations are available, but requires a cross-walk to identify potential congruencies and gaps

Spatial units in SEEA EA

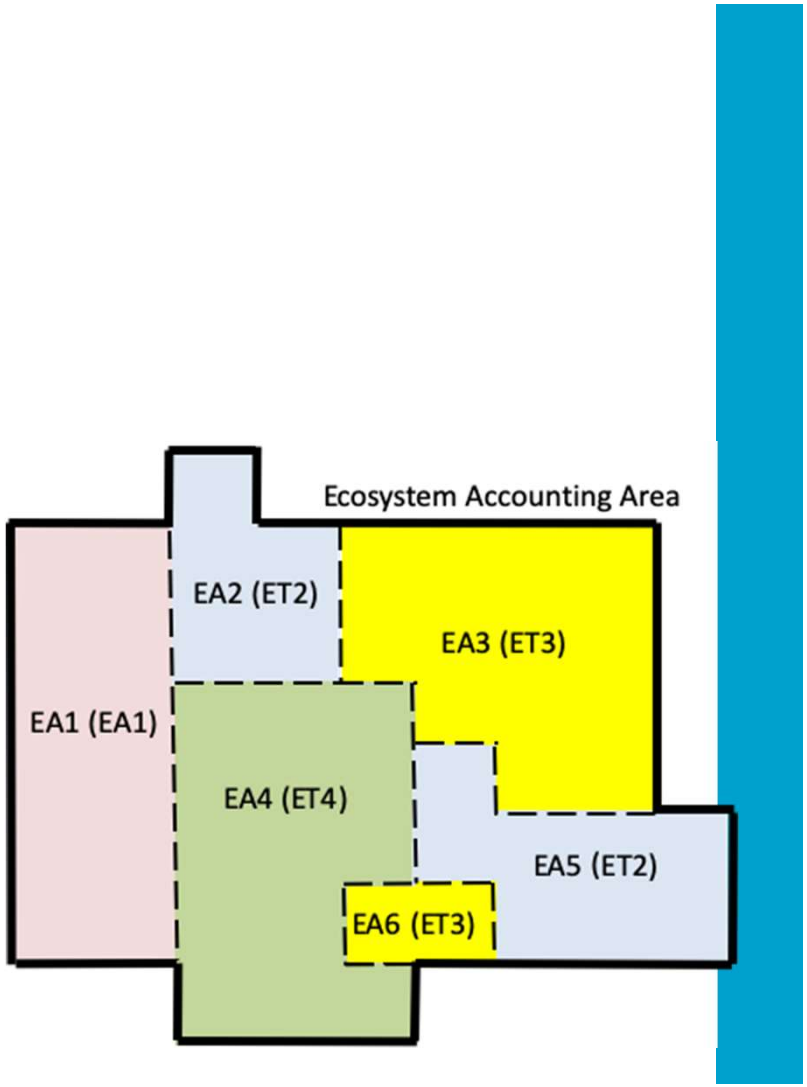
Ecosystem assets (EAs) are contiguous spaces of a specific ecosystem type characterized by a distinct set of biotic and abiotic components and their interactions.

An ecosystem type *reflects a distinct set of abiotic and biotic components and their interactions*



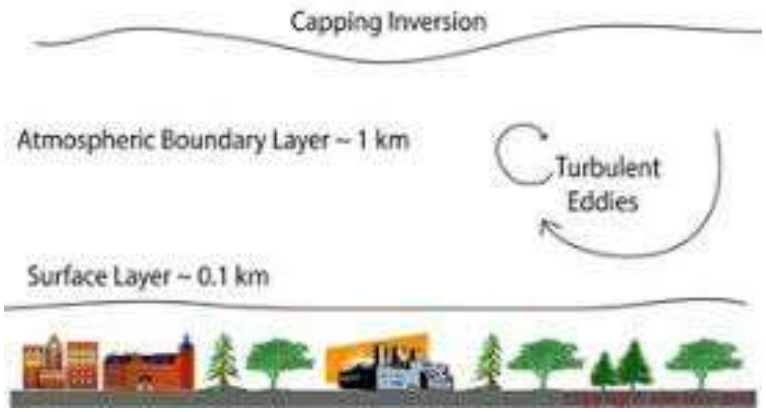
Spatial units in SEEA EA

The ***ecosystem accounting area (EAA)*** *is the geographical territory for which an ecosystem account is compiled.*



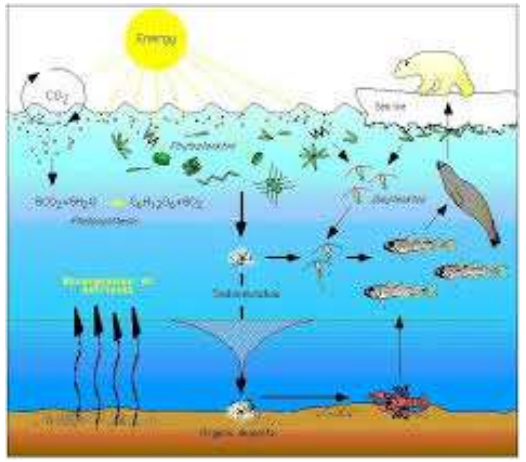
Atmosphere

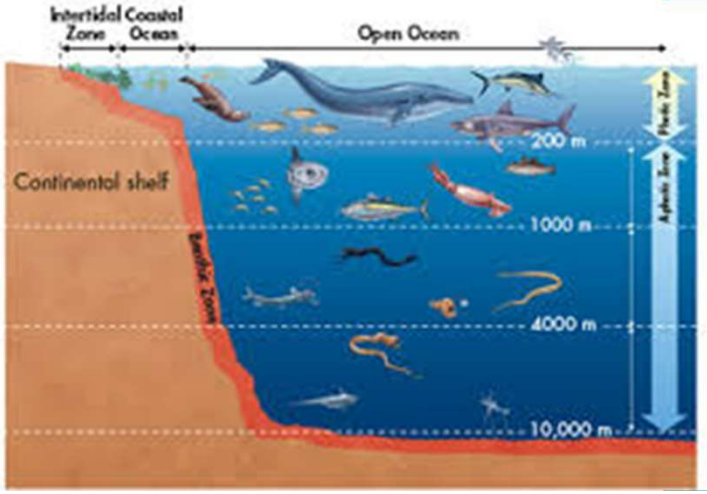
- The atmosphere directly above and within an ecosystem is considered part of the ecosystem asset as one of the abiotic components within the spatial unit.
- The **atmospheric boundary layer** forms the natural upper boundary of ecosystem assets



Oceans

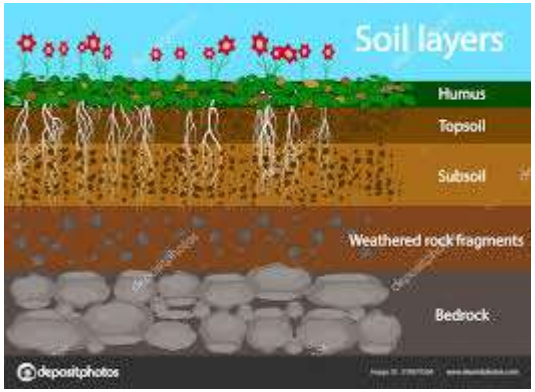
- For marine ecosystems within the **continental shelf**, delineate ecosystem assets based on the areas of different ecosystem types associated with the sea bed
- For marine ecosystems **beyond the continental shelf**, adopt vertically stratified spatial units, i.e., the ecosystem assets are delineated with respect to both location and depth within the water column.





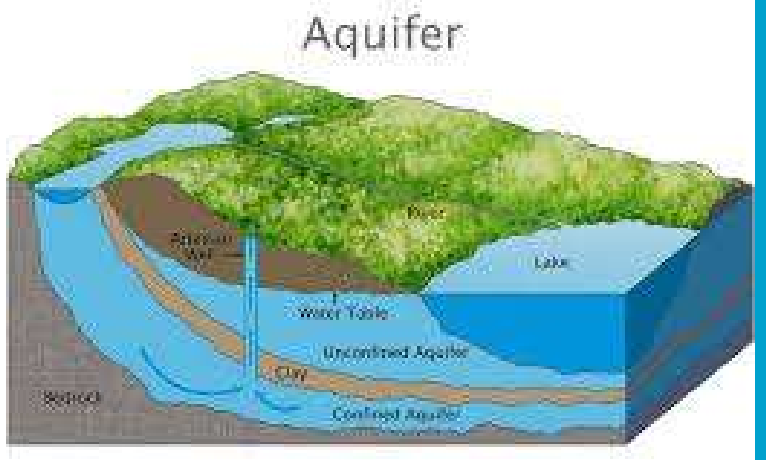
Subsoil and subsoil assets

- The subsoil that is directly involved with ecosystem processes is considered part of the ecosystem asset.
- Resources located in the deeper substrate within the lithosphere, that are in no direct interaction with the surrounding ecosystems, are not considered ecosystem assets



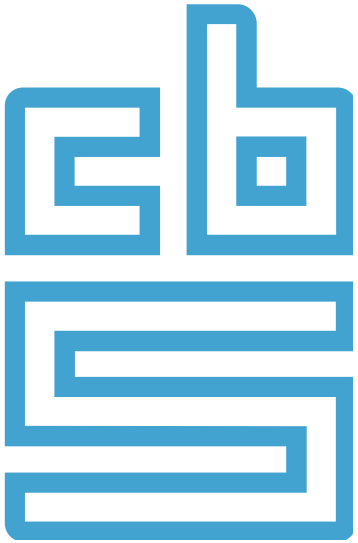
Aquifers

- **Confined aquifers** should be treated as distinct ecosystem assets from the ecosystem assets located above them.
- **Unconfined aquifers** may be treated distinctly or integrated with the surface ecosystem asset depending on the context.



Linear features

- The area of sufficiently wide **rivers and streams** should be separately recorded.
- For other linear features that are **ecologically linked to surrounding landscape**, it is recommended that they should not be separately identified and any associated area should be attributed to the ecosystem type of the surrounding ecosystem.
- For **any other linear features** the choice is to treat them like streams and rivers if sufficiently wide, or to include them with the surrounding ecosystem types



Voor wat er **feitelijk** gebeurt