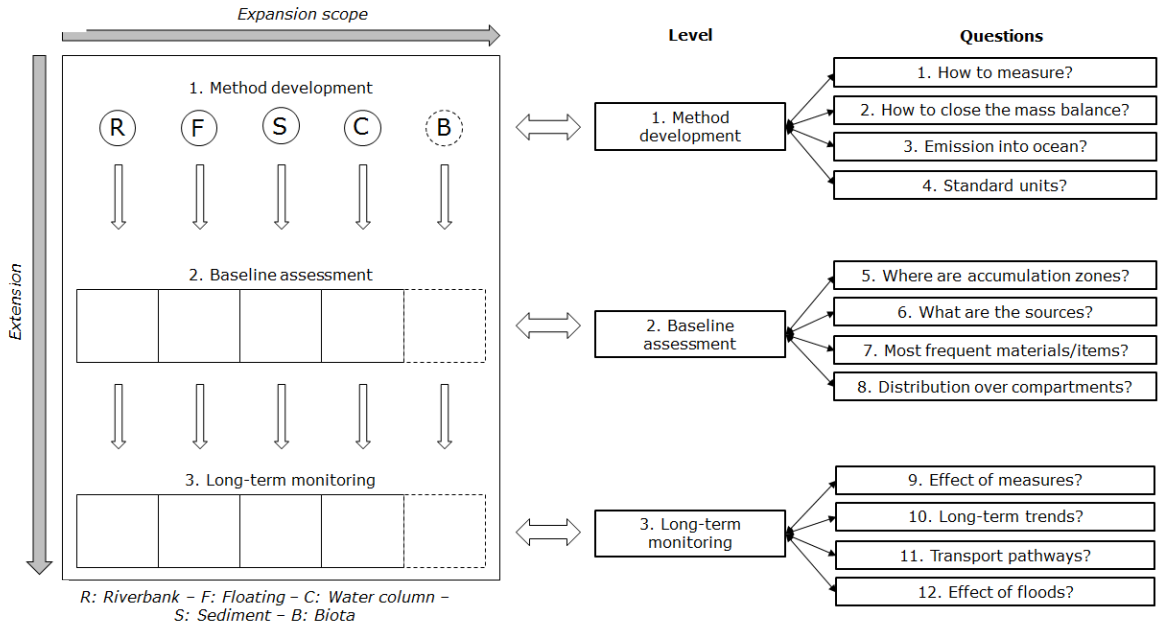



Rijkswaterstaat
*Ministerie van Infrastructuur en Waterstaat*

# Roadmap for long-term Macroplastic monitoring in rivers

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Plastic in Freshwater Environments

# Take home messages

- Riverine macroplastic monitoring now often short term, limited in spatial coverage, and lacking standardized methods
- Monitoring is performed with different goals
- The Roadmap is a tool structure the road towards long-term monitoring, linking data needs with monitoring methods
- The Roadmap is flexible to account for different research goals, ambition levels, and resource availability

Link to paper:

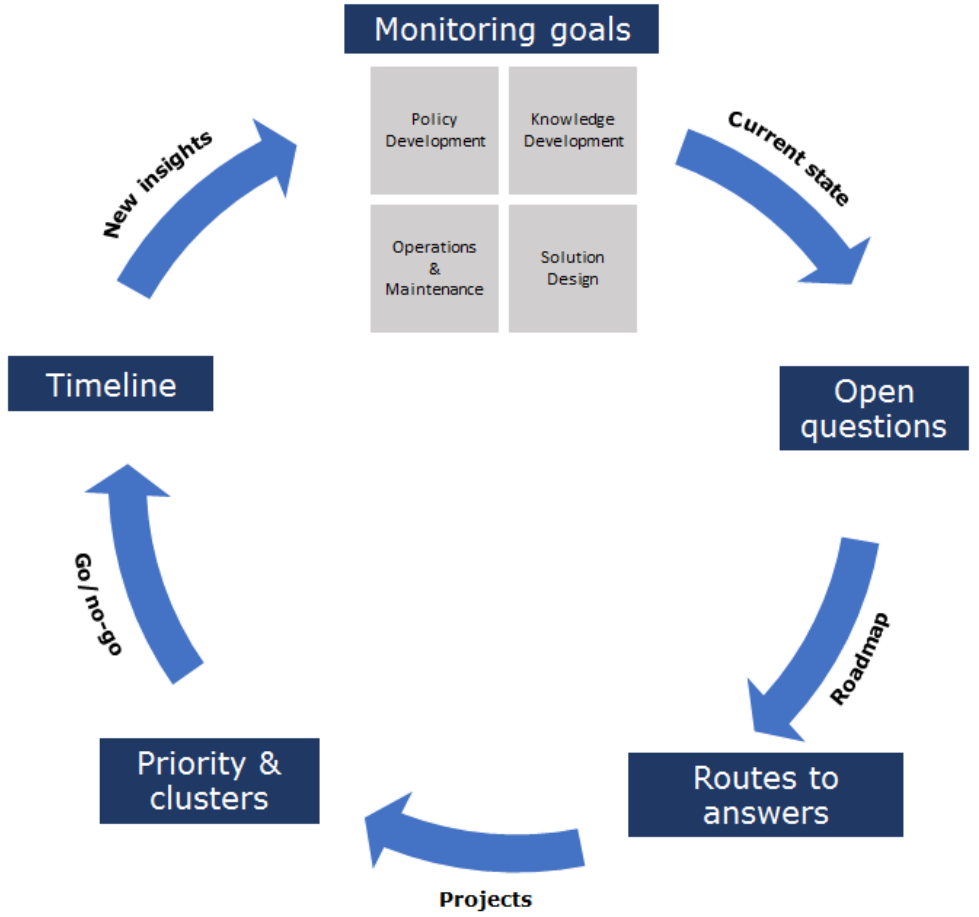
van Emmerik, T., Vriend, P., & Copius Peereboom, E. (2022). Roadmap for Long-Term Macroplastic Monitoring in Rivers. Frontiers in Environmental Science, 716.

# Why is the Roadmap needed?

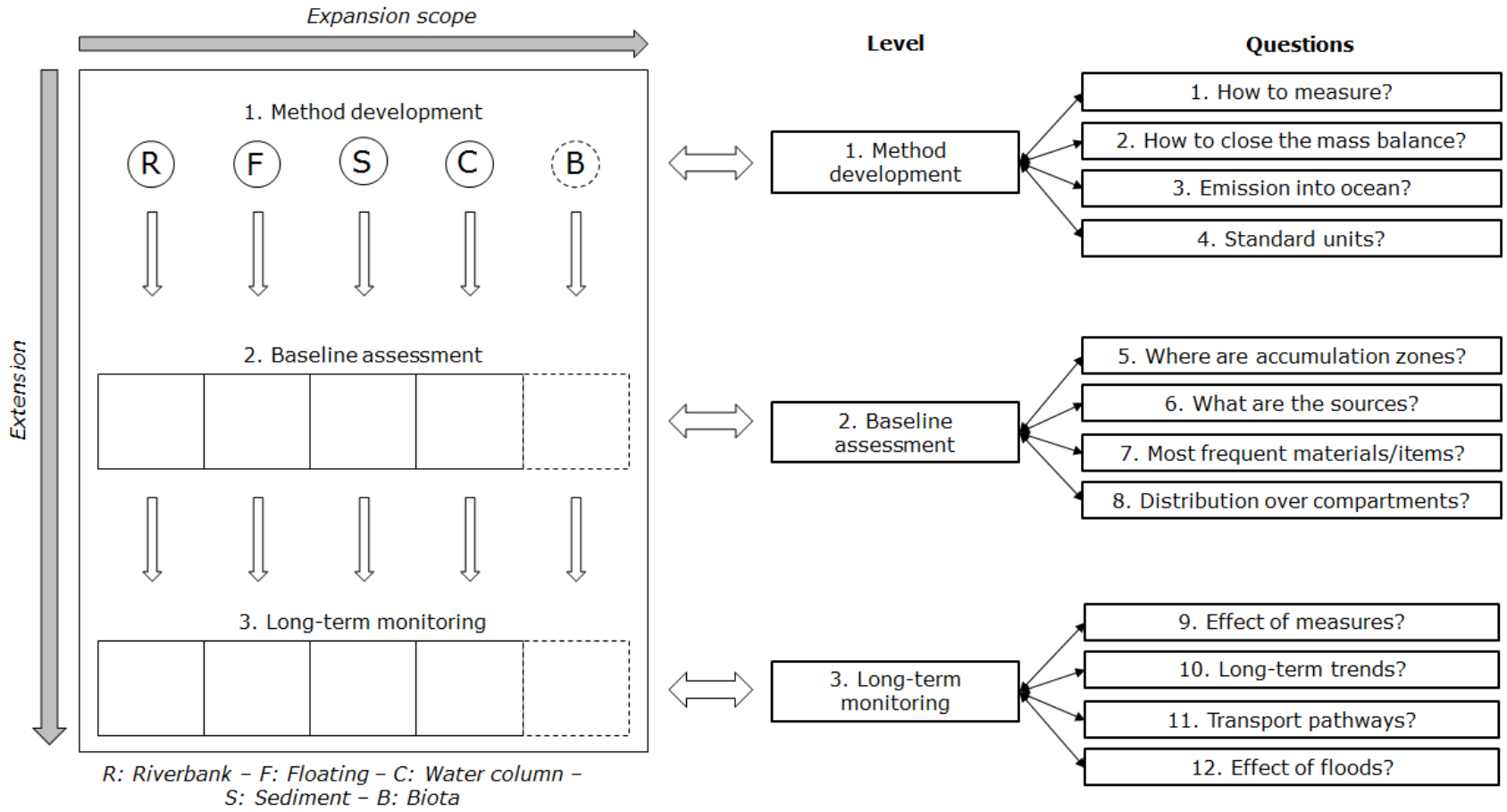
- Riverine macroplastic monitoring now often short term, limited in spatial coverage, and lacking standardized methods
- Roadmap to structure the development of structured, long-term monitoring by linking research questions with methods

# The Roadmap for long term monitoring

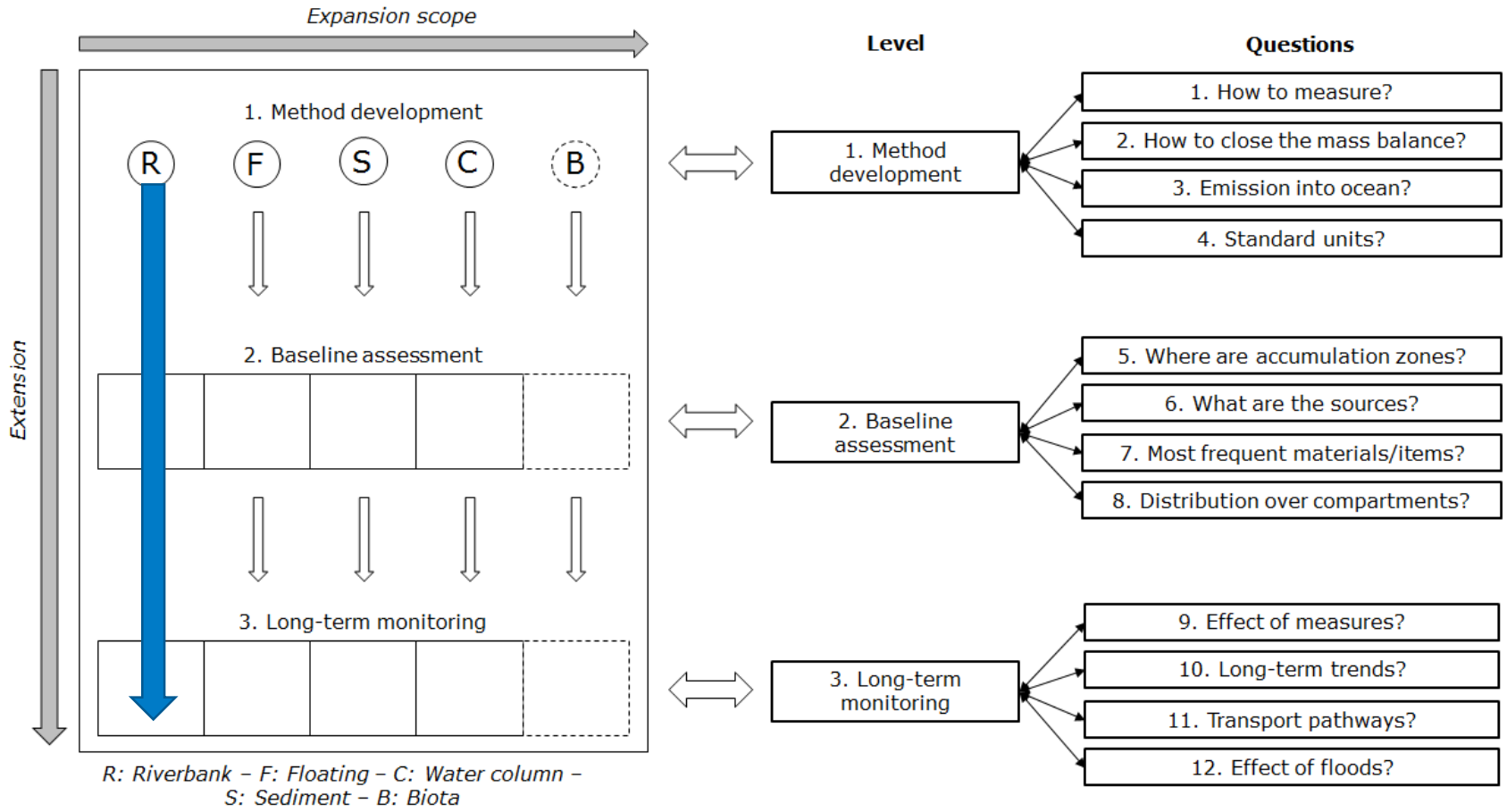
1) Identify monitoring goals
2) Decide research questions
3) Map out routes to answers
4) Prioritize & Execute
5) Evaluate



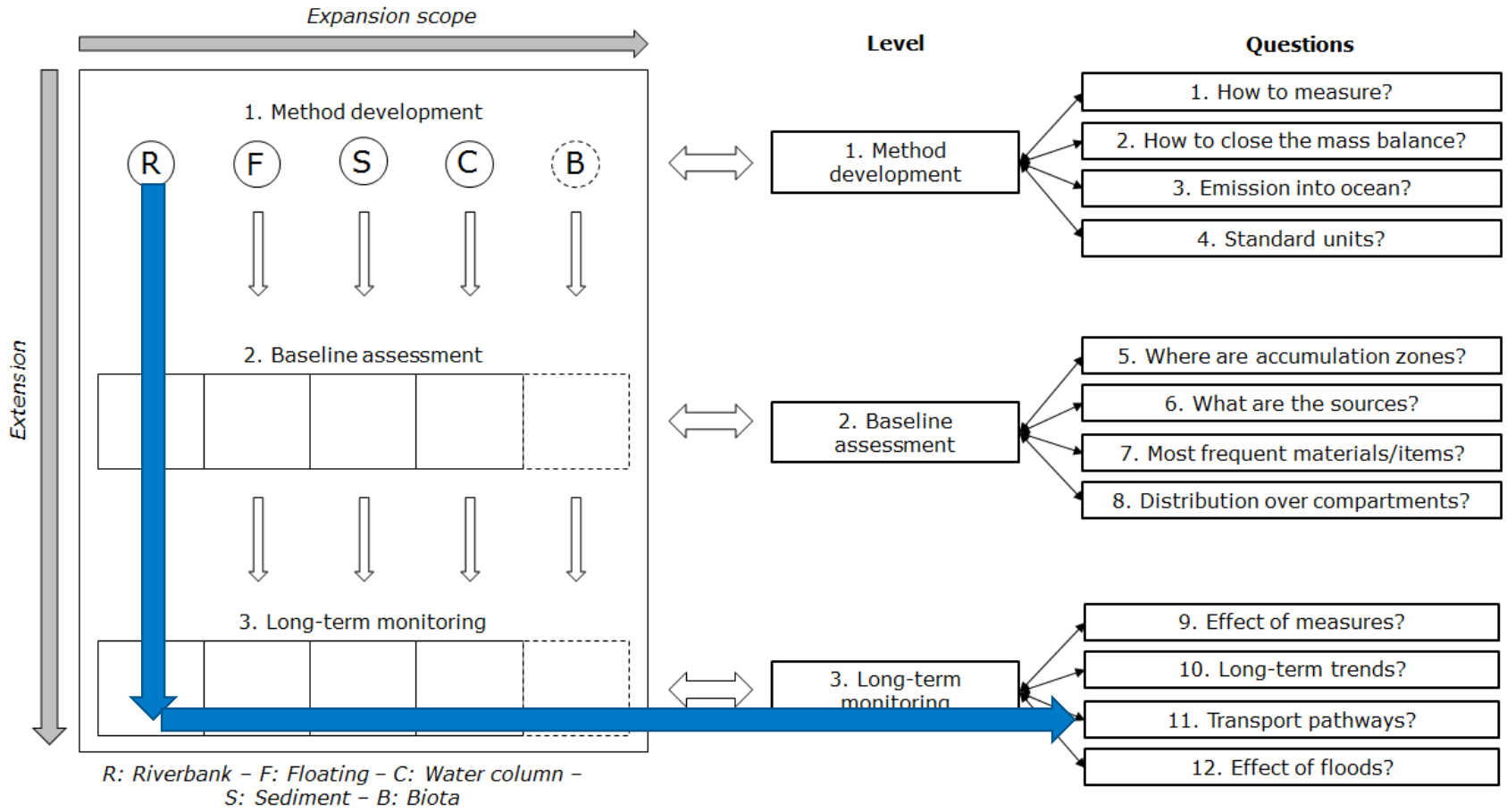
# Routes to answers



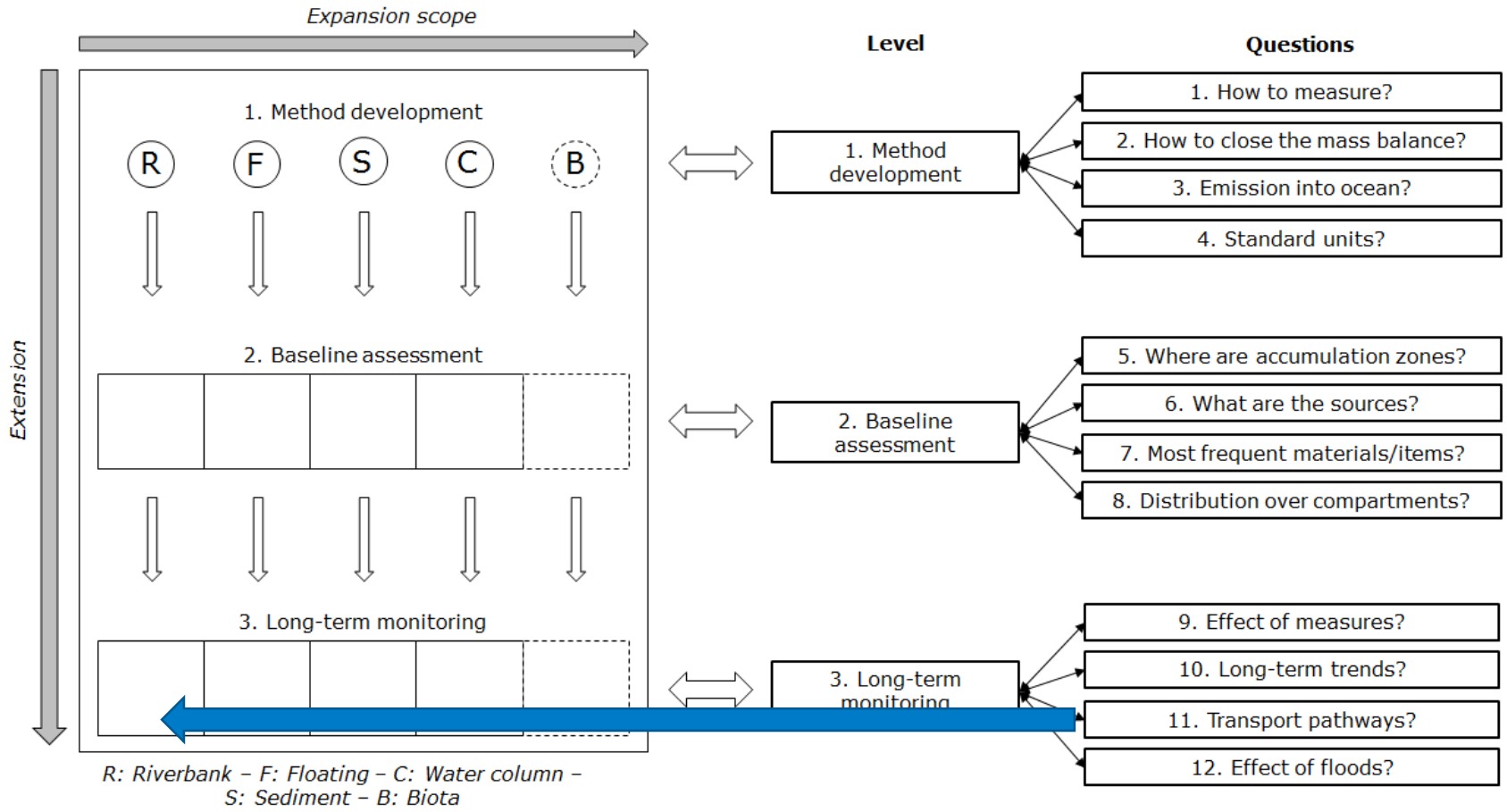
# Routes to answers



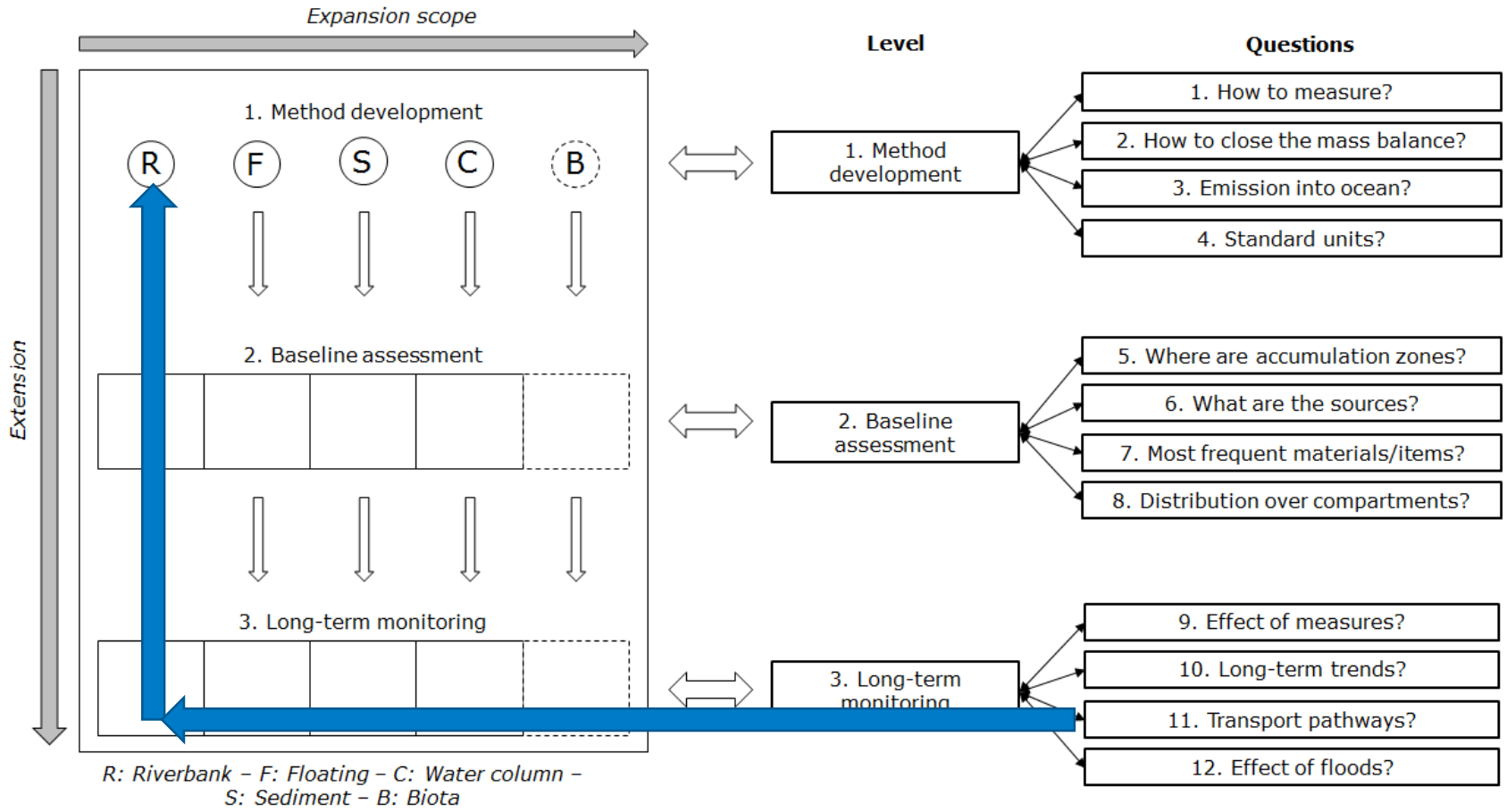
# Routes to answers



# Routes to answers

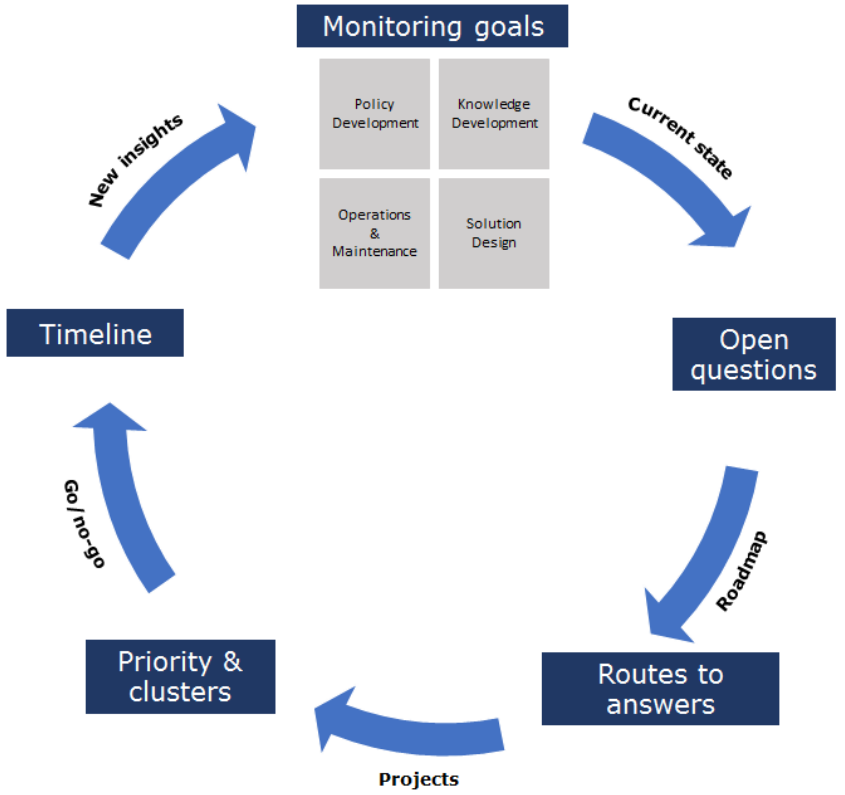


# Routes to answers

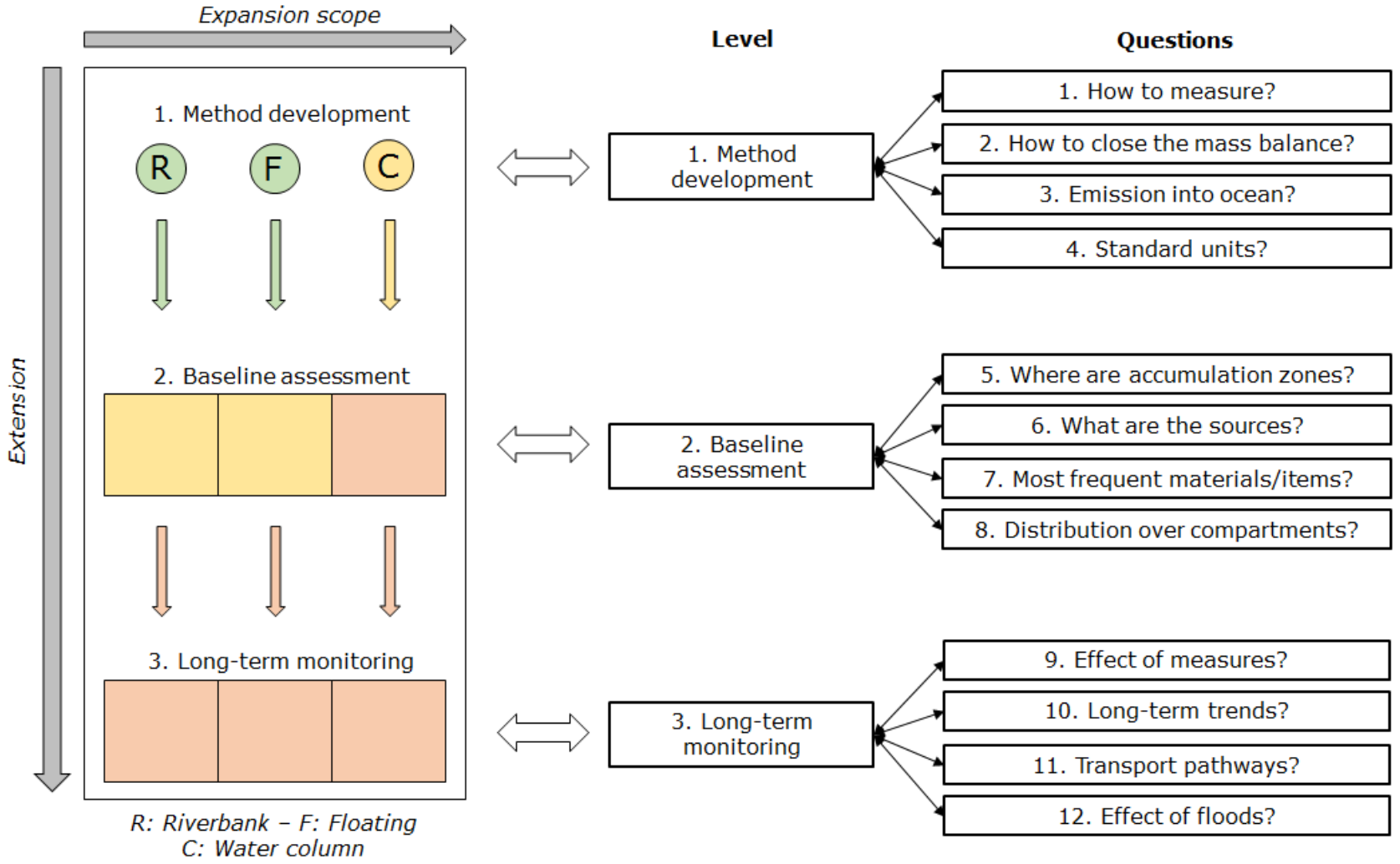


# Case study in the Netherlands

1) Monitoring goals: Policy + Operations and Maintenance
2) 15 most important research questions
3) Map out routes to answers
4) Prioritize and Execute (current stage)
5) Evaluate



# Case study in the Netherlands



# Case study in the Netherlands

Monthly visual observations at all main Dutch rivers

4 rounds of riverbank observations at 40 locations

# Case study in the Netherlands

Method development:
Water column


Method development:
Technologies to replace manual methods

# Take home messages

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