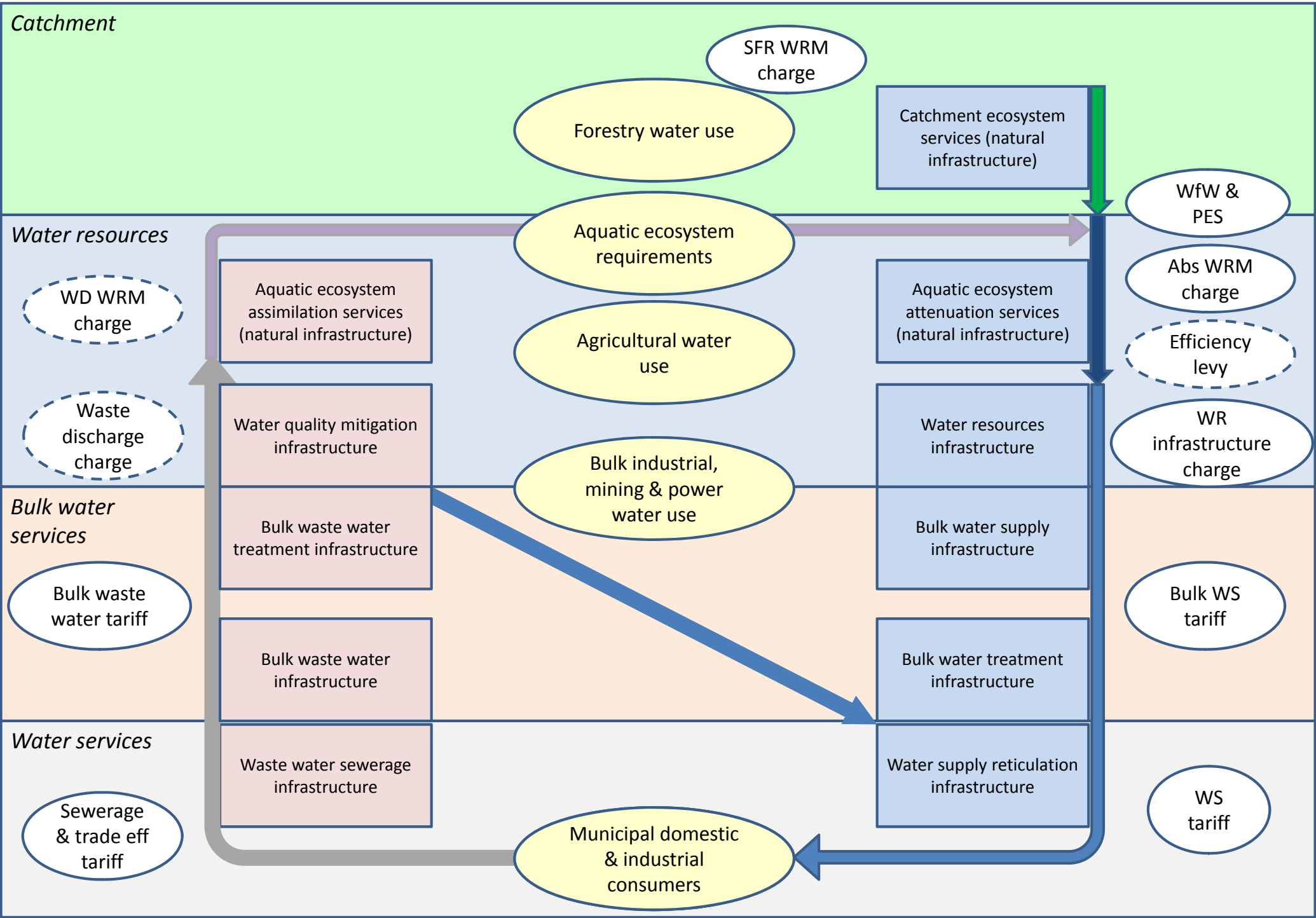
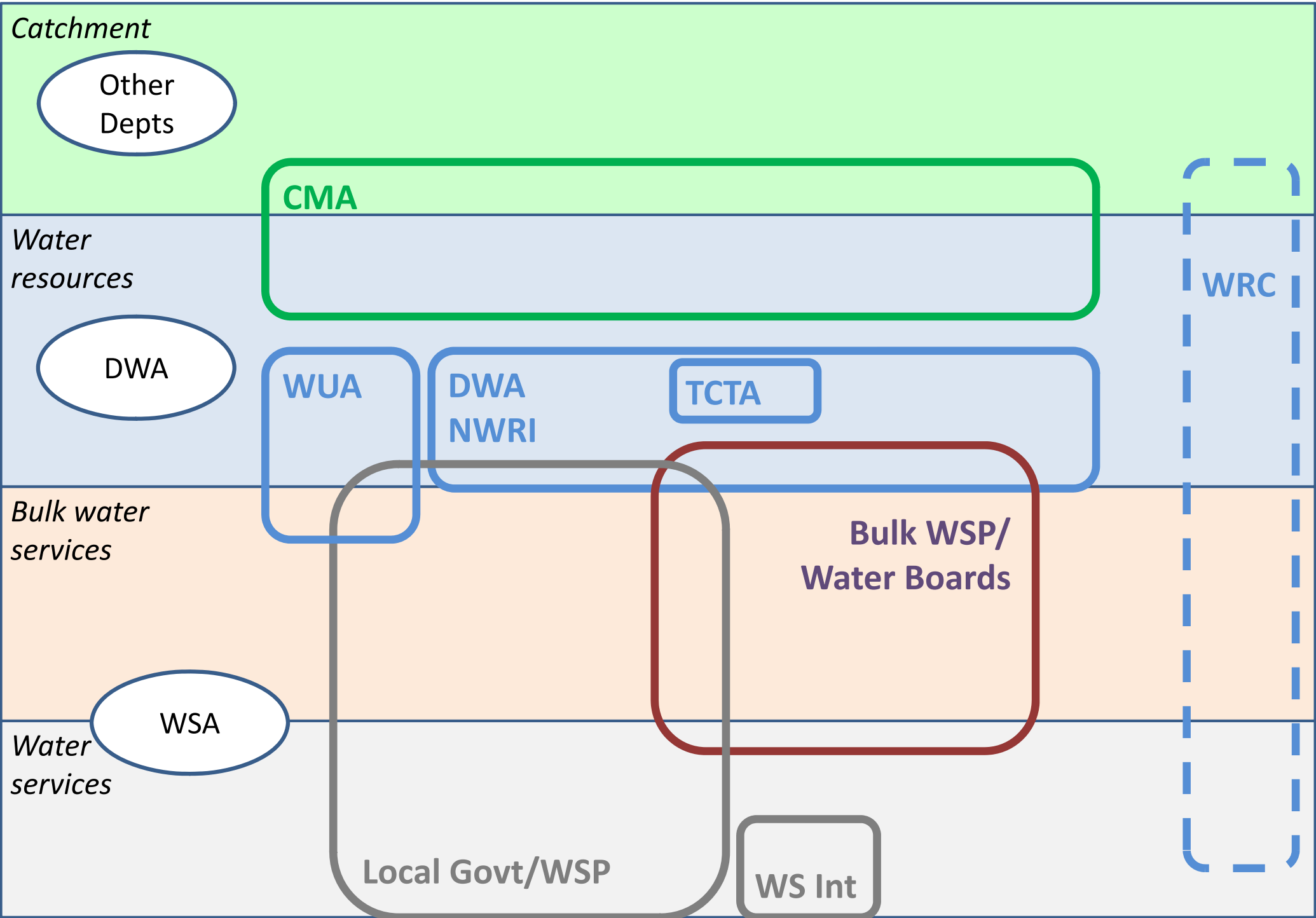


Water Flows, Infrastructure, Users & Charges



Institutional responsibilities



Financial Flows & Infrastructure

Natural infrastructure

Water resources infrastructure

Bulk water services infrastructure

Water services infrastructure

CMA
Implementing
agent

DWA NWRI
entity

Water boards
& Bulk WS
providers

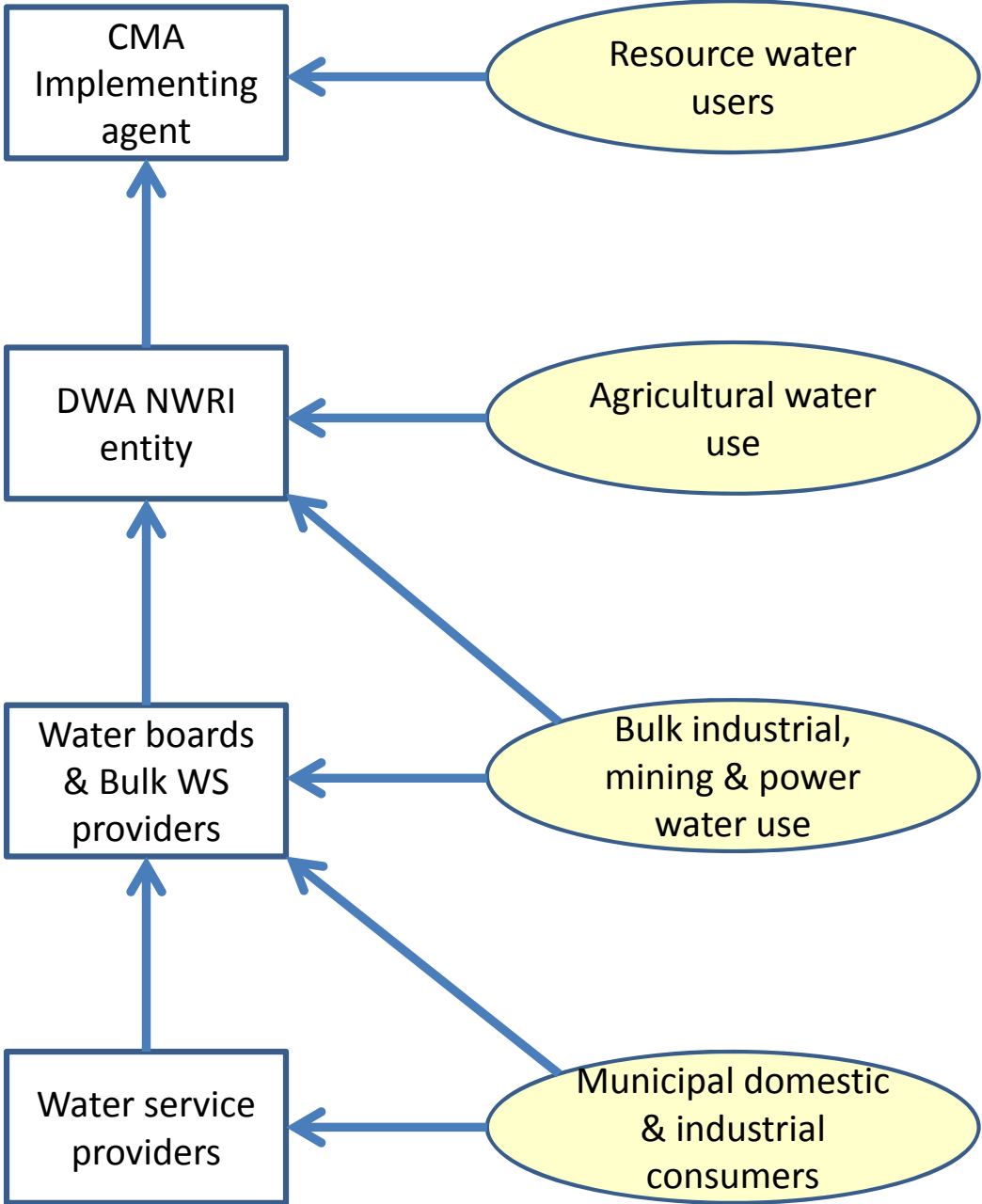
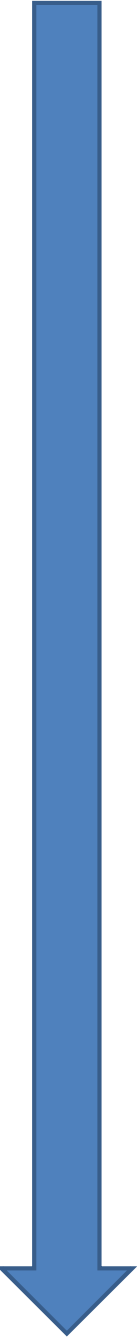
Water service
providers

Resource water
users

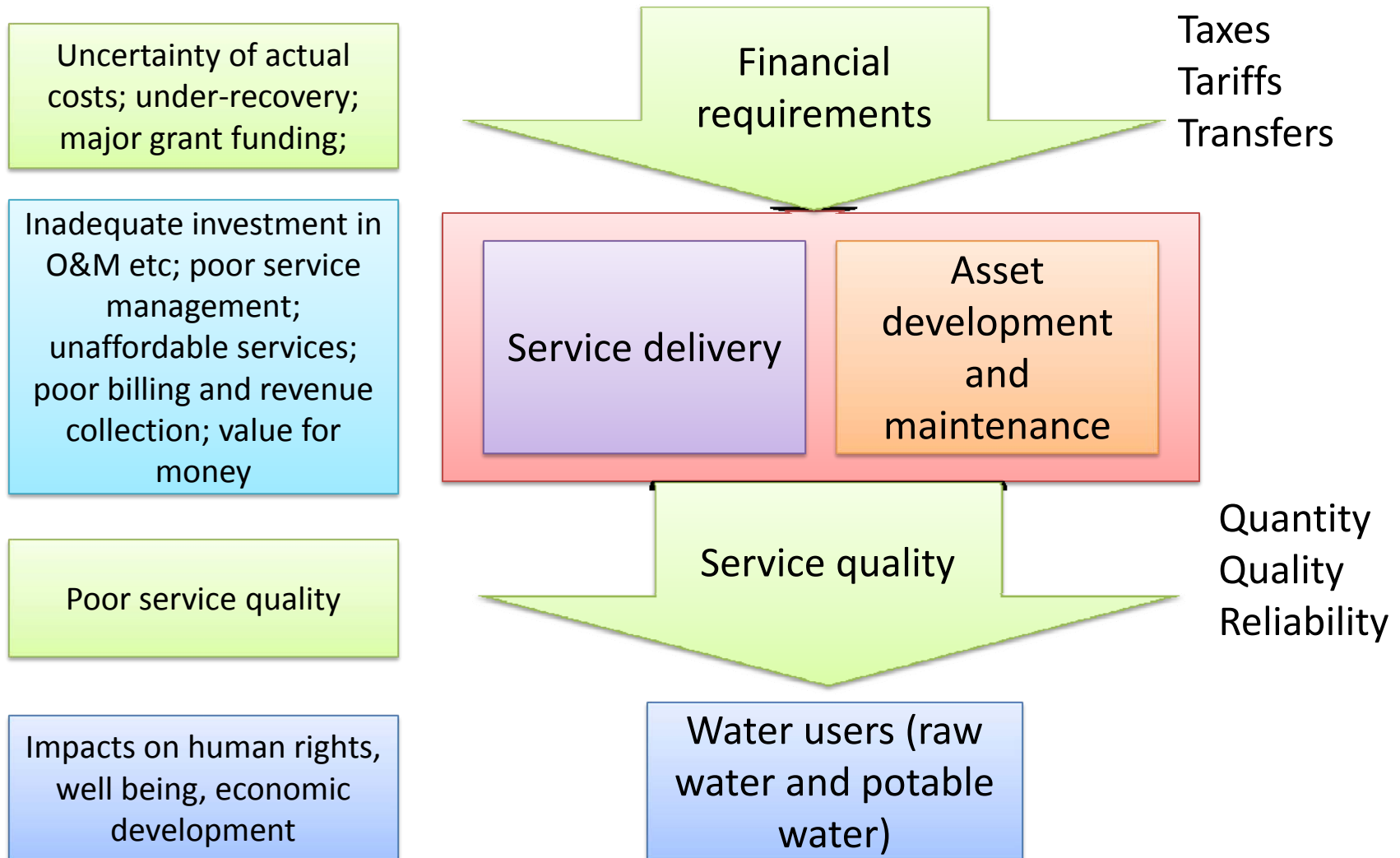
Agricultural water
use

Bulk industrial,
mining & power
water use

Municipal domestic
& industrial
consumers



Problem statement



Need stronger economic regulation

Challenges

Service delivery

Infrastructure

Financing

Water resources

- *Equity/Redress*
- *Beneficial allocation*
- *Resource sustainability*
- *Quantity/Reliability*
- *Water quality*

- *Assurance*
- *Operations*
- *Refurbishment*

- *Capital*
- *Revenue*
- *Charges*

Bulk water services

- *Reliability*
- *Treatment quality*

- *Expansion*
- *Operational efficiency*
- *Refurbishment*

- *Capital*
- *Revenue*
- *Tariffs*

Water services

- *Access*
- *Reliability*
- *Quality*

- *Expansion*
- *Operational efficiency*
- *Refurbishment*

- *Capital*
- *Revenue*
- *Tariffs*
- *Free basic*

Regulatory environment

Technical Regulation

- *Ensure access to adequate quality water – poor and the economy*
- *Ensure robust safe infrastructure in time*

Institutional oversight

- *Support efficient sustainable institutions (WMI or WSI)*
- *Ensure effective governance / accountability*

Economic regulation

- *Finance new and refurbishment infrastructure (off-budget)*
- *Establish affordable tariffs, with free basic services*

Customer protection

Sustainable financing

Reliable quality service

Affordable Charges/Tariffs

Infrastructure management

User/consumer cost recovery

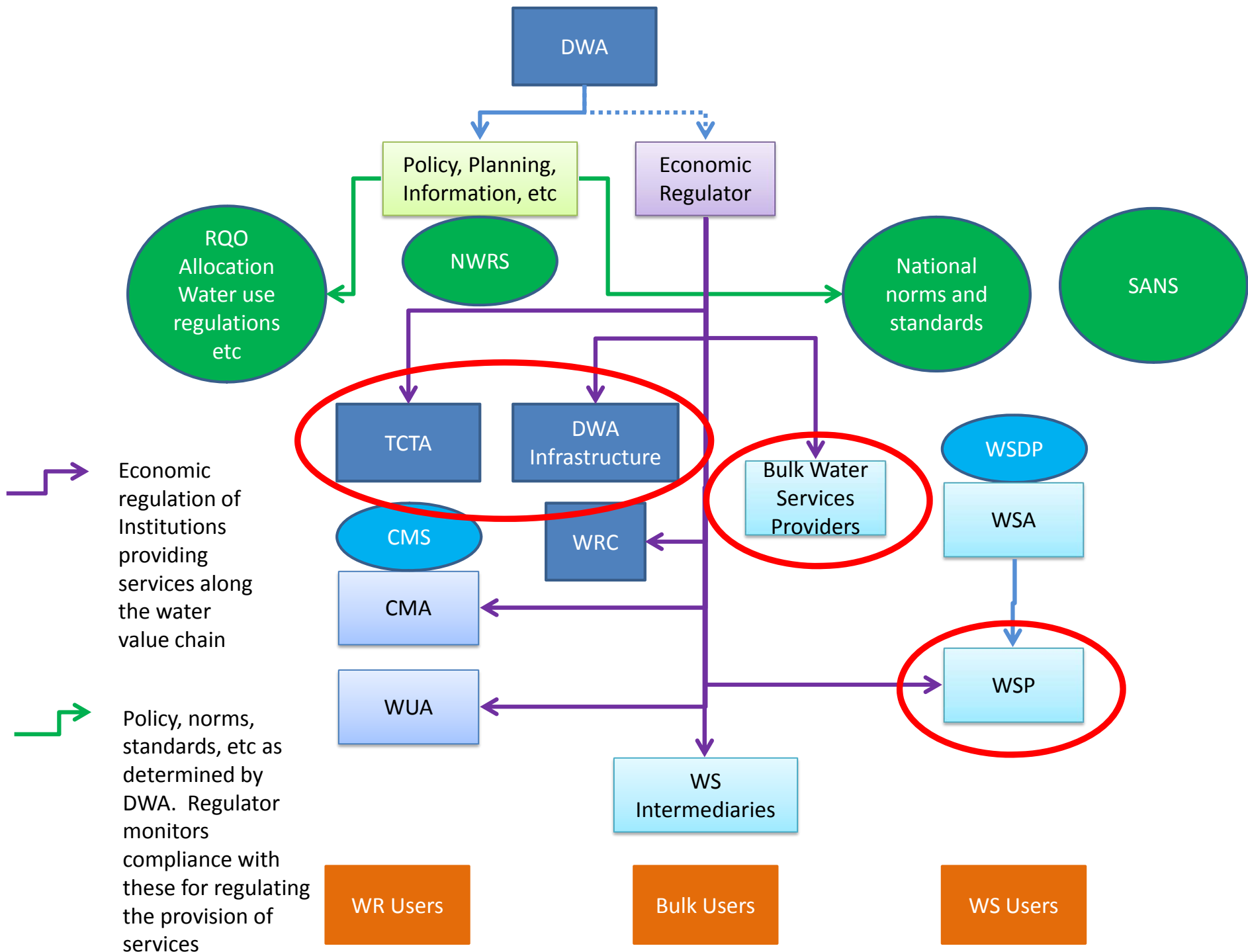
Capital funding (commercial)

Assured robust development

Maintenance of public assets

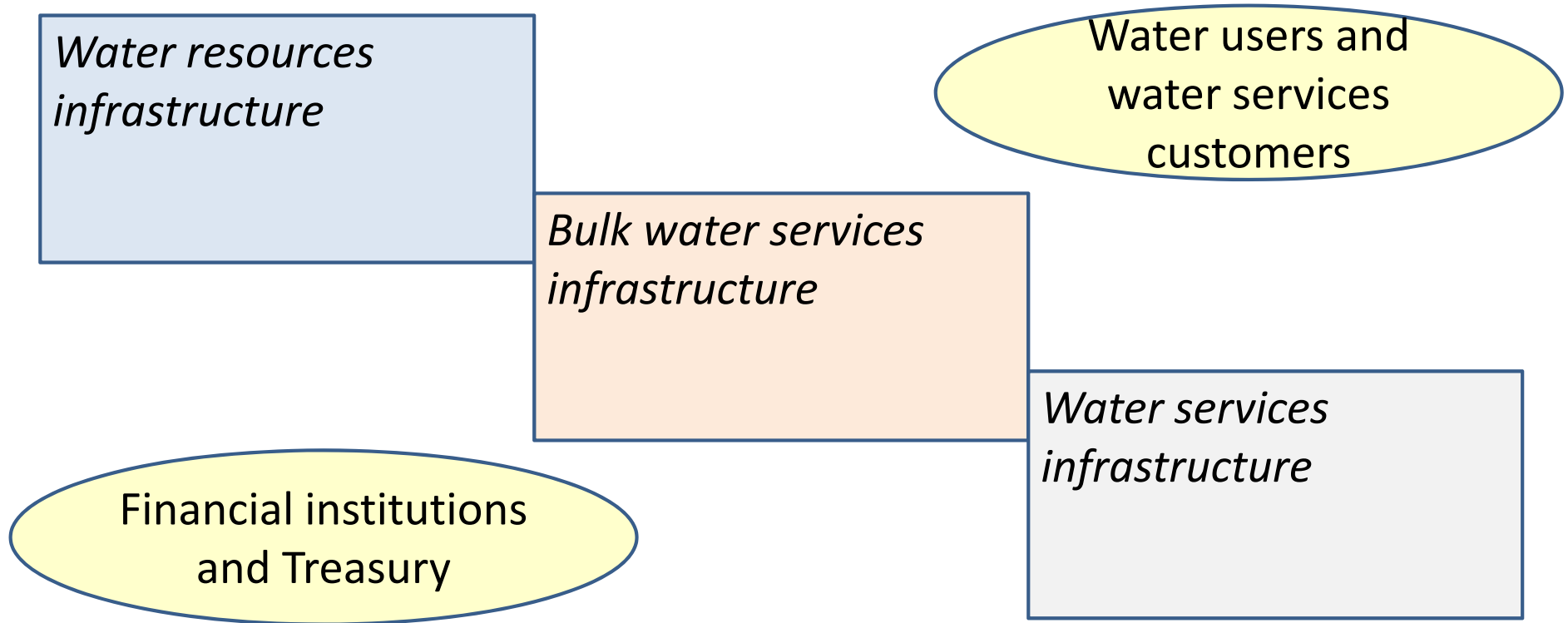
Regulatory authorities and instruments

| | <i>Institutions Authority</i> - <i>Provider</i> | <i>Service Instruments</i> | <i>Financial Instruments</i> |
|----------------------------|--|--|---|
| <i>Water resources</i> | <i>Minister/DWA</i> <ul style="list-style-type: none"> • <i>CMA</i> • <i>WUA</i> | <ul style="list-style-type: none"> • <i>NWRS</i> • <i>CMS</i> • <i>WR Authorisation</i> | <ul style="list-style-type: none"> • <i>Pricing strategy</i> • <i>Business Plans</i> • <i>Raw water charge gazette</i> |
| <i>WR infrastructure</i> | <i>Minister/DWA</i> <i>CMA (authorisation)</i> <ul style="list-style-type: none"> • <i>NWRI/TCTA</i> • <i>WUA</i> | <ul style="list-style-type: none"> • <i>NWRS , Recon, etc</i> • <i>Ministerial instruction</i> • <i>Storage licensing</i> | <ul style="list-style-type: none"> • <i>Pricing strategy</i> • <i>Business Plans</i> • <i>Raw water charge gazette</i> • <i>Project financing</i> |
| <i>Bulk water services</i> | <i>Minister/DWA</i> <i>WSA (contract)</i> <ul style="list-style-type: none"> • <i>Water Boards</i> | <ul style="list-style-type: none"> • <i>Norms & Standards</i> • <i>Service contracts</i> | <ul style="list-style-type: none"> • <i>Business Plans</i> • <i>Tariff determination negotiation</i> |
| <i>Water services</i> | <i>WSA</i> <i>Minister (norms)</i> <ul style="list-style-type: none"> • <i>WSP</i> | <ul style="list-style-type: none"> • <i>Norms & Standards</i> • <i>WSDP</i> • <i>Blue/Green drop</i> • <i>Service contracts?</i> | <ul style="list-style-type: none"> • <i>LG Regulations</i> • <i>Business Plans</i> • <i>Council tariff approval</i> |



Priority economic regulatory issues

Three distinct levels / institutions for economic regulation,
with distinct instruments



- Engage transfer of costs to users/customers and institutions
- Engage infrastructure development decisions
- Engage infrastructure maintenance priorities
- Engage sources of infrastructure finance
- Engage the value of the water service