



Planbureau voor de Leefomgeving

Deltares



Global Scenarios Ecosystem Health

Pitch workstream proposal

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PBL: Lex Bouwman, Arthur Beusen

Who, why, what, when, budget

Who: Deltares & Netherlands Environmental Assessment Agency (PBL)

Why: finalizing baseline and make the step to scenario calculations

What: global scenarios for Ecosystem Health indicators (Inf.Doc)

When: results 12 months after start of the project

Budget:

WWQA	65,000 US\$
Deltares:	30,000 US\$
PBL:	<u>30,000 US\$</u>
<i>total</i>	<i>125,000 US\$</i>

Ecosystem Health Indicators

1. Nutrient pollution

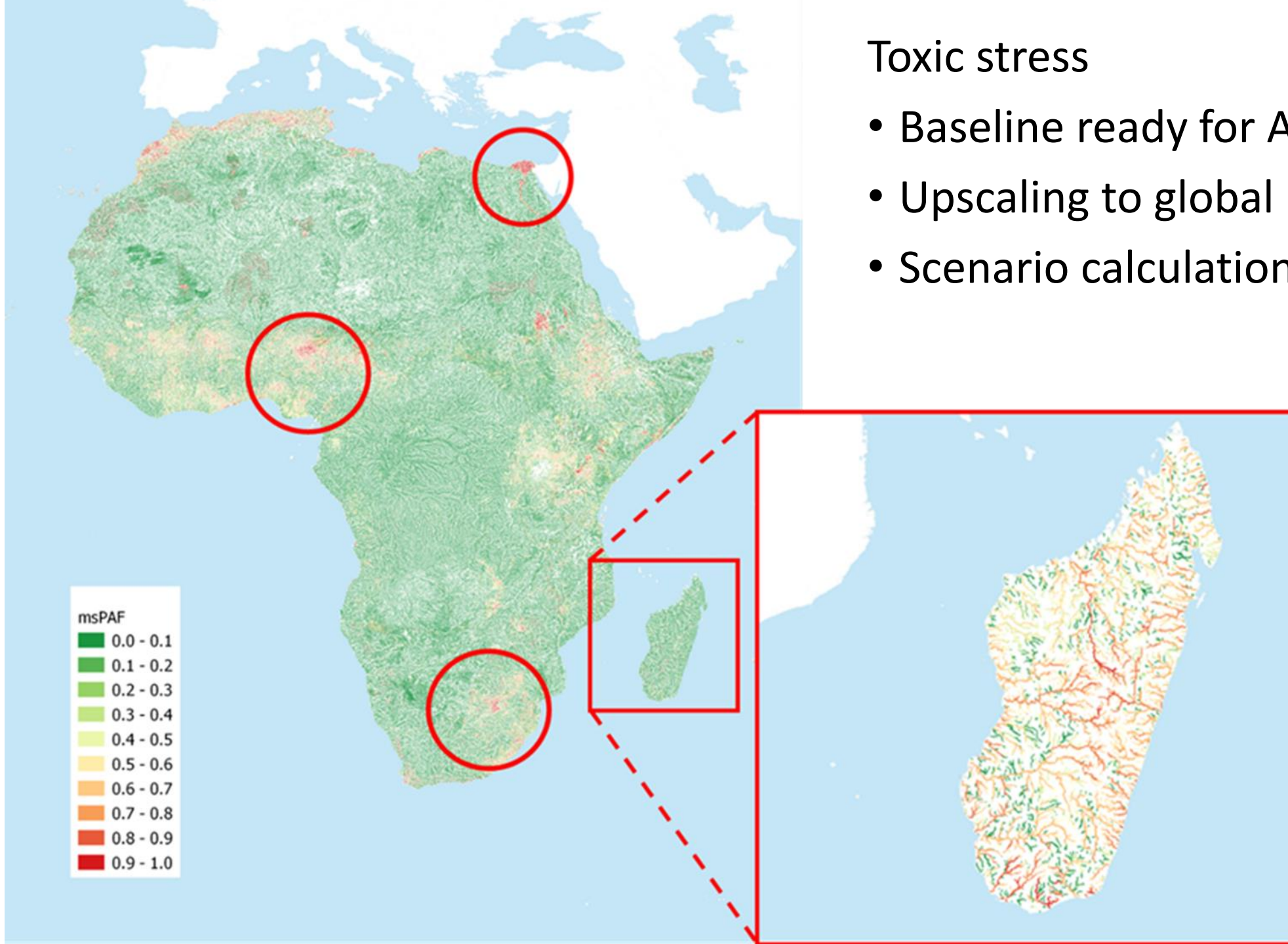
- groundwater and surface water pollution
- loss of habitat and biodiversity
- coastal dead zones
- harmful algal blooms
- human health impact

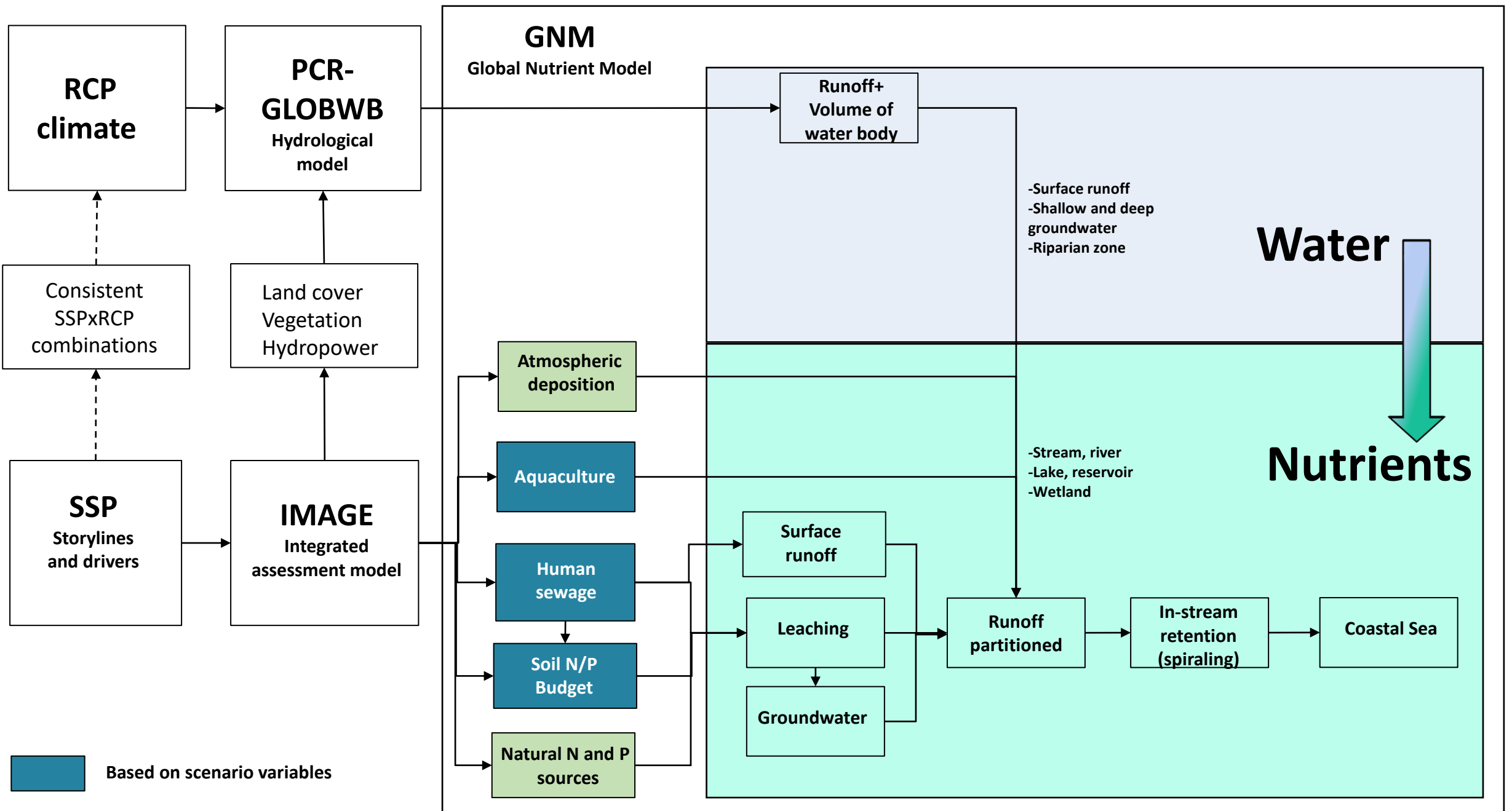
2. Toxic stress

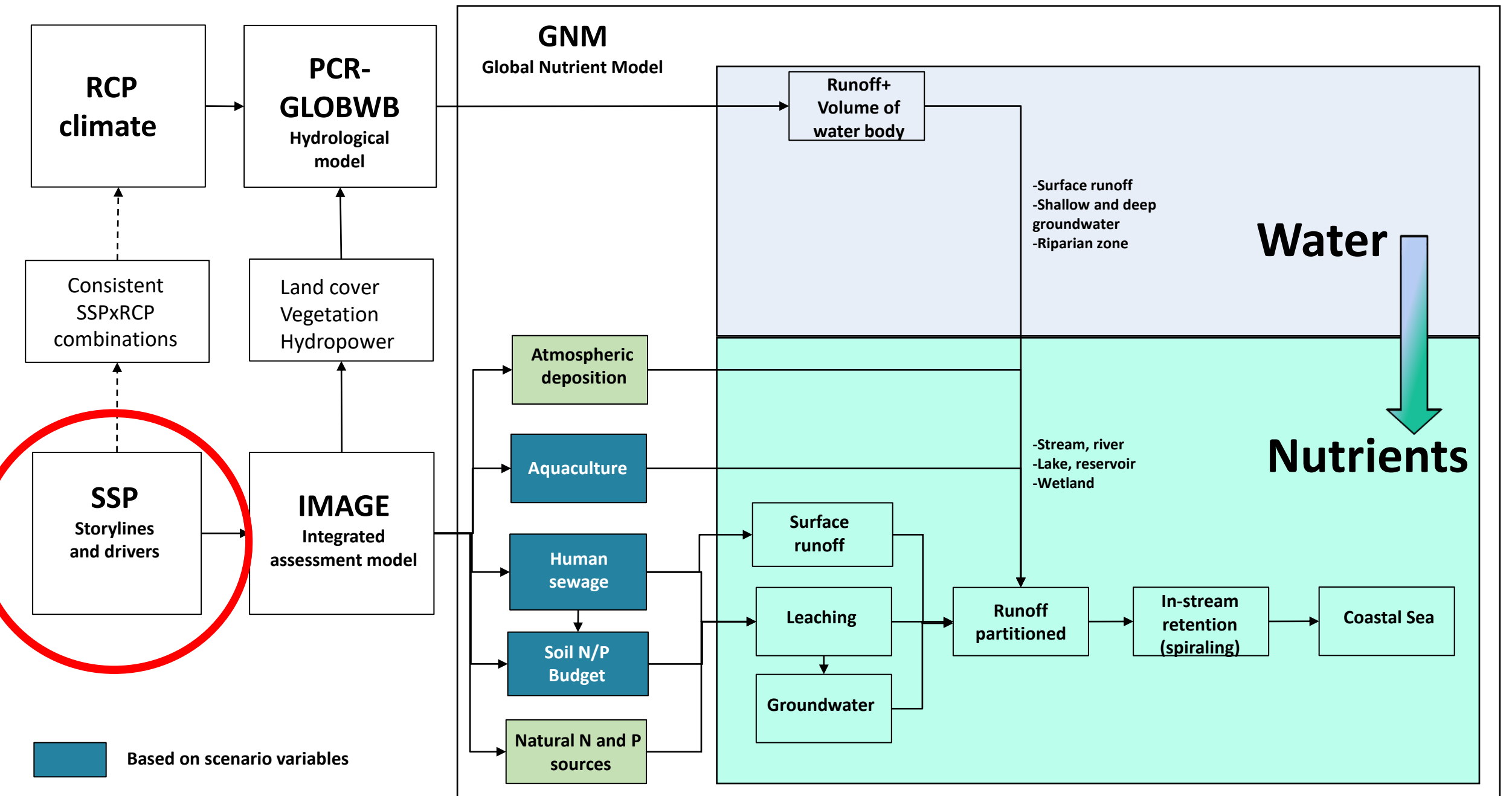
- toxic effects on aquatic species
- biodiversity loss
- human health impact

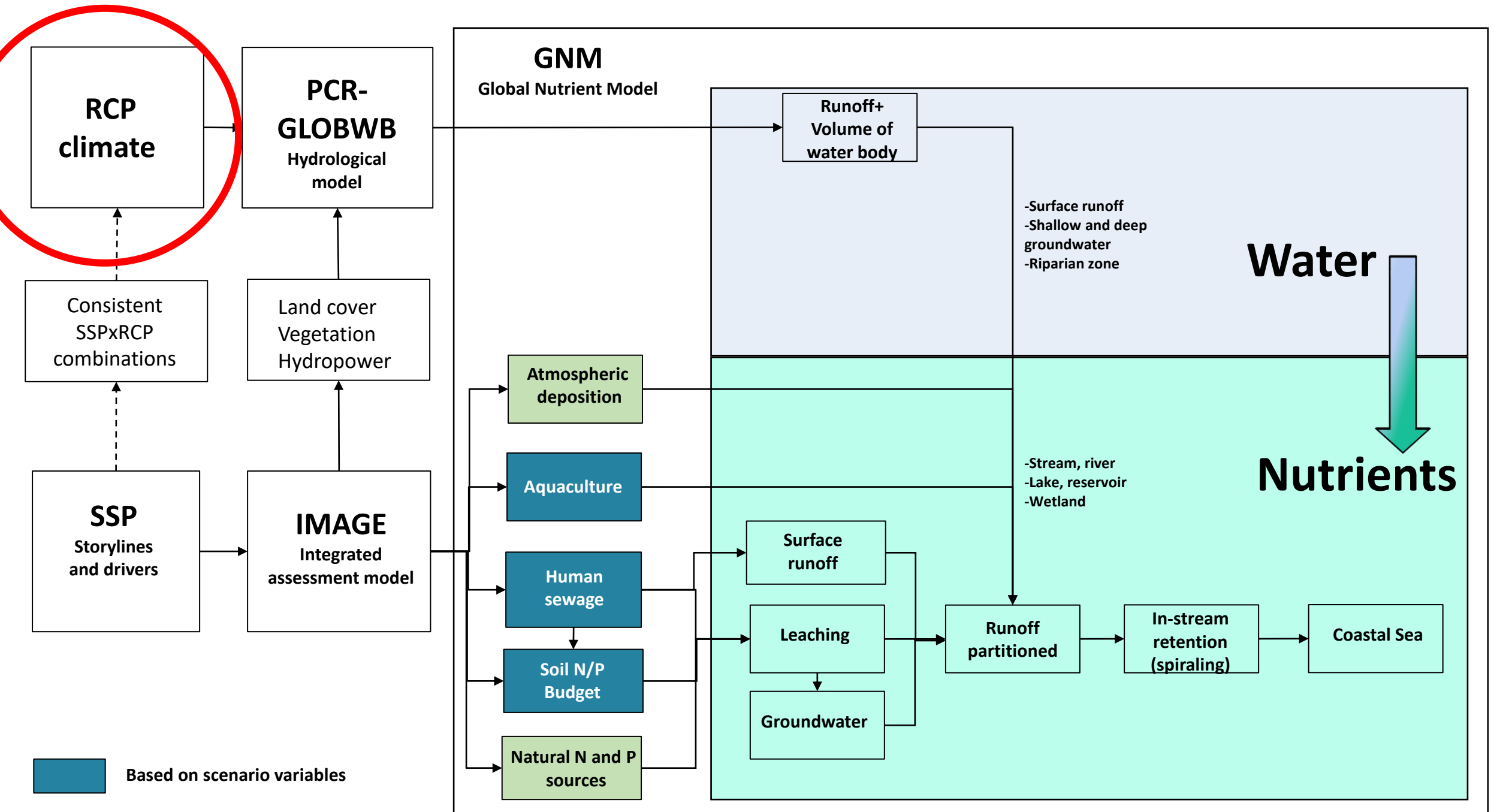
Toxic stress

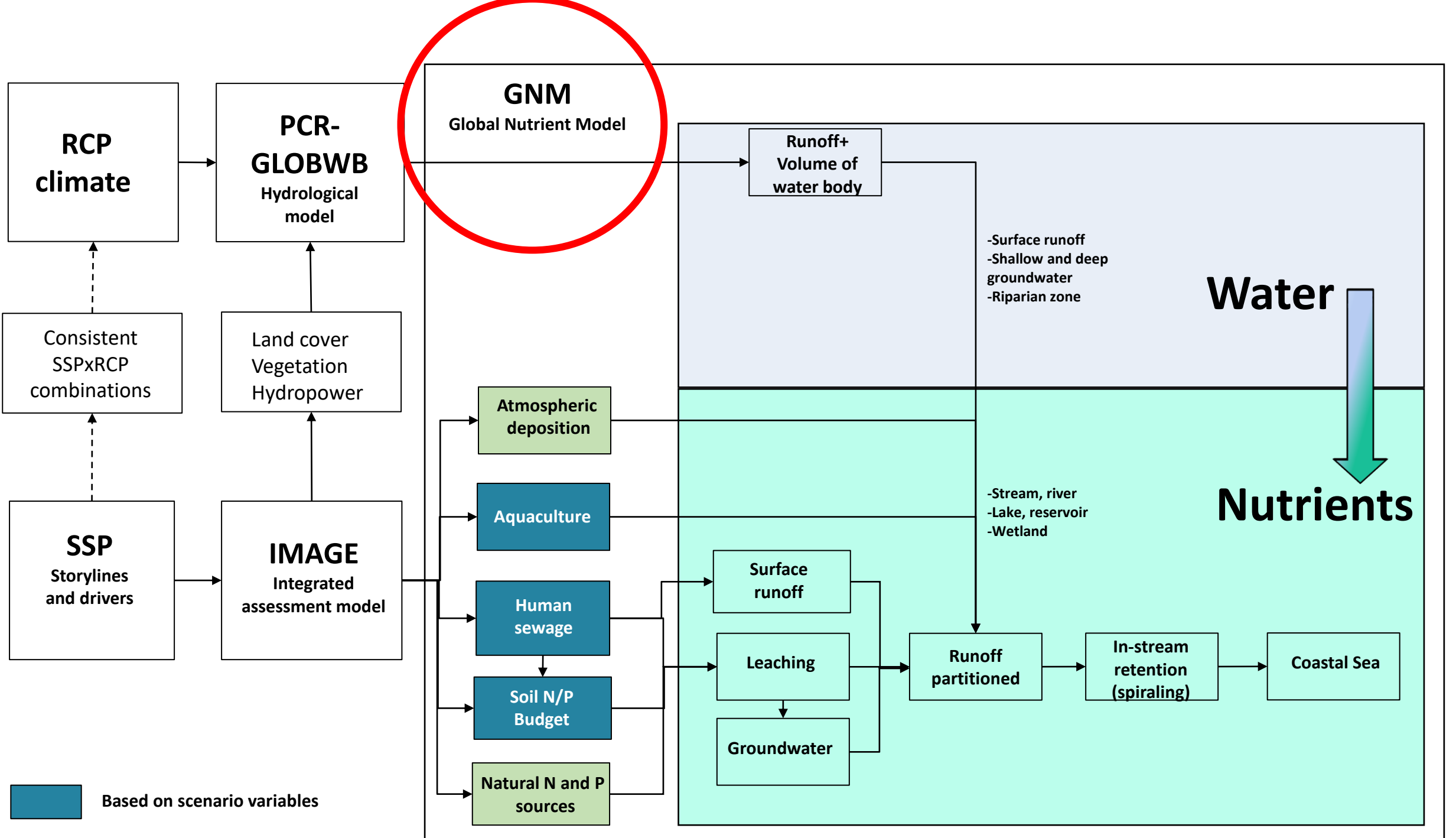
- Baseline ready for Africa
- Upscaling to global baseline
- Scenario calculations

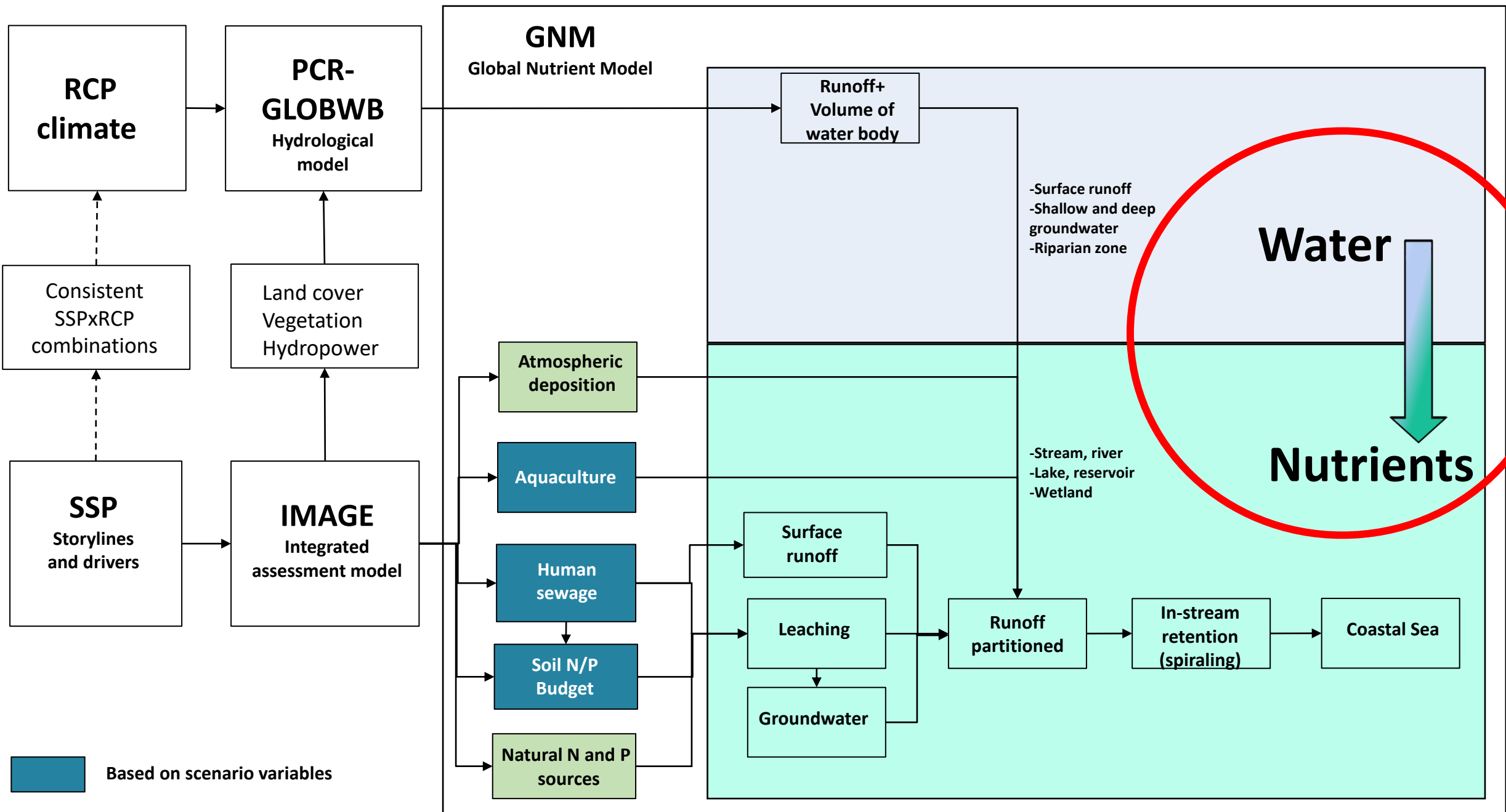


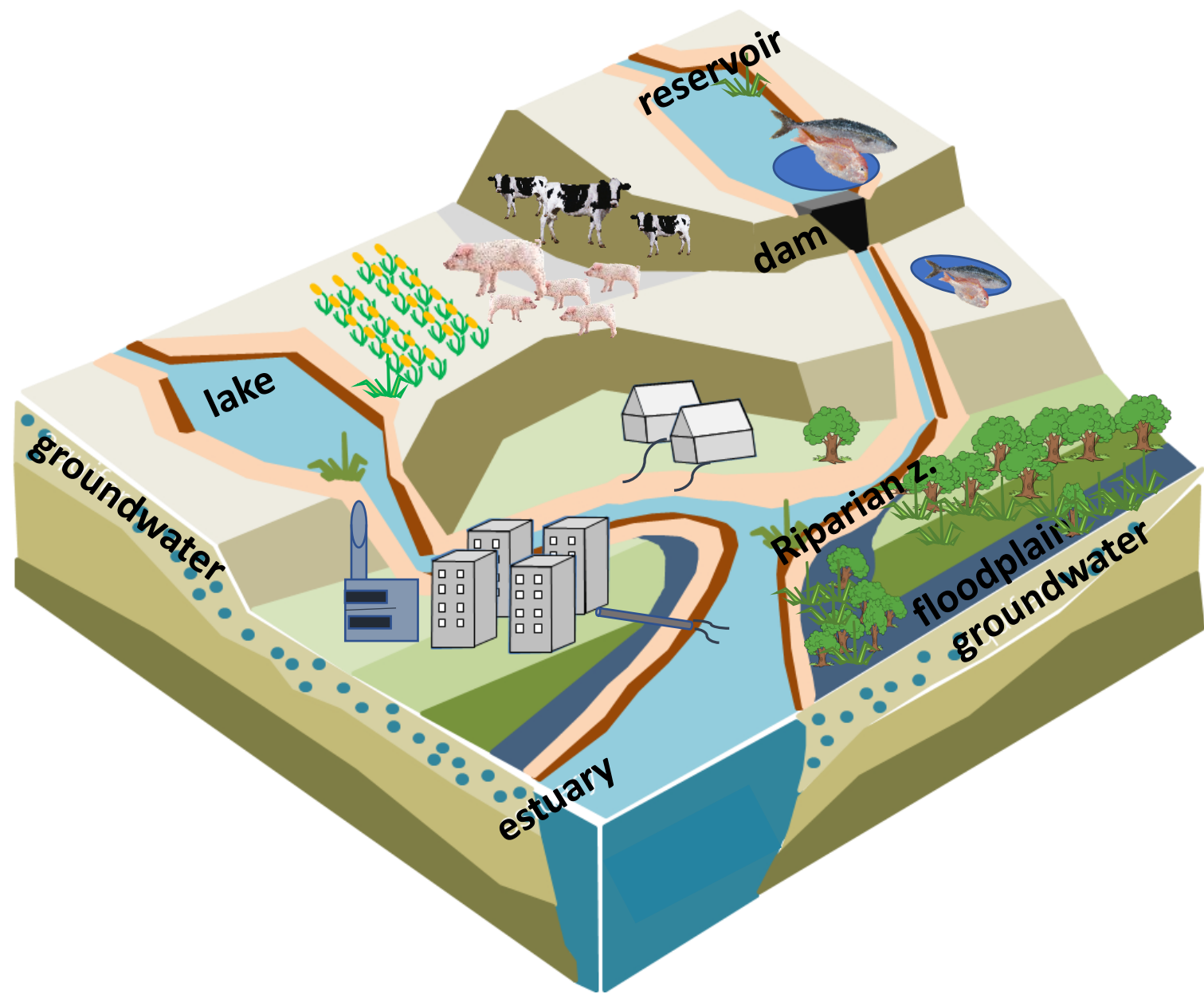


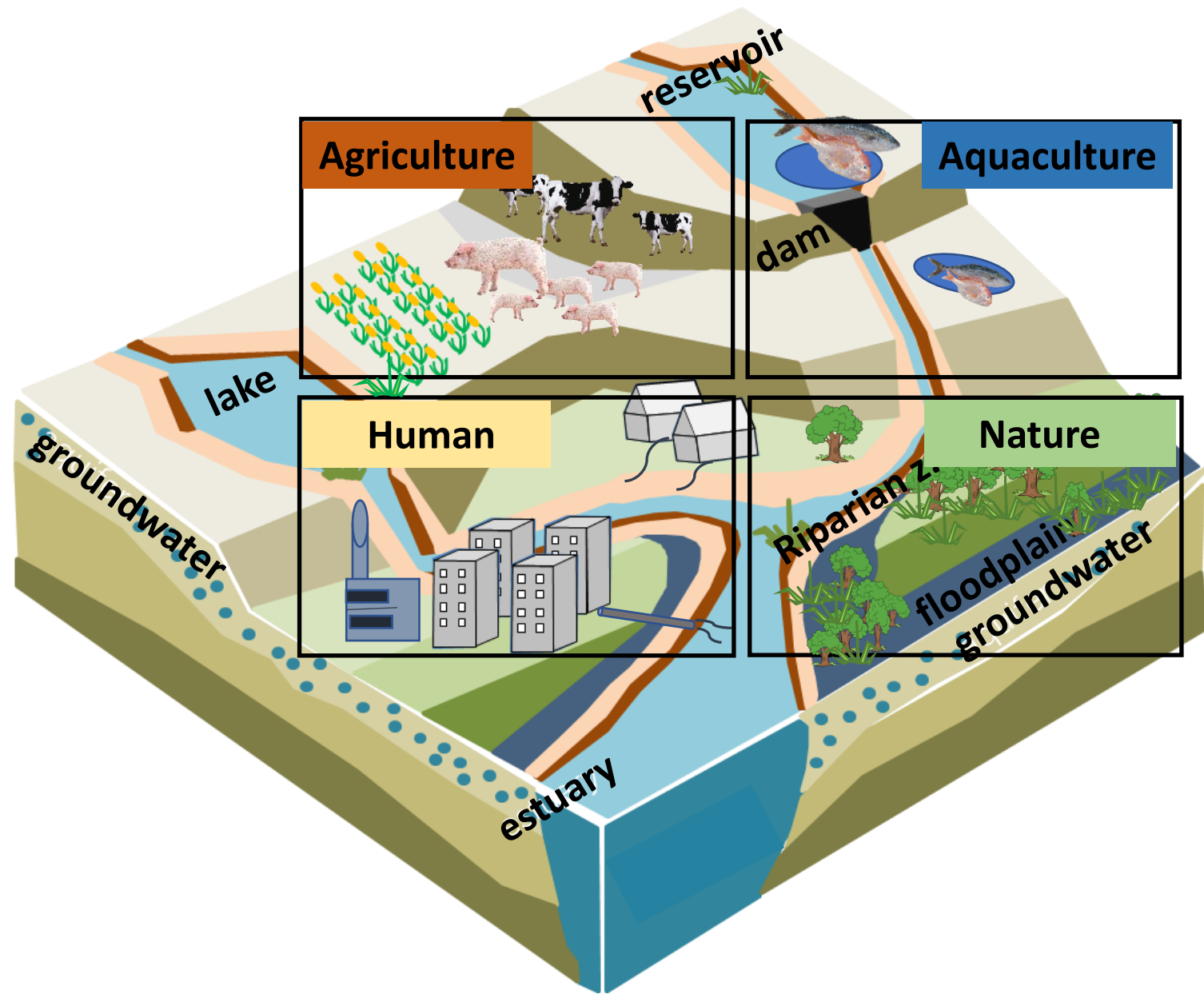












Global calculations

Covering all water types and land uses

Using SSP scenarios combined with RCP climate scenarios

For nutrient pollution and toxic stress

Results and outcome

- Commonly agreed definitions wrt scenario set up
 - Intermediate results of socio-economic drivers
 - Global scenario maps of nutrient pollution and toxic stress
 - Documentation/Presentation of results
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- Assessing key environmental issues related to Ecosystem Health
 - Identification of hotspot areas where major changes are expected
 - Overview of regional developments, including existing policies