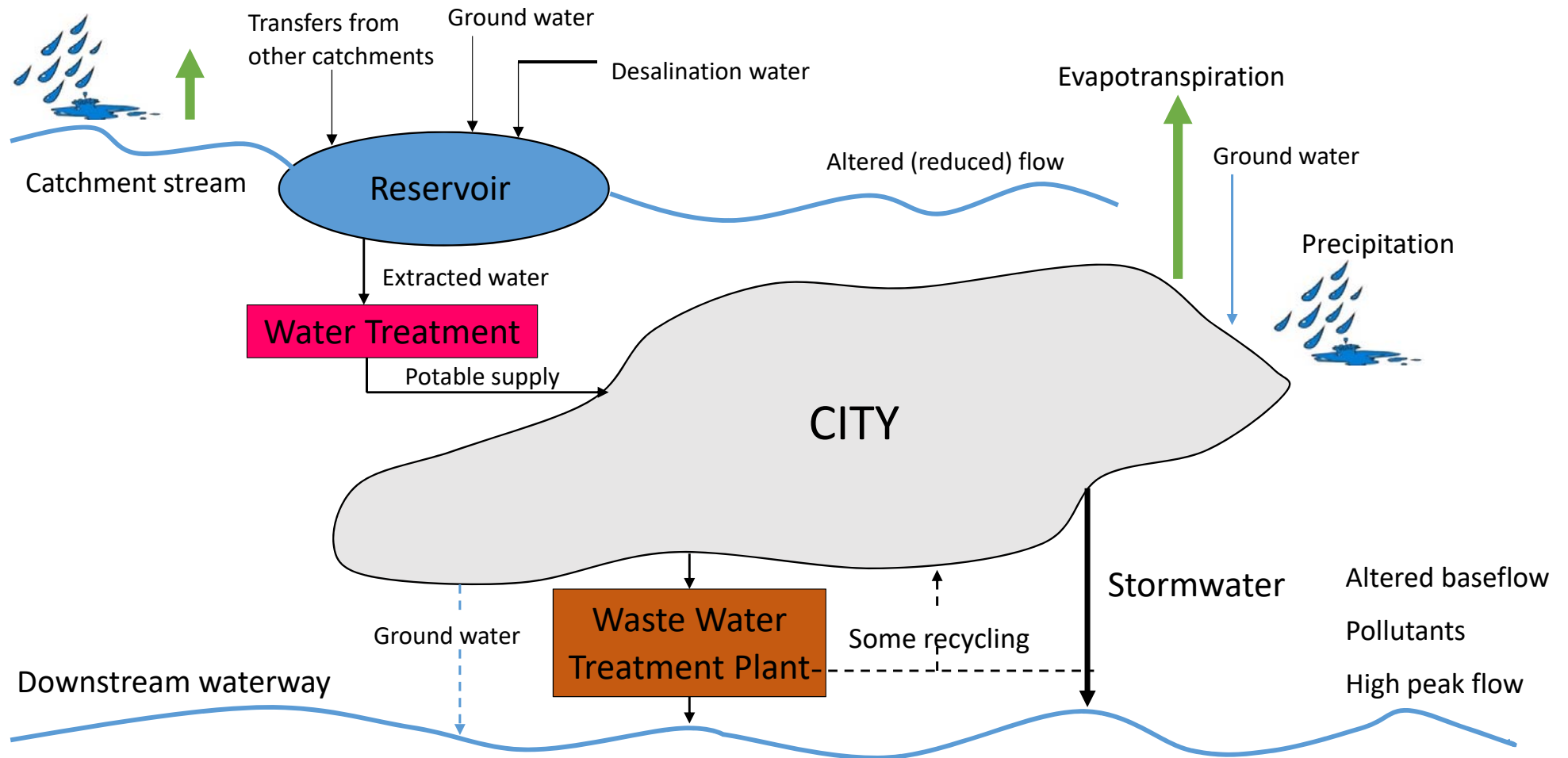


Triple Bottom Line analysis of stormwater use in a city

David Ebbs

Current state – An open system



WSUD – Canadian Lakes (Ballarat)



Rainwater tank



Swale



Buffer strip



Wetland



Sediment pond



Bioretention swale

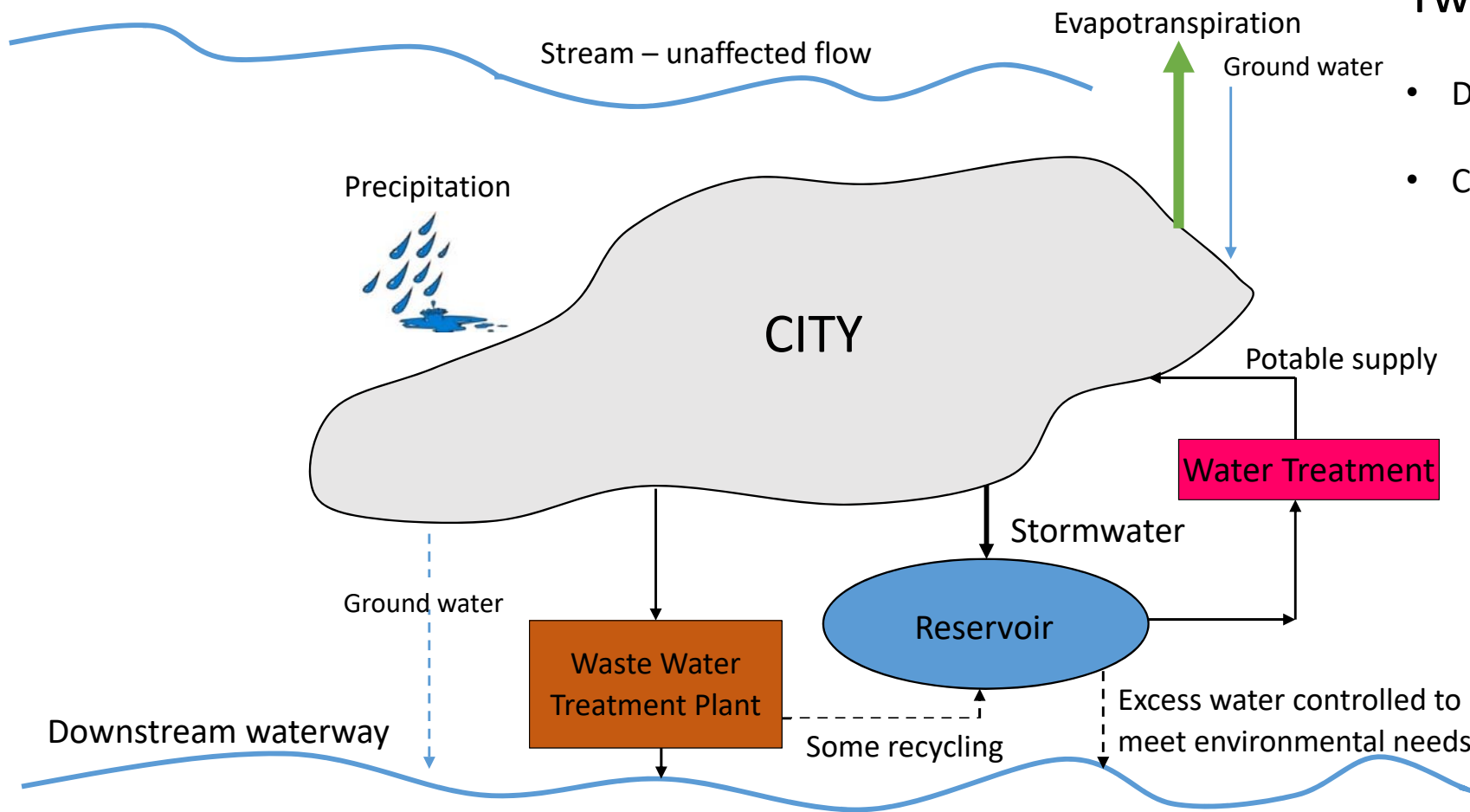
- Reduces peak flows
- Removes pollutants
- Reduces overall flow
- Substitutes for potable supply
- Improves amenity

Implement this widely enough and approach a Water Sensitive City

- Storage is an issue
- Decentralised systems have management concerns
- 3rd pipe schemes require dual infrastructure

<5% water use is stormwater

Potential – A closed system



Two pathways

- Distributed WSUD
- Centralised capture and use

Methods

- Available hydrologic models (eg: MUSIC, Source)
- Spatial and temporal data on climate, population and land use

- Cost data

- Pre-development streamflow regimes

- Social data eg: Statutory role of authority

