South Australia – Challenges in Ecosystem Monitoring and Evaluation

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Knowledge and Information

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What are the traditional roles within this process?

1. **Researchers** provide the science to underpin an argument, these can be on either side of the coin and is dependent on the definition of the question.

2. **Public agencies** should be central to developing and diffusing the rational arguments needed for the collective use of common property resources. Managements decision making role is to balance the cost verses benefit of a competing value.

3. **NRM agencies** prepare the community to engage the knowledge, the problem and the solutions needed to achieve some defined future values or targets.

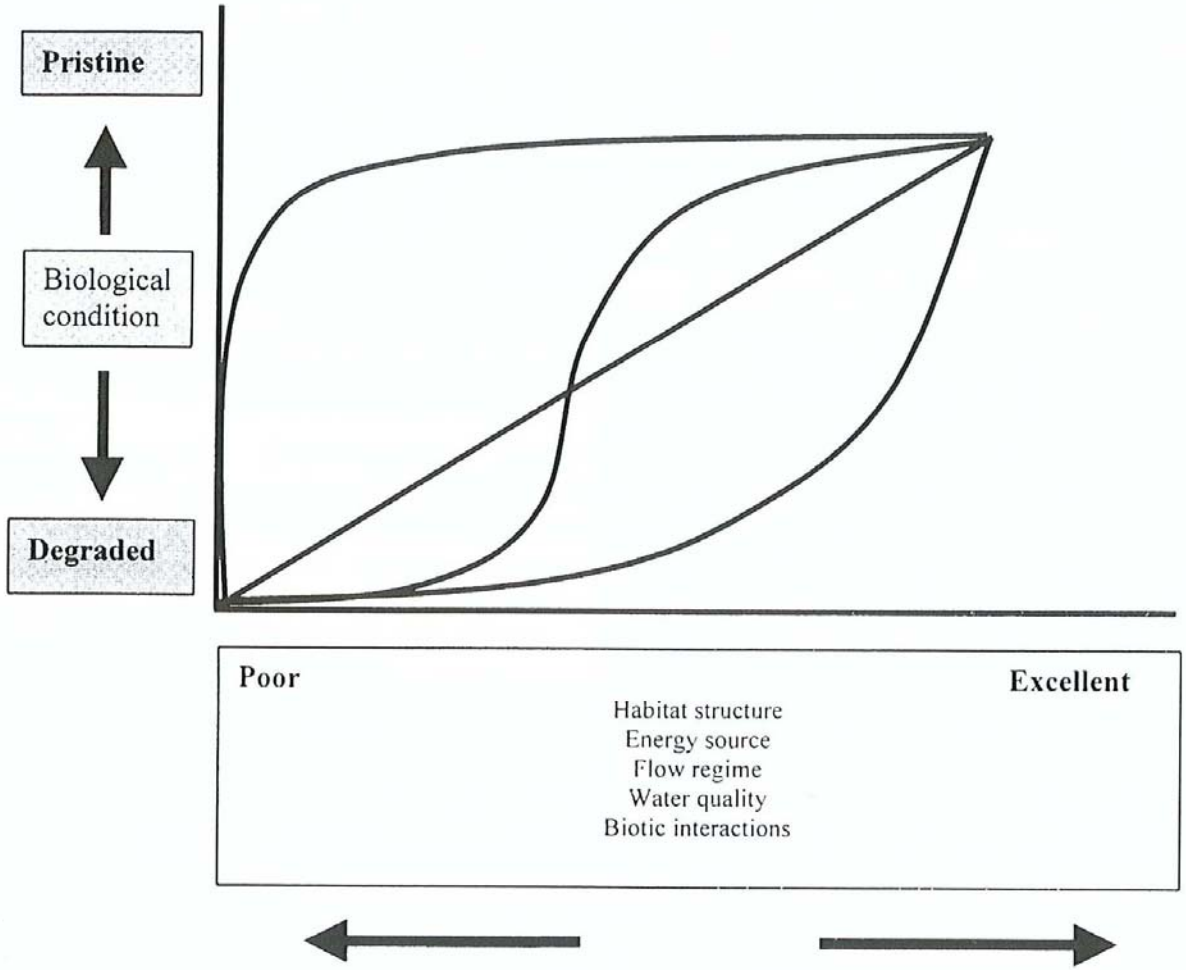
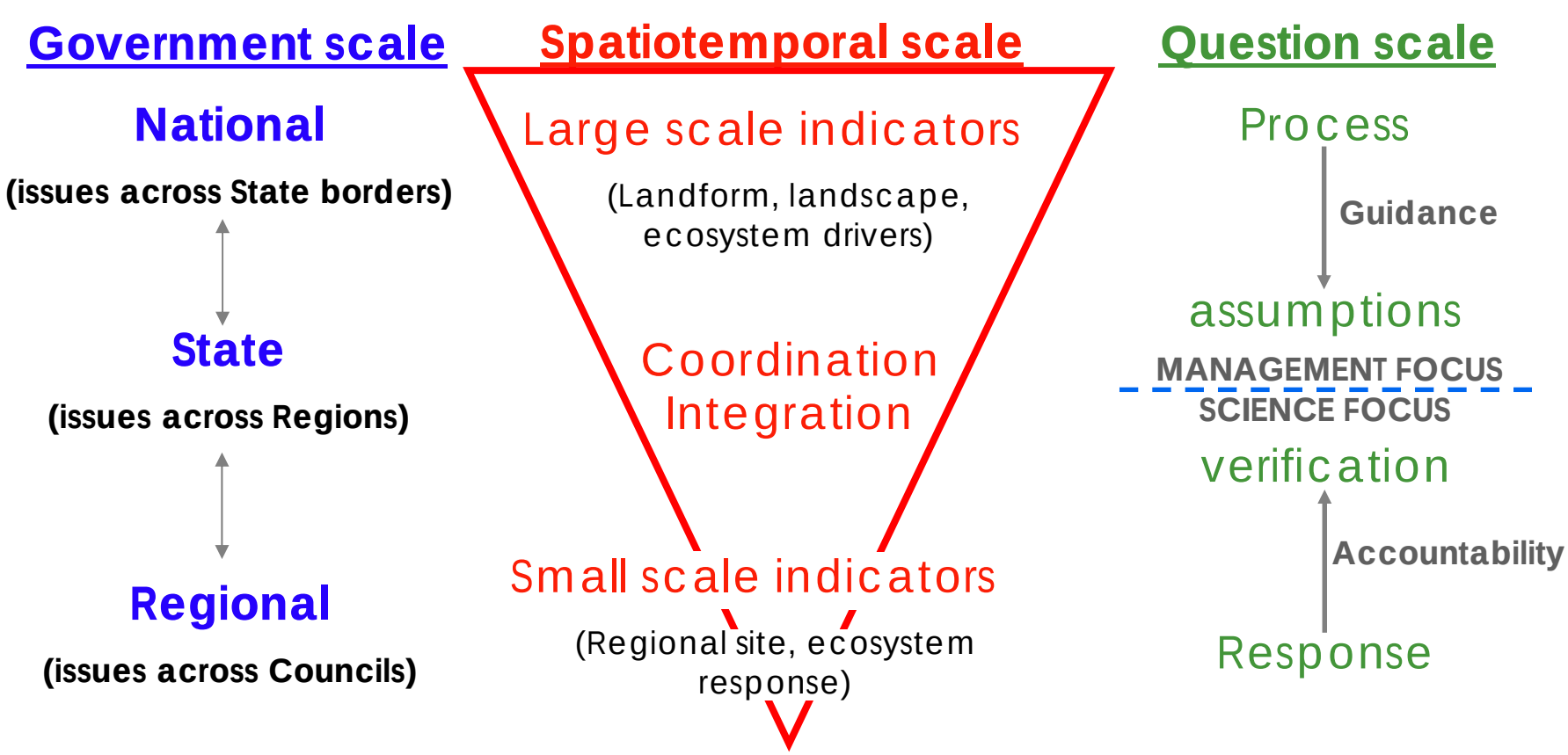


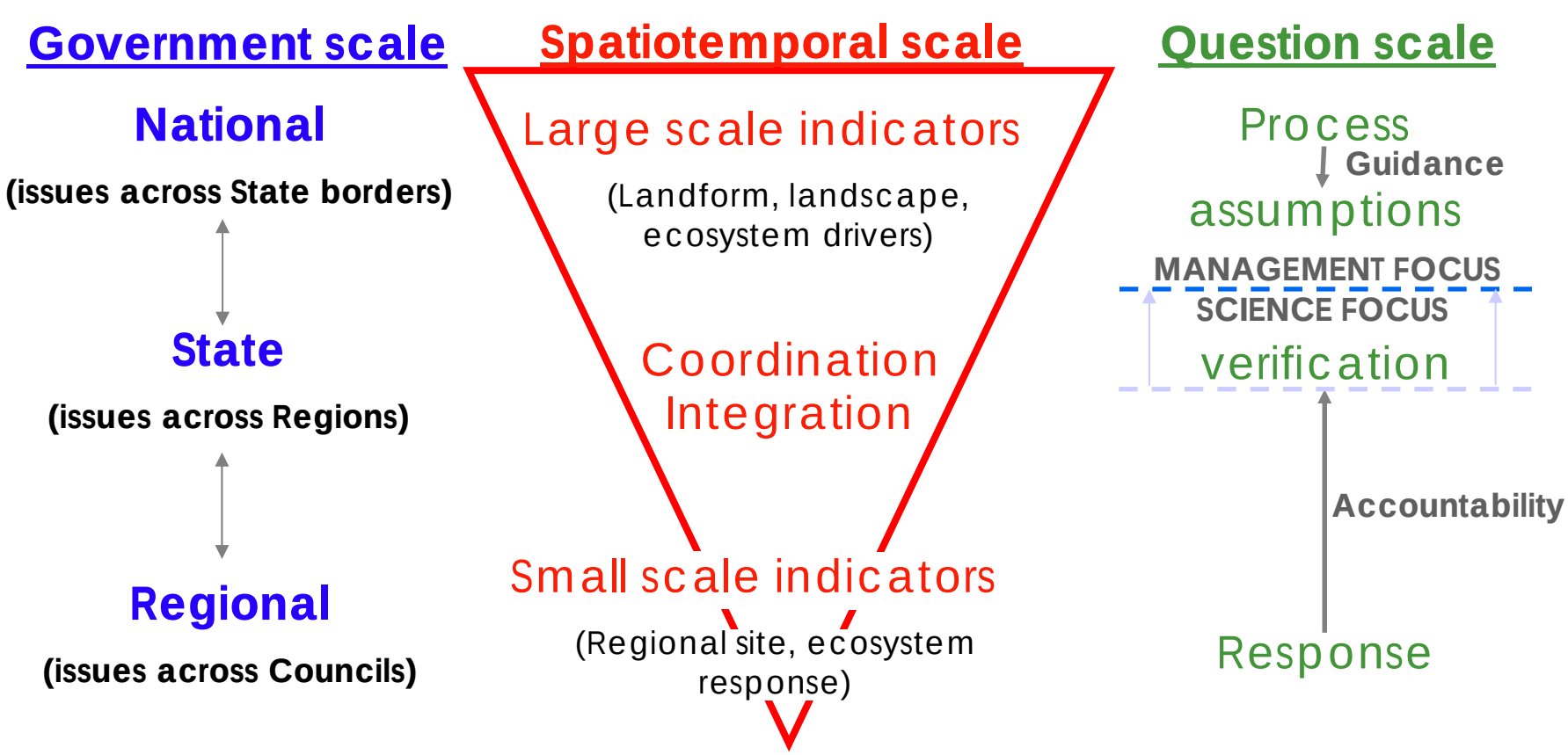
Fig. 1 Hypothetical relationships between environmental variables that affect aquatic biota and biological condition.

(Norris and Thoms, 1999)

Monitoring Strategy Questions



Monitoring Strategy Questions



Science and Management

Key considerations:

1. Is NRM monitoring a science question or a management question?

   Depends on the purpose and the question

2. How much science do you need to make a management decision?

   As much as you can get at the time ?

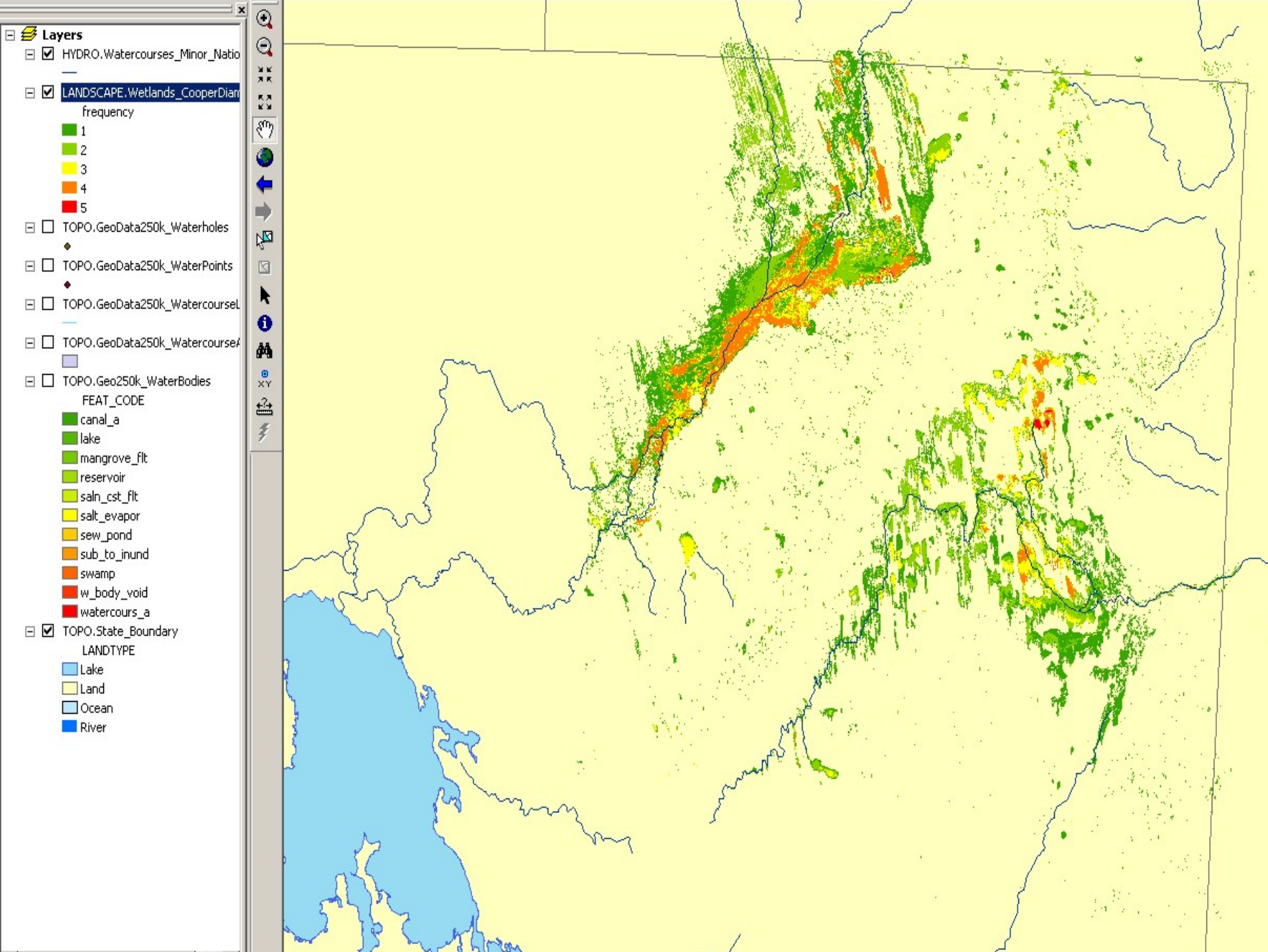
3. How important is management to scientific outputs?

   How much do you want to influence change?

Science and Management

Key focus:

- The vision only becomes useful when its transformed into reality
- A need to move from delivering outputs to outcomes
- A need to change focus from reporting as our aim to facilitating change as our goal


Layers
HYDRO.Watercourses_Minor_Natio
LANDSCAPE.Wetlands_CooperDiam
frequency
1
2
3
4
5
TOPO.GeoData250k_Waterholes
TOPO.GeoData250k_WaterPoints
TOPO.GeoData250k_WatercourseL
TOPO.GeoData250k_WatercourseA
TOPO.Geo250k_WaterBodies
FEAT_CODE
canal_a
lake
mangrove_flt
reservoir
saln_cst_flt
salt_evapor
sew_pond
sub_to_inund
swamp
w_body_void
watercours_a
TOPO.State_Boundary
LANDTYPE
Lake
Land
Ocean
River

How can we be more effective?

1. Successful change will depend on how well all players engage not as ‘experts’ with a perceived higher moral ground but as co-learners and interactive players who are willing to change.

2. Our role should be as integrated technical managers who manage the whole process of asking the right question within a large context and ensuring the messages are delivered in the appropriate format to the right stakeholders to ensure beneficial change occurs.

Federal position

Strong drivers for the states to undertake large-scale wetland and river health monitoring