



# *Department of Environment and Conservation*

## *Marine Science Program*

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### *WAMSI Node 2 science planning workshop*

(26<sup>th</sup> March 2010)

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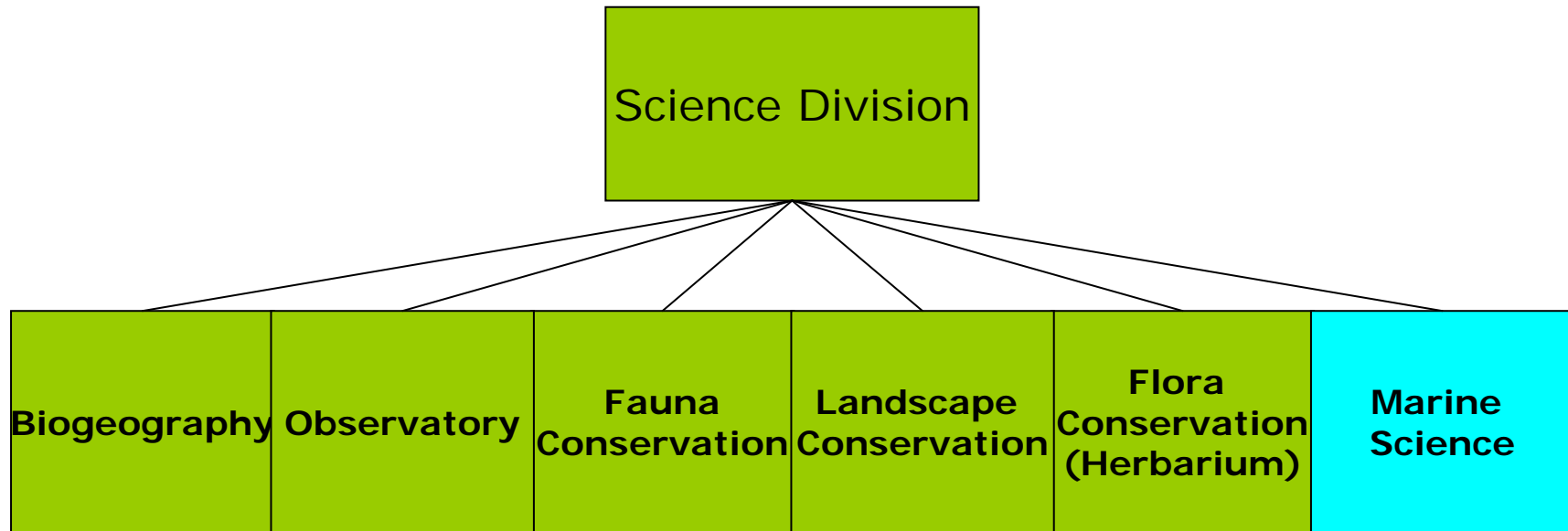


Department of  
**Environment and Conservation**

*Our environment, our future*



# Marine Science within DEC



- Ten permanent staff
- Liaise with other DEC branches  
(e.g. Environmental management, Policy & Planning)
- Liaise with regional offices

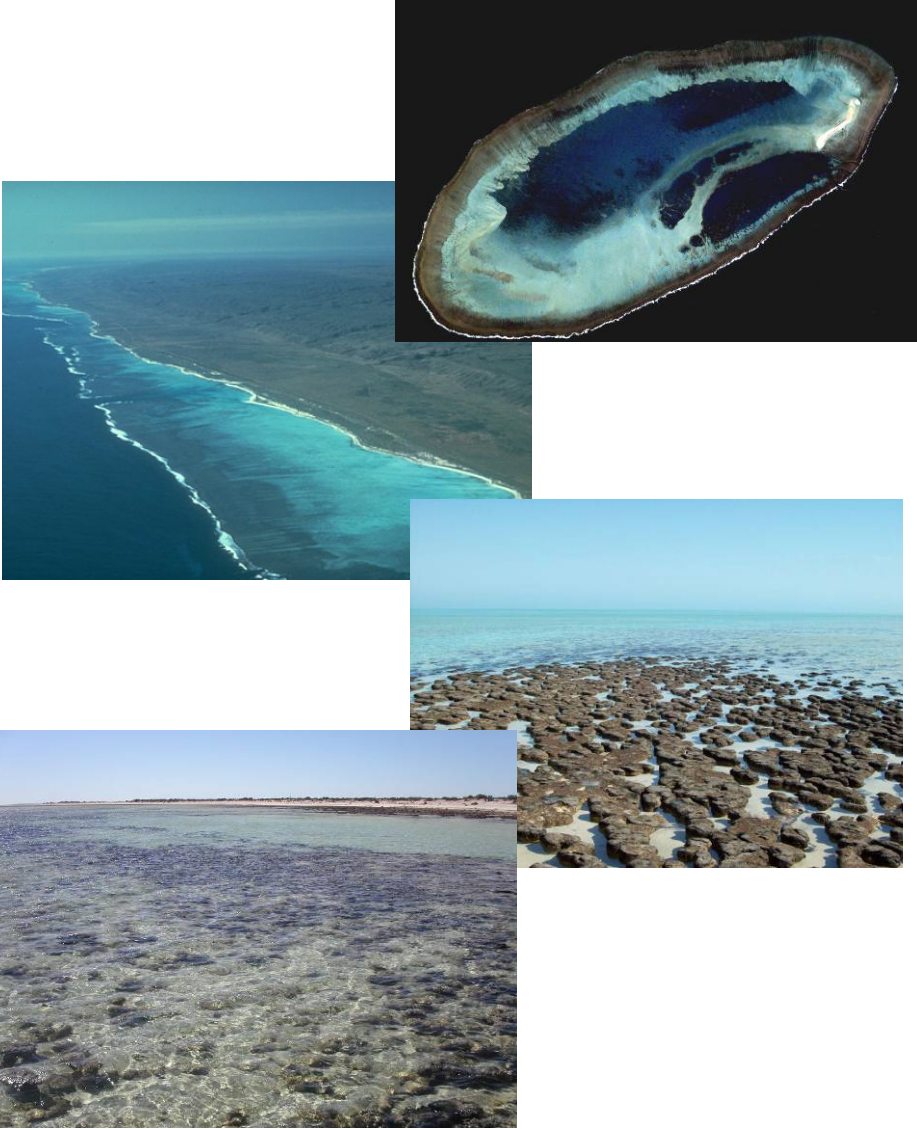
# The role of the MSP:

*To conduct or cause to be conducted scientific research and monitoring programs necessary to manage existing marine parks and reserves; conserve marine biodiversity; assist in planning for new parks and reserves; and contribute to regional marine planning.*

*Marine Science Business Plan 2008*



# Western Australia's Marine Parks and Reserves



# Recommendations

## Strategic issues

**DEC recommends a CC node in WAMSI 2 should:**

1. Be of broader scope including chemical and biological as well as physical implications
2. Have a significant focus on R&D to inform the development of CC adaptation and mitigation strategies.
3. Undertake a formal risk assessment to assess the scale of potential CC impacts on marine assets



Develop specific management questions



Develop science plan

# Specific issues

How will changes in current influence dispersal and connectivity?

*Question asked by 10/33 researchers (Wilson et al. 2010 JEB)*

Consider:

- changes in productivity and larval survival
- existing MPA network
- models that include larval behaviour



# Specific issues

Modelling impacts of climate change on water movements within shallow inshore areas (MPAs)

Scaling down of larger models to assess dispersal of:

- marine organisms,
- pollutants,
- sediments



# Specific issues

How will changes in rainfall effect estuaries and shallow bays?

Consider:

- effects on discharge rates
- sedimentation rates
- salinity
- opening and closing of estuary mouth



# Specific issues

Develop methods and strategies for monitoring

Consider:

- Database for temperature loggers
- Methods for measuring acidity/calcification



# Thanks!!



