

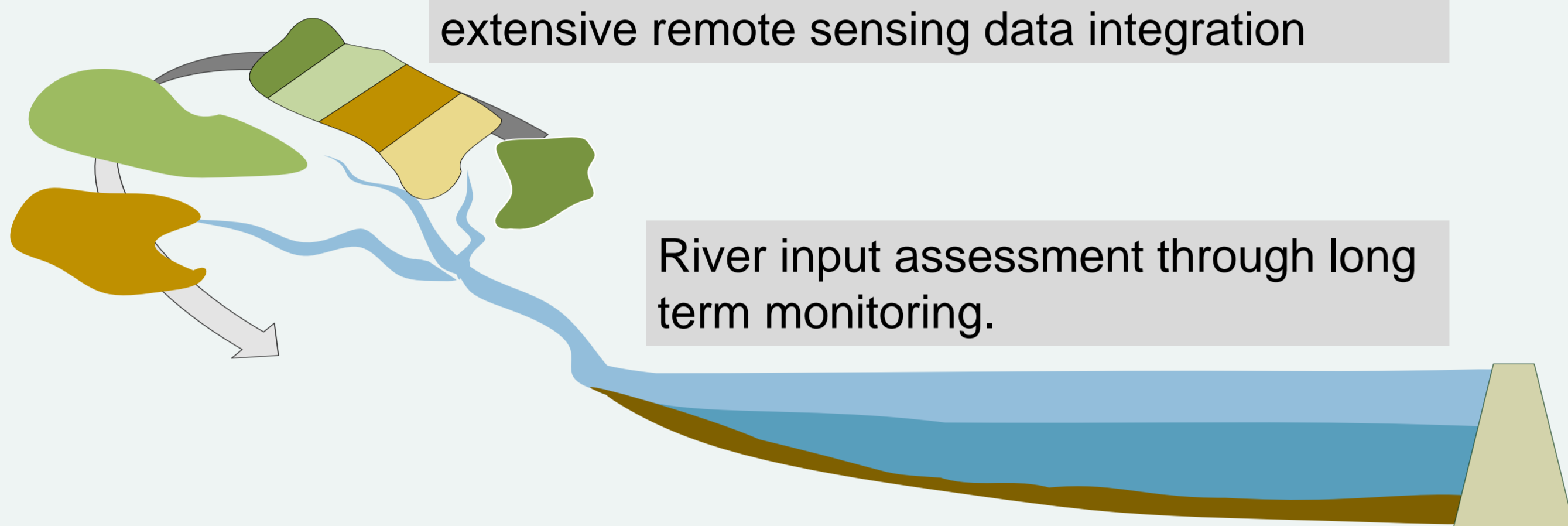
# MuDak-WRM – Multidisciplinary Data Acquisition as Key for a Globally Applicable Water Resource Management

## Project Overview

### 1. Core aim

Investigate to which extent, the ecological situation within a reservoir (trophic status) can be represented, modelled and managed based on a simplified set of parameters.

Sediment and Phosphorus input modelling by reduced complexity monitoring approach and extensive remote sensing data integration



Assessment of trophic state and potential of reservoir water by continuous and conventional monitoring of water and sediment.

- Assessment of sediment and Phosphorus stock
- Assessment of reservoir lifetime based on the sedimentation rate
- Link of existing P-stock with eutrophication potential

### 2. Key scientific results

- Automatization of remote sensing data processing
- Simplification of water balance models aiming on global applicability
- Low complexity sediment and Phosphorus emission model
- High accuracy assessment of Phosphorus and sediment budget
- Efficient data management and data visualization structures for multiple data types
- Scenario based budget predictions
- Results included in management practices



### 3. Partners

- 9 German Partners (four academic and five industry partners)
- 10 International Partners (two academic and eight industry and environmental institution partners)



### 4. Knowledge transfer

Training and schooling events for students and specialists



### 5. Facts and Stats

- 12 German and Brazilian PhD directly engaged in the project
- 23 scientific contributions, including peer reviewed articles, dissertations and conference contributions
- PhD student exchange in the Brazilian and German academic institutions (5 Brazilian and 2 German students), assured with external funding
- Approx. 200k € additional funding from the Brazilian partners associated with MuDak-WRM



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