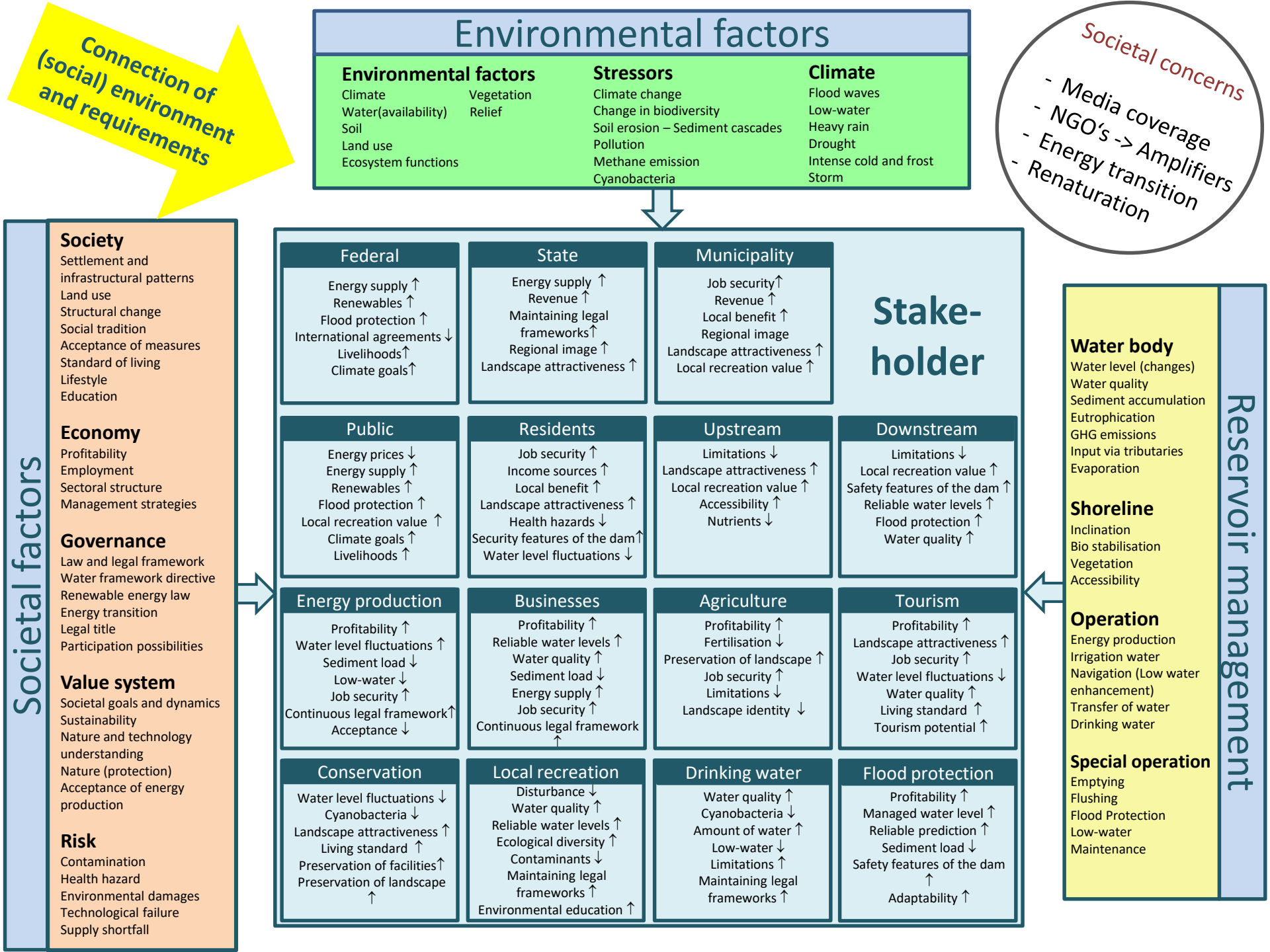
Connection of (social) environment and requirements
Environmental factors
Environmental factors
Climate
Water(availability)
Soil
Land use
Ecosystem functions
Vegetation
Relief
Stressors
Climate change
Change in biodiversity
Soil erosion – Sediment cascades
Pollution
Methane emission
Cyanobacteria
Climate
Flood waves
Low-water
Heavy rain
Drought
Intense cold and frost
Storm
Societal concerns
- Media coverage
- NGO's -> Amplifiers
- Energy transition
- Renaturation
Societal factors
Society
Settlement and infrastructural patterns
Land use
Structural change
Social tradition
Acceptance of measures
Standard of living
Lifestyle
Education
Economy
Profitability
Employment
Sectoral structure
Management strategies
Governance
Law and legal framework
Water framework directive
Renewable energy law
Energy transition
Legal title
Participation possibilities
Value system
Societal goals and dynamics
Sustainability
Nature and technology understanding
Nature (protection)
Acceptance of energy production
Risk
Contamination
Health hazard
Environmental damages
Technological failure
Supply shortfall
Federal
Energy supply ↑
Renewables ↑
Flood protection ↑
International agreements ↓
Livelihoods↑
Climate goals↑
State
Energy supply ↑
Revenue ↑
Maintaining legal frameworks↑
Regional image ↑
Landscape attractiveness ↑
Municipality
Job security↑
Revenue ↑
Local benefit ↑
Regional image
Landscape attractiveness ↑
Local recreation value ↑
Stake-holder
Public
Energy prices ↓
Energy supply ↑
Renewables ↑
Flood protection ↑
Local recreation value ↑
Climate goals ↑
Livelihoods ↑
Residents
Job security ↑
Income sources ↑
Local benefit ↑
Landscape attractiveness ↑
Health hazards ↓
Security features of the dam↑
Water level fluctuations ↓
Upstream
Limitations ↓
Landscape attractiveness ↑
Local recreation value ↑
Accessibility ↑
Nutrients ↓
Downstream
Limitations ↓
Local recreation value ↑
Safety features of the dam ↑
Reliable water levels ↑
Flood protection ↑
Water quality ↑
Energy production
Profitability ↑
Water level fluctuations ↑
Sediment load ↓
Low-water ↓
Job security ↑
Continuous legal framework↑
Acceptance ↓
Businesses
Profitability ↑
Reliable water levels ↑
Water quality ↑
Sediment load ↓
Energy supply ↑
Job security ↑
Continuous legal framework ↑
Agriculture
Profitability ↑
Fertilisation ↓
Preservation of landscape ↑
Job security ↑
Limitations ↓
Landscape identity ↓
Tourism
Profitability ↑
Landscape attractiveness ↑
Job security ↑
Water level fluctuations ↓
Water quality ↑
Living standard ↑
Tourism potential ↑
Conservation
Water level fluctuations ↓
Cyanobacteria ↓
Landscape attractiveness ↑
Living standard ↑
Preservation of facilities↑
Preservation of landscape ↑
Local recreation
Disturbance ↓
Water quality ↑
Reliable water levels ↑
Ecological diversity ↑
Contaminants ↓
Maintaining legal frameworks ↑
Environmental education ↑
Drinking water
Water quality ↑
Cyanobacteria ↓
Amount of water ↑
Low-water ↓
Limitations ↑
Maintaining legal frameworks ↑
Flood protection
Profitability ↑
Managed water level ↑
Reliable prediction ↑
Sediment load ↓
Safety features of the dam ↑
Adaptability ↑
Reservoir management
Water body
Water level (changes)
Water quality
Sediment accumulation
Eutrophication
GHG emissions
Input via tributaries
Evaporation
Shoreline
Inclination
Bio stabilisation
Vegetation
Accessibility
Operation
Energy production
Irrigation water
Navigation (Low water enhancement)
Transfer of water
Drinking water
Special operation
Emptying
Flushing
Flood Protection
Low-water
Maintenance