

Water reform, property rights and hydrological realities

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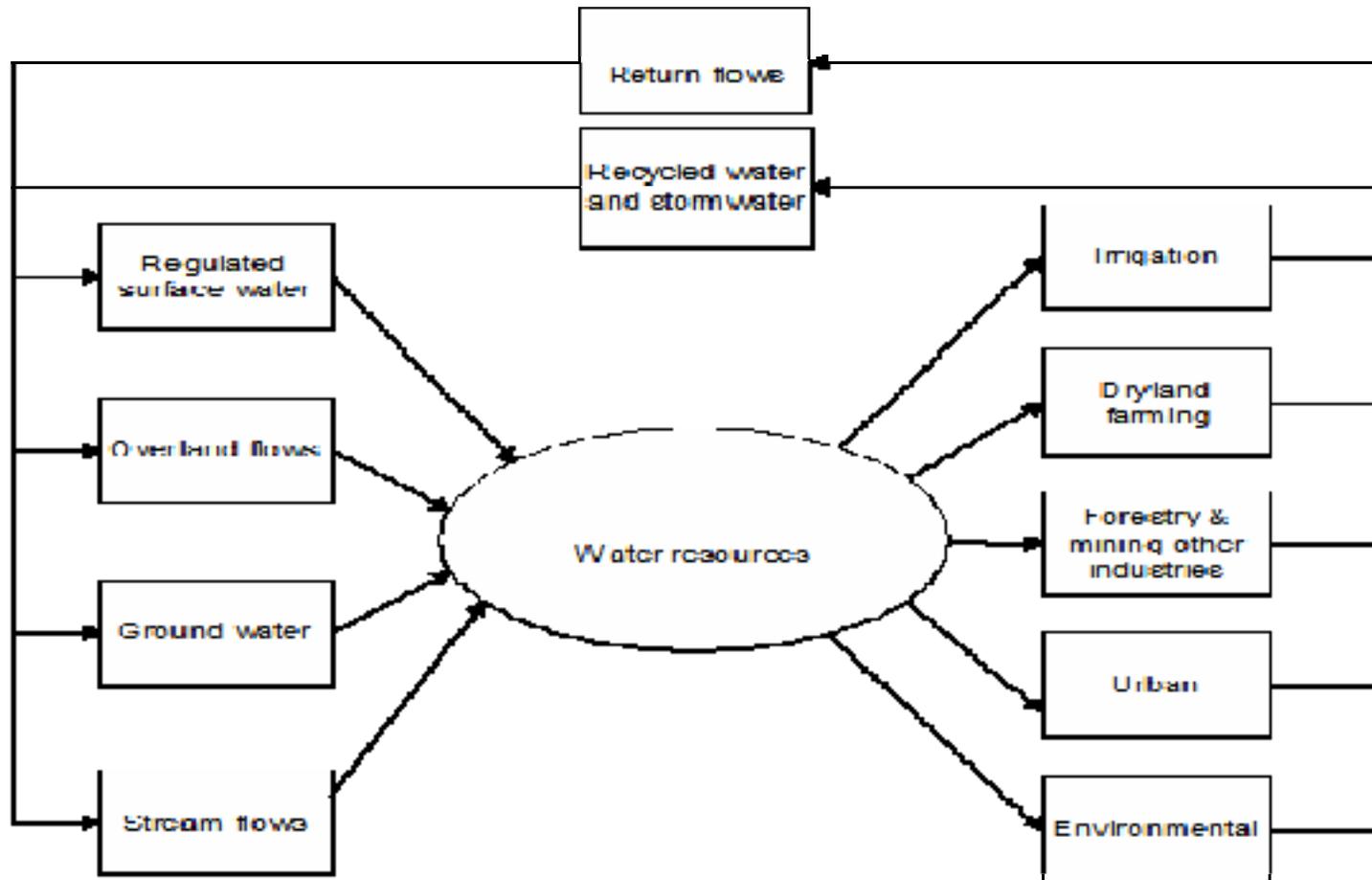
Background

- Water is a vexing public policy issue
 - *Hanrahan has gone national*
- No simple solutions
 - *Horses for courses*
- Drought is sharpening
 - *our understanding of the problems*
 - *the sophistication and nuance of the debate*

No compartments in water reform

- Different approaches for different sectors
 - *Country mile between rural and urban*
- Most focus on regulated surface water
 - *What about other parts of the hydrological cycle?*
- Who can trade
 - *Who needs to trade?*

Understanding the inter-linkages



Factors affecting water availability

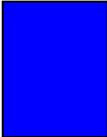
- climate change
- farm dams
- Vegetation change (land use and bushfires)
- ground water extractions
- changes to irrigation practices
- others

Mountains

Town

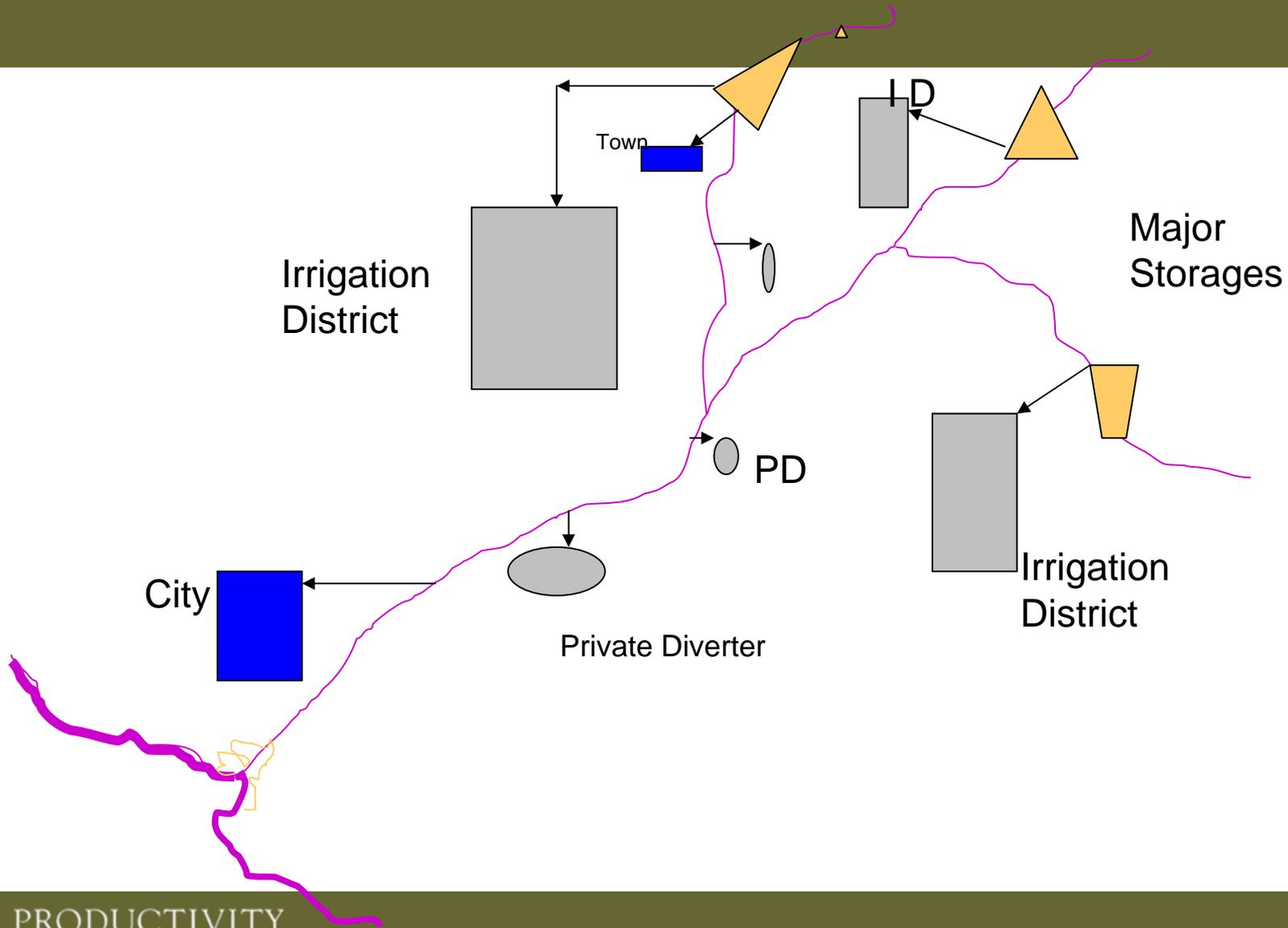


City

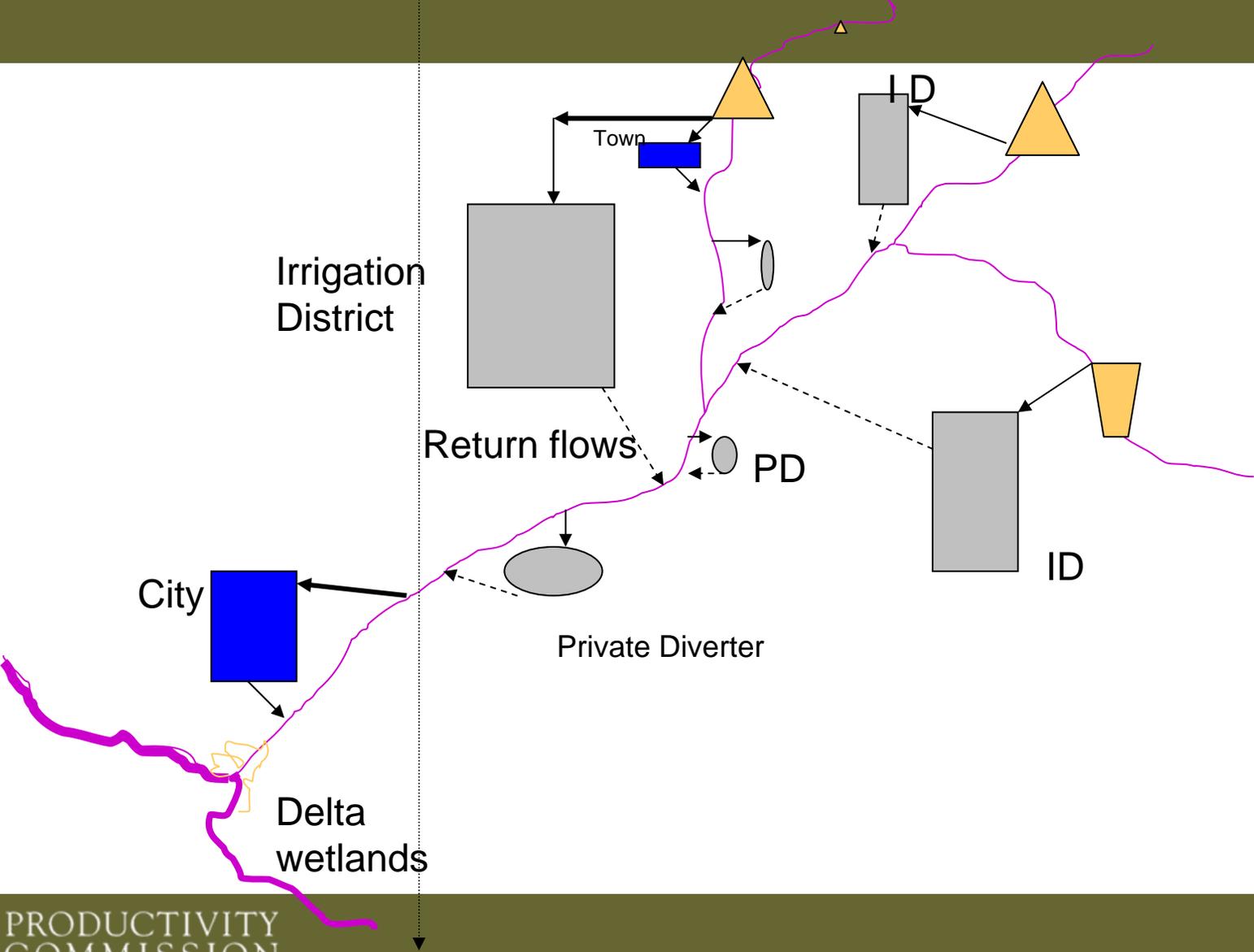


Sea

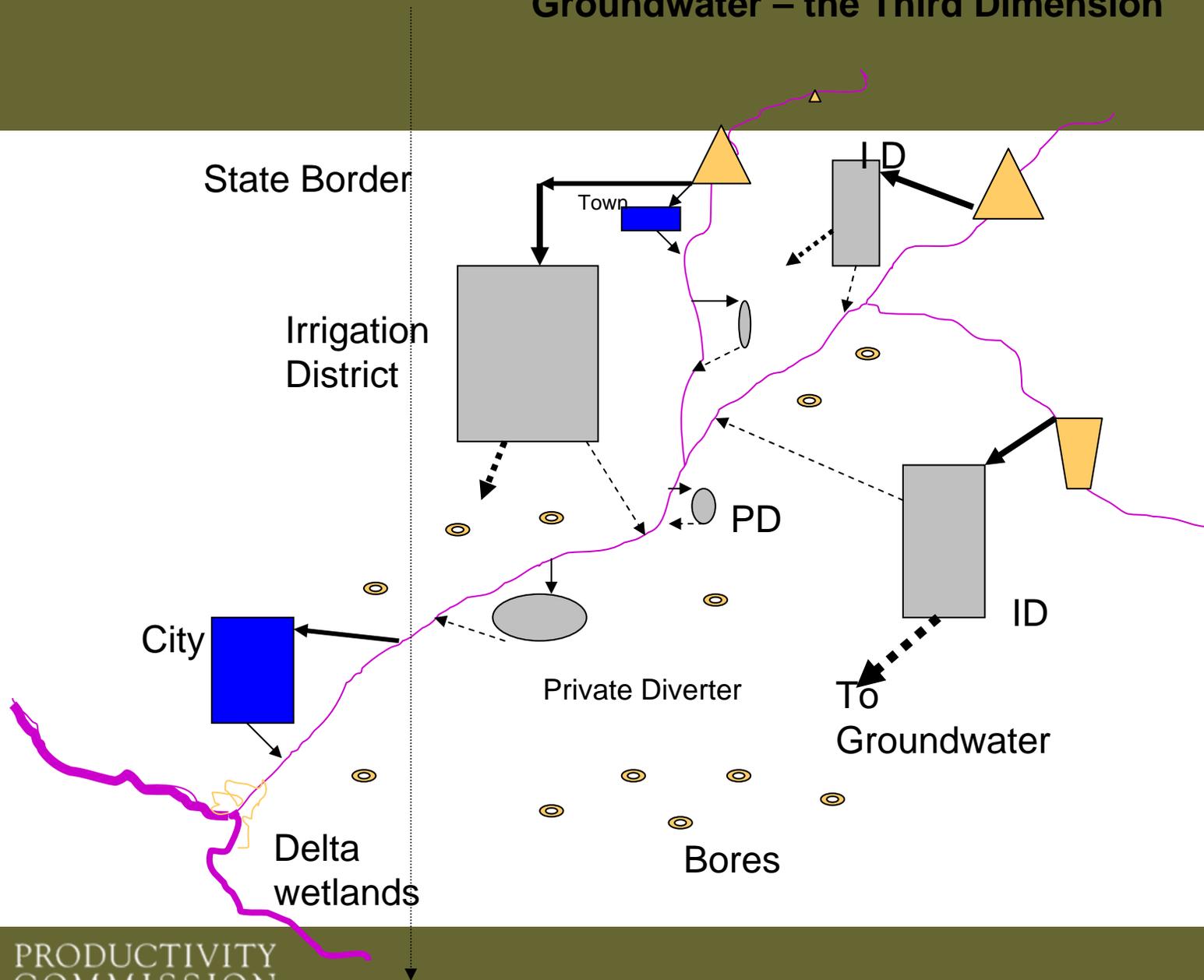




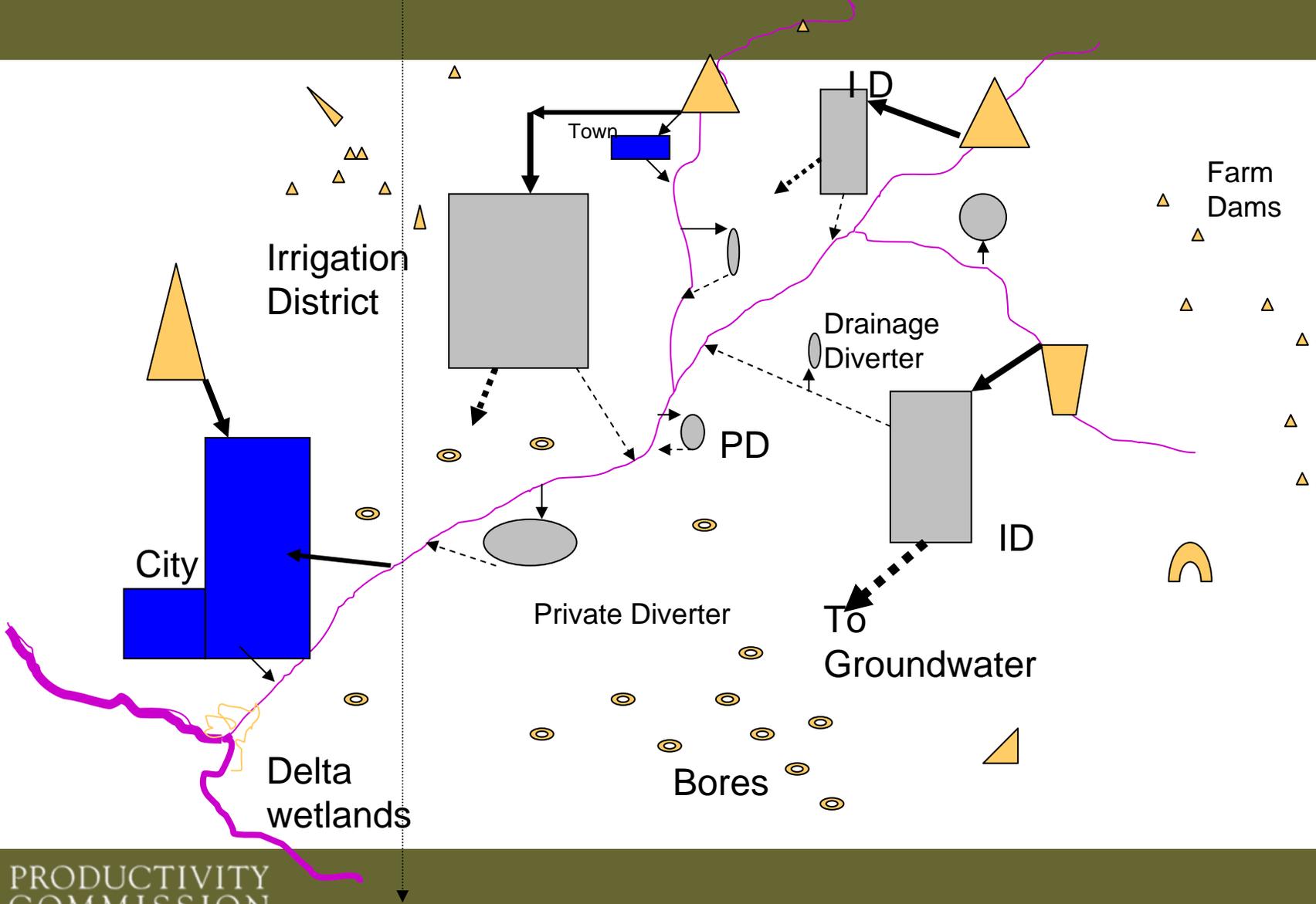
State Border

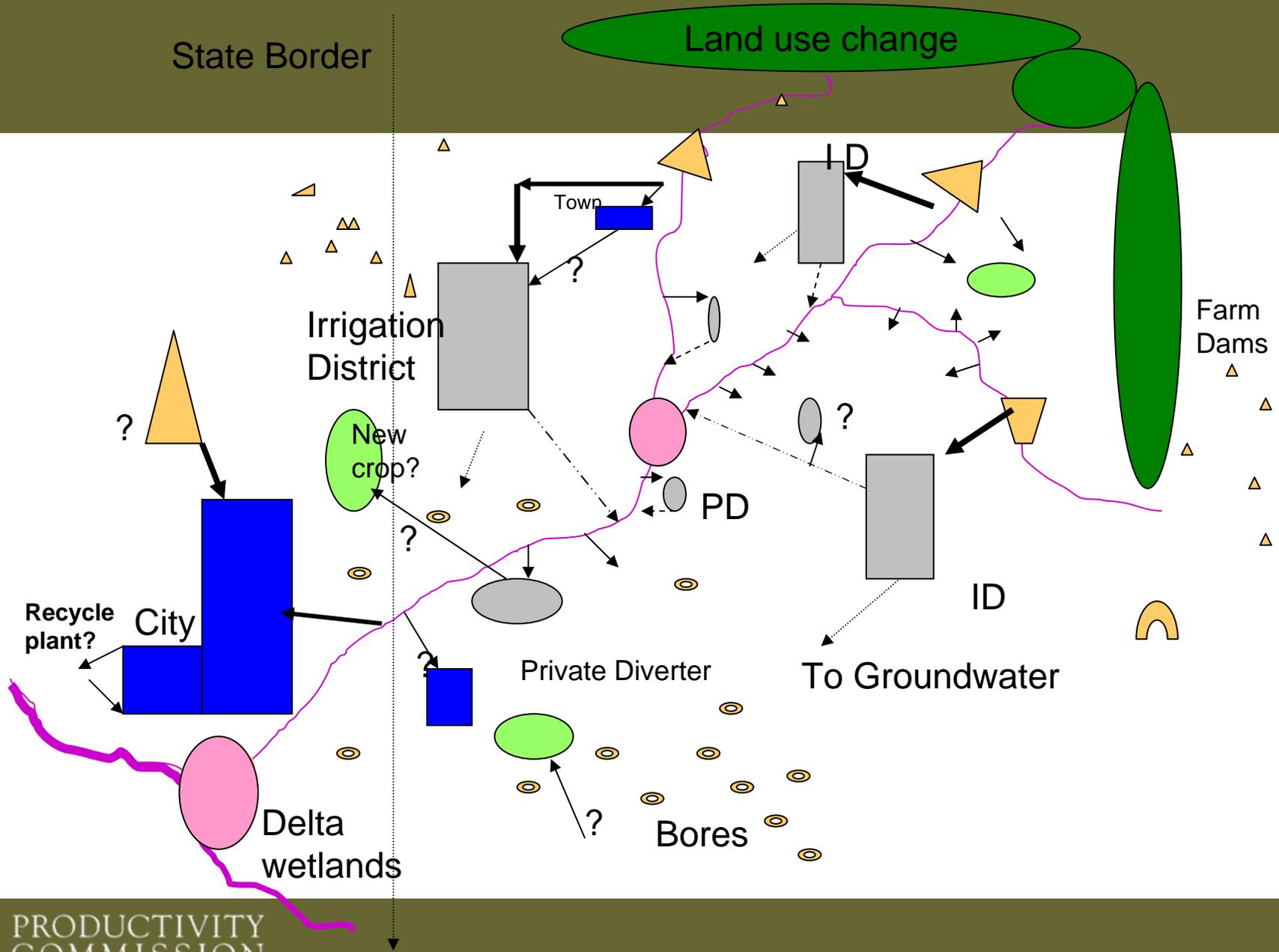


Groundwater – the Third Dimension



State Border





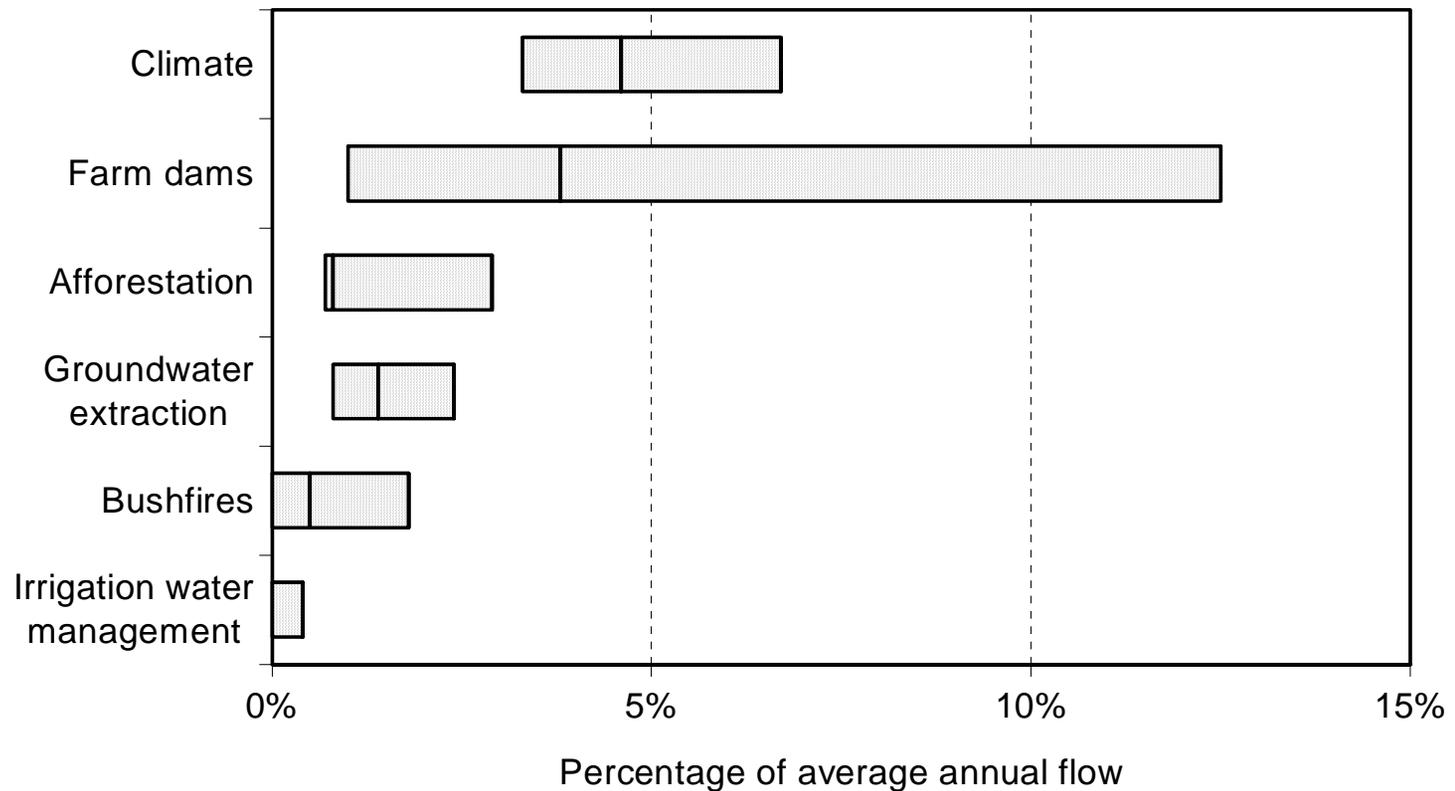
Situation?

System is seriously overstretched

Increasing demand for

- *Urban water*
- *Expansion of existing or new crops*
- *Restoration of environmental assets
(rivers, wetlands, riparian floodplains)*

Estimated reductions in stream flows



'Risks to shared resources'

- Not 'risks' – realities
 - *The question is 'by how much?'*
 - *Is the Cap up to it?*
- Private and 'shared resources'
 - *A clash of private rights and shared resources?*
 - *Who is affected more?*
- Property right specification matters

Over relying on planning

- ‘Don’t worry - it’s in the plan’
 - *Usually we use markets because we don’t plan well*
- Clarify and refine property rights
 - *Let markets do more of the work*
- Good regulation will still be needed

Putting markets to work

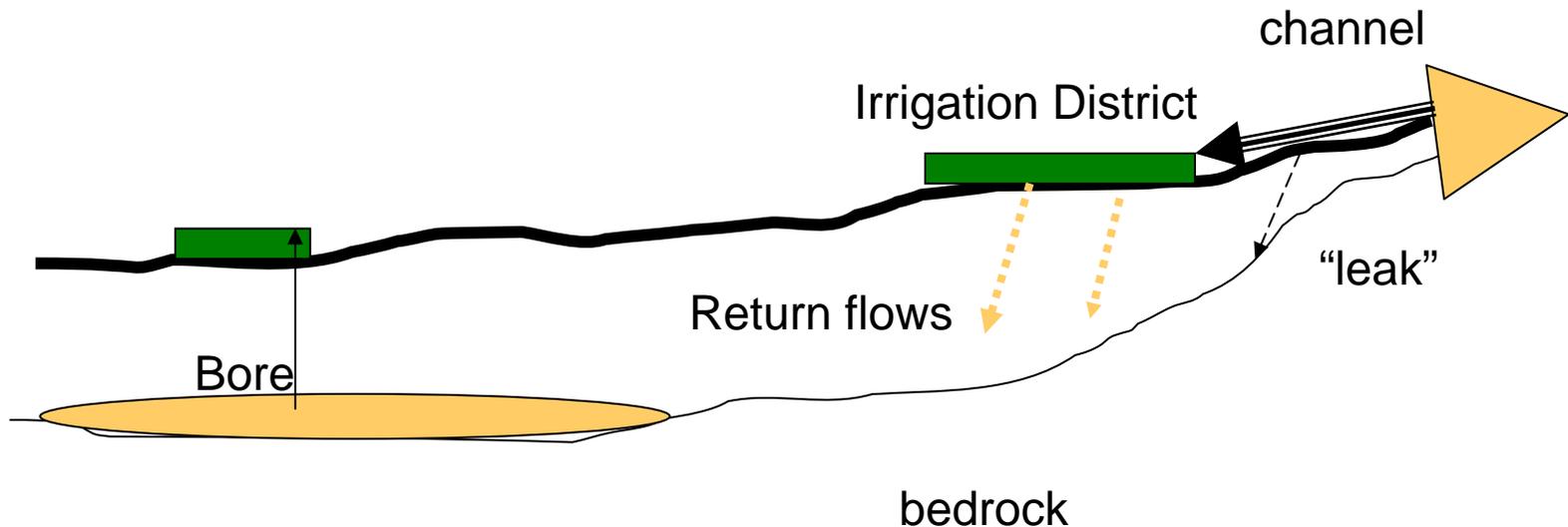
- Irrigators are sophisticated water traders
 - *Why aren't other users?*
- Markets enable irrigators to adjust
 - *Trade reduces the economic effects of reduced water availability*
 - *PC modelling, ABARE modelling*
- Need to integrate water markets
- Other market mechanisms will also help

No time like the present

- Need to take a longer term view
- There will be winners and losers
- Is the Cap sufficiently robust?
- More research and much better water accounting are needed

www.pc.gov.au

Fixing leaky channels? Improve irrigation efficiency?



Costs \$2000 to \$10000/ML to save water, currently worth about \$1250/ML,
[And cuts off supply to remote groundwater user who pays almost nothing]