

# Aquaculture's role in a regenerative food system

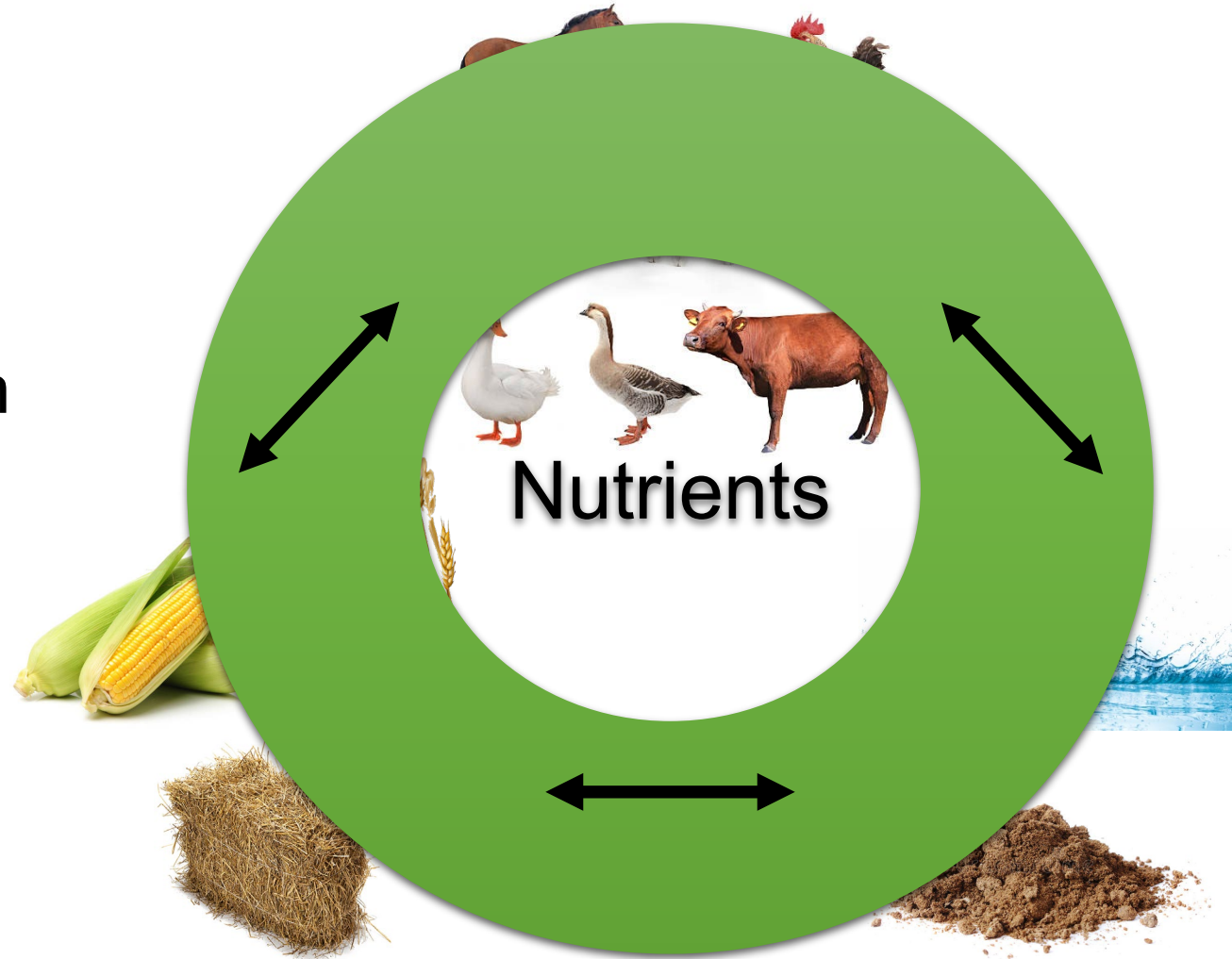
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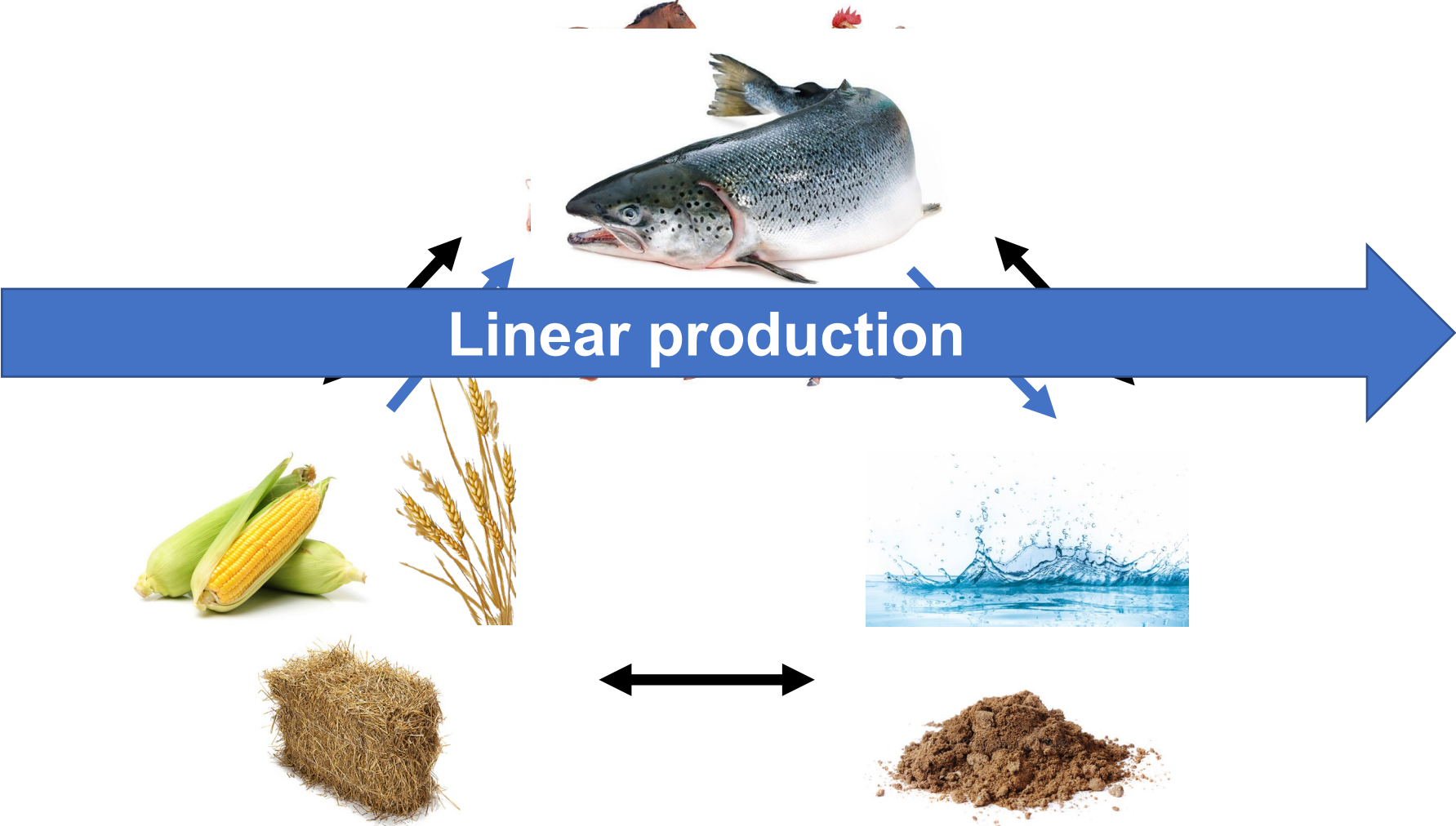


# What is a regenerative food system?

- No clear definition
- Minimizes input
- Focusses on soil health
- Holistic approach

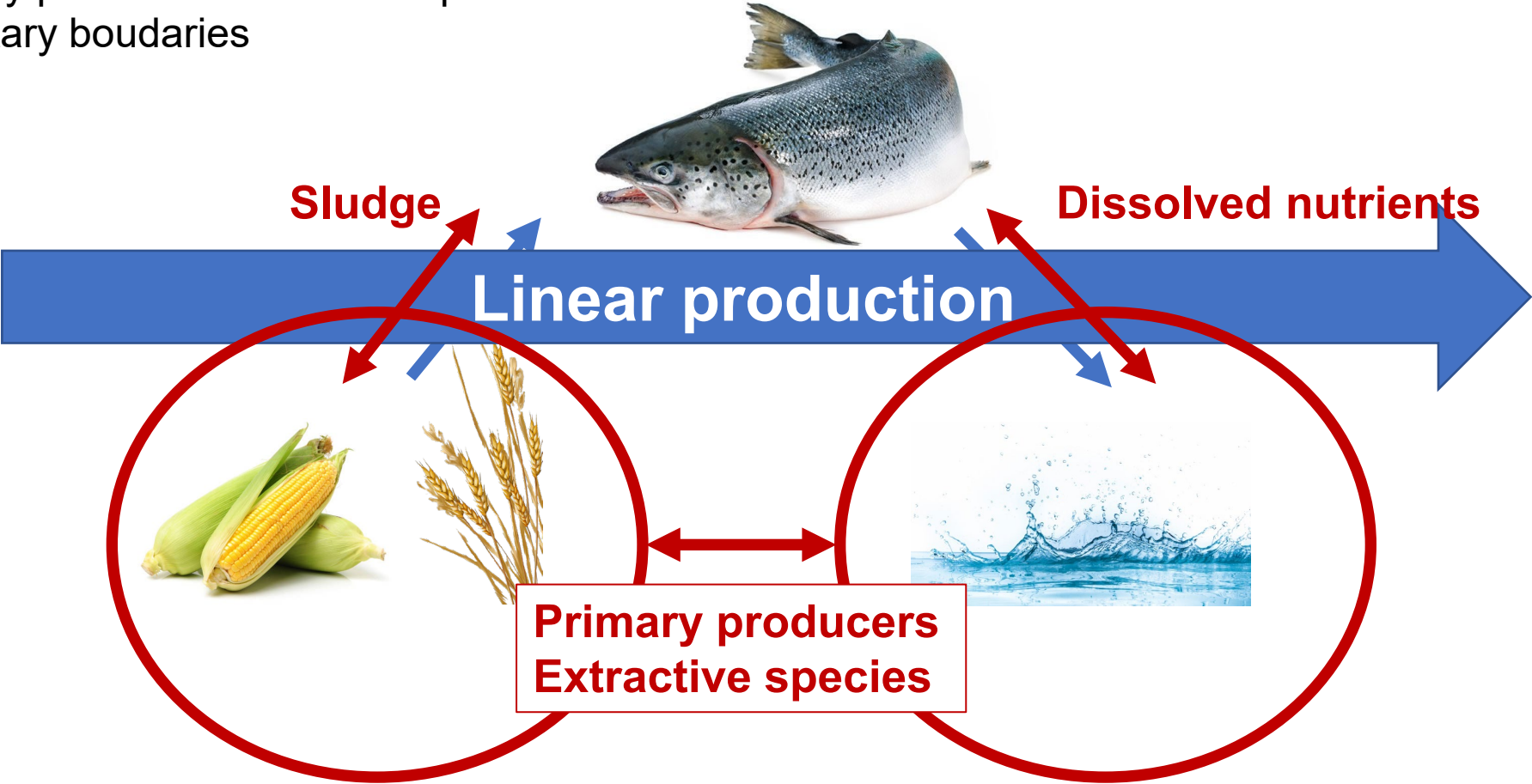


# Aquatic regenerative food system?



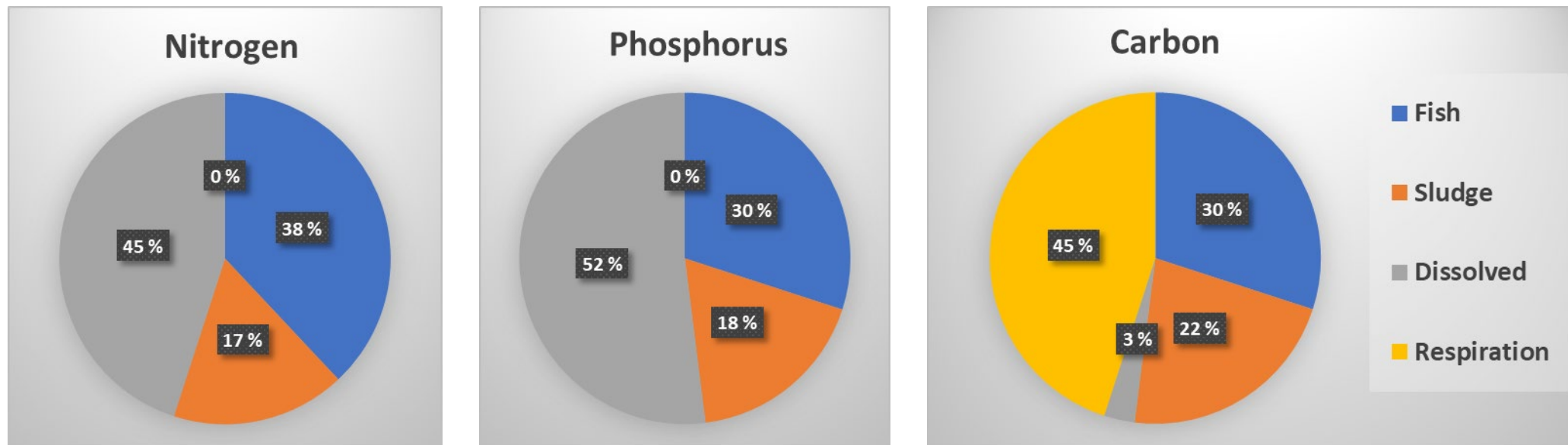
# Aquatic regenerative food system?

- 1. Sludge and dissolved nutrients
- 2. Primary producers/extractive species
- 3. Planetary boundaries



# 1. Sludge and dissolved nutrients

Largest unused organic waste stream from fish farming



Wang et al. 2012



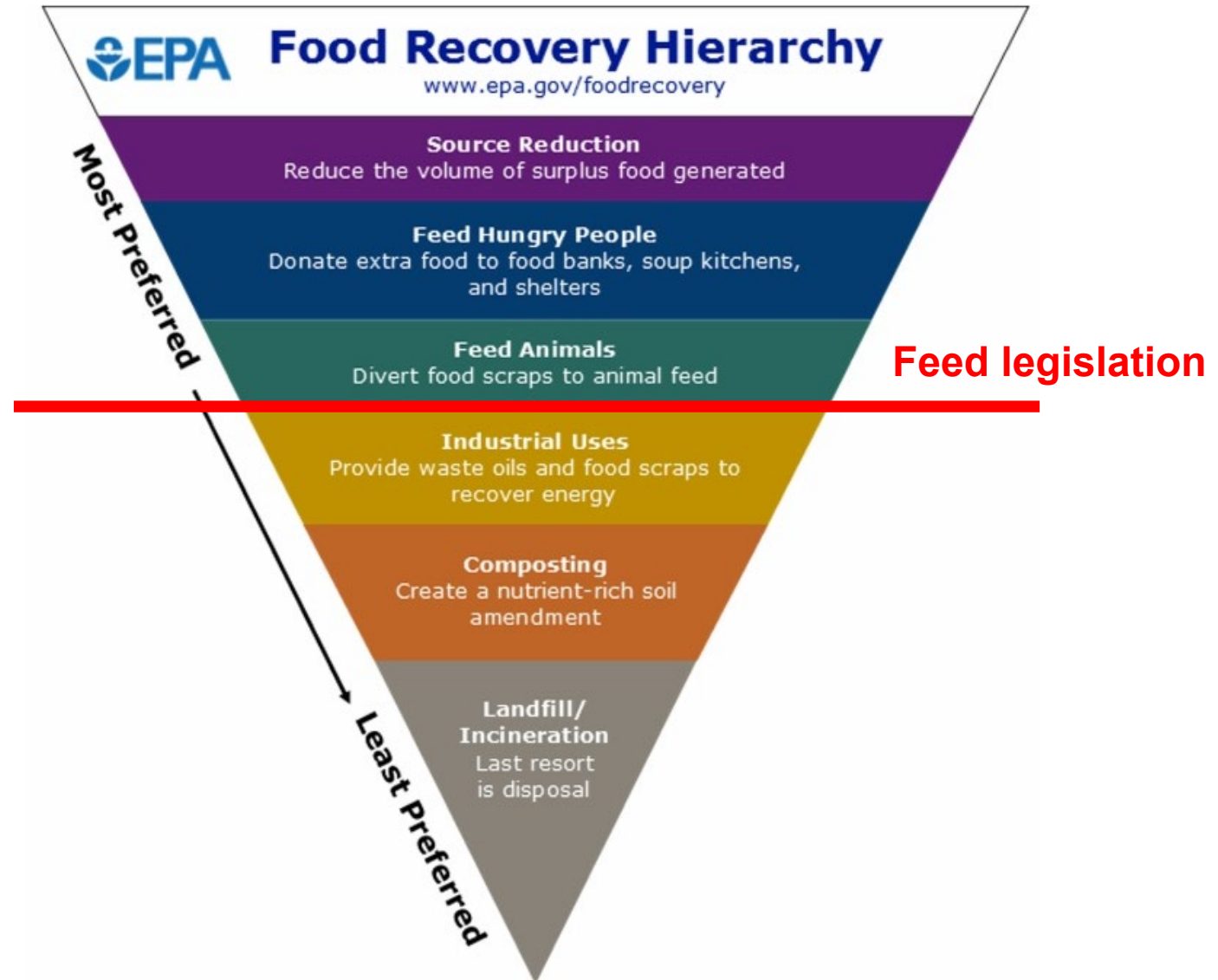
# 1. Sludge and dissolved nutrients

- Largest unused organic waste stream from fish farming
  - 600.000 tons of carbon
  - 75.000 tons of nitrogen
  - 14.000 tons of phosphorus
- Collected sludge consists of faecal matter and feed pellets
  - 10 – 50% of sludge dry matter can be from uneaten feed pellets

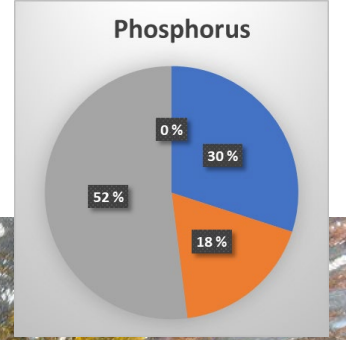
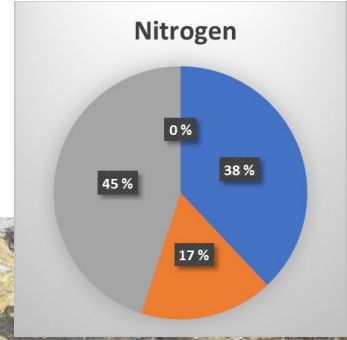
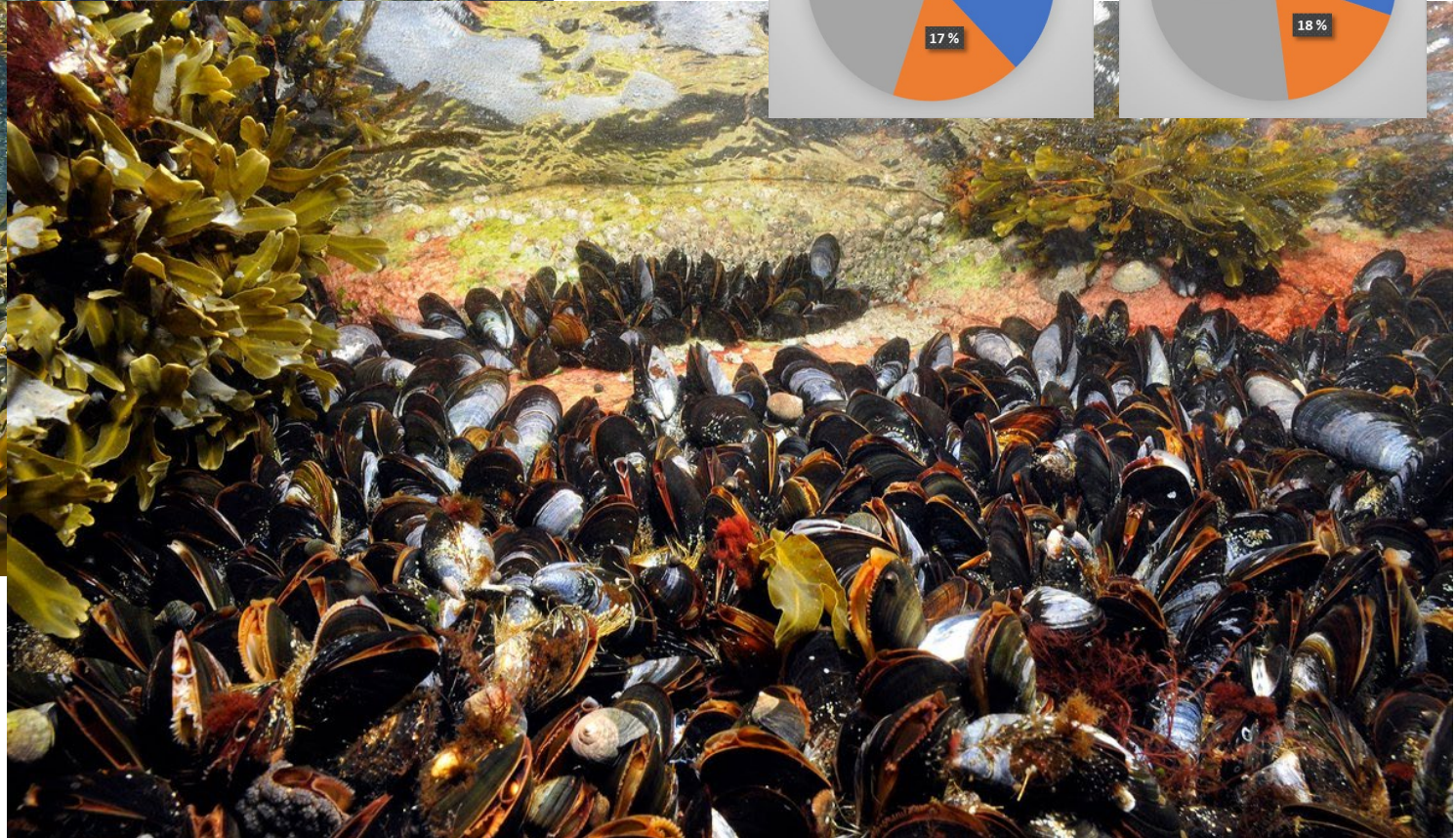


# 1. Sludge and dissolved nutrients

- Regulated like manure
- Limited possibilities

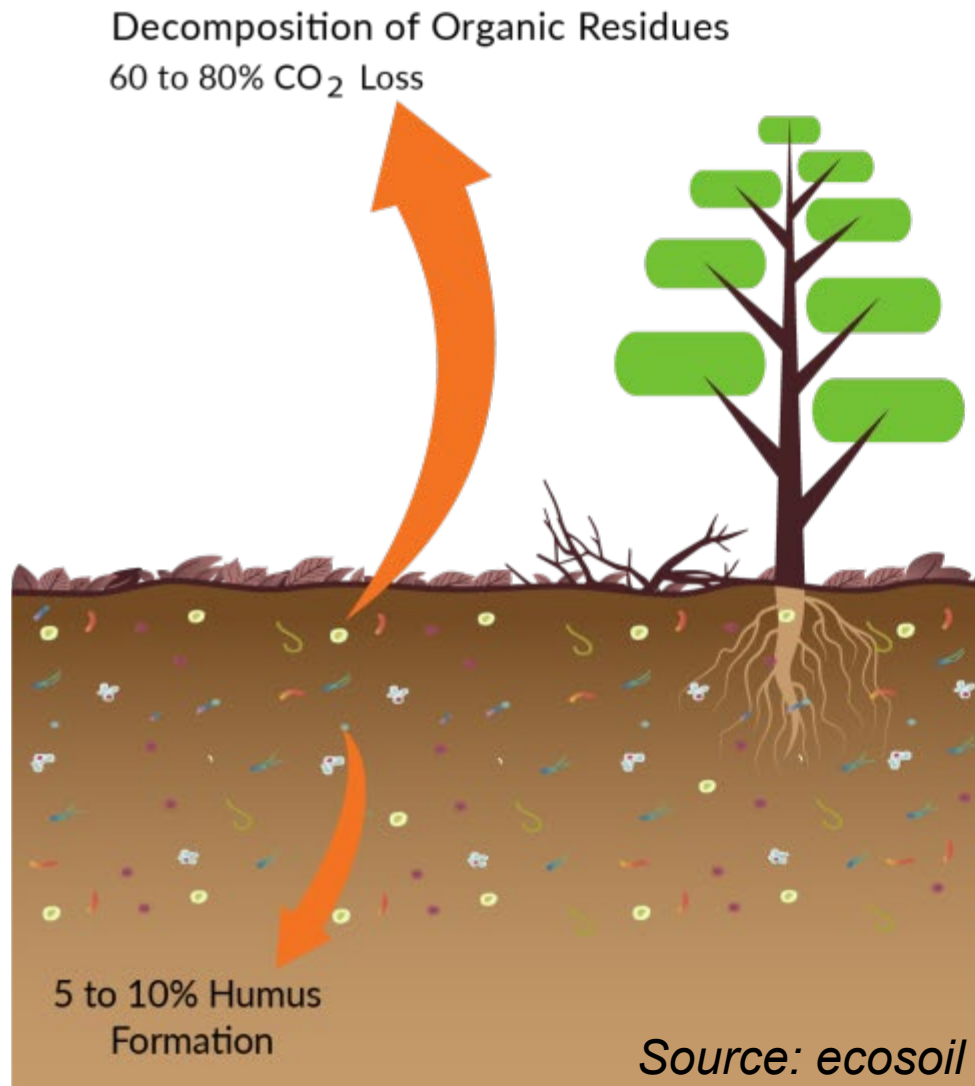


# 2. Primary producers and extractive species

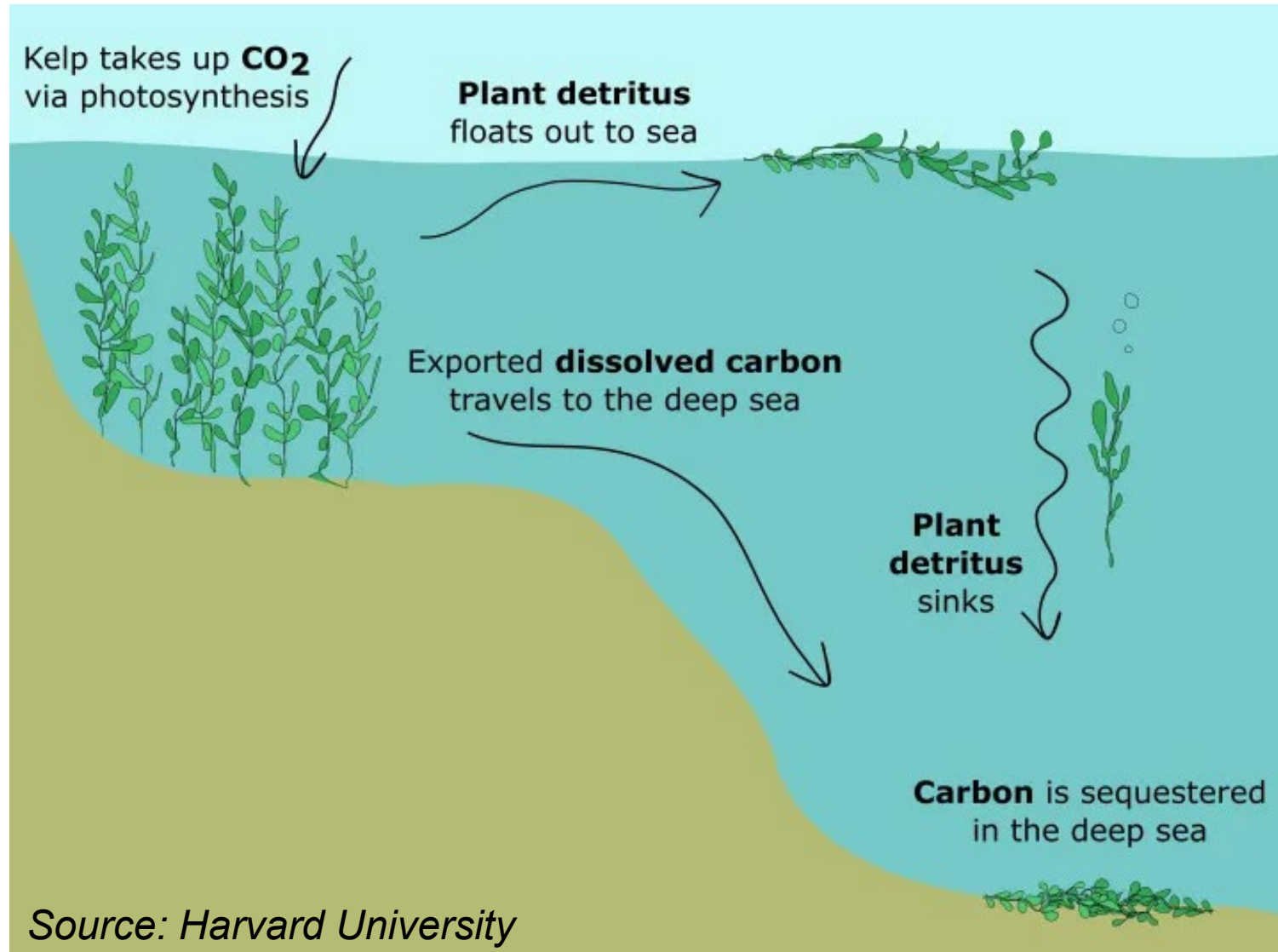




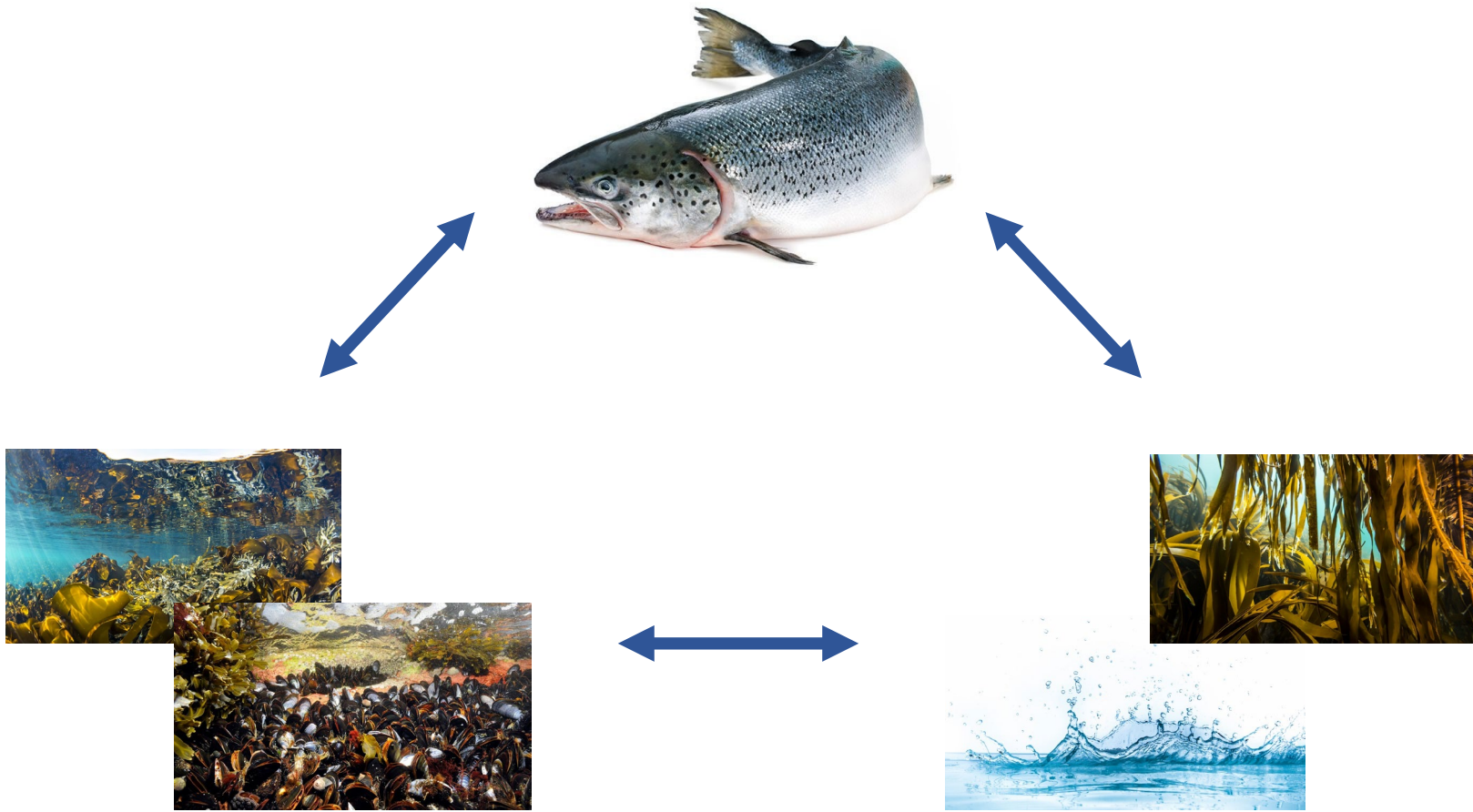
# 3. Planetary boundaries – CO<sub>2</sub>



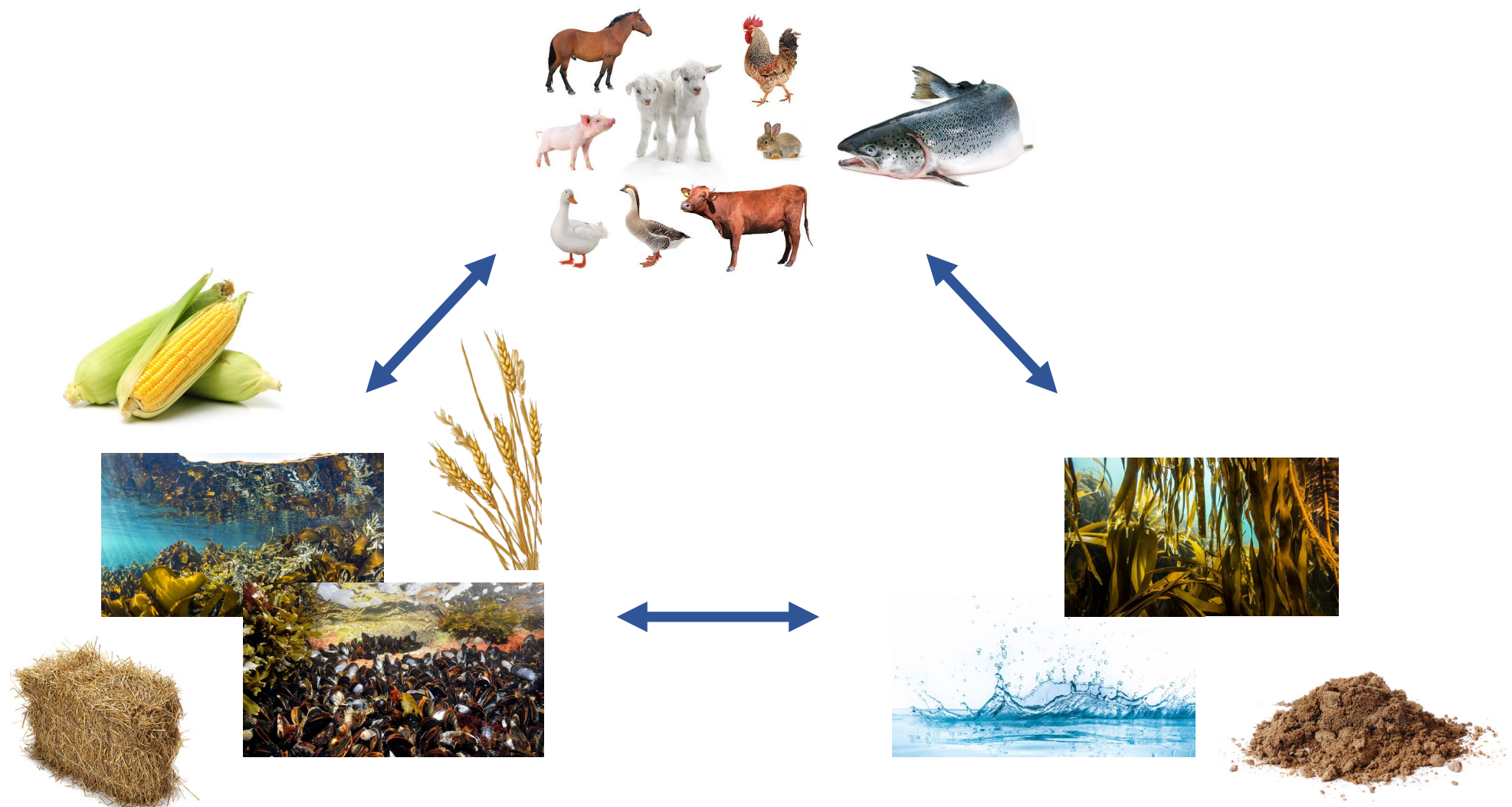
### 3. Planetary boundaries – CO<sub>2</sub>



# Aquatic regenerative food system?



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Takk for oppmerksomheten

