

# Elizabeth River and Estuary

## Summary

Water quality at the upper estuary monitoring site is in excellent condition. Water quality at the ambient freshwater monitoring sites is in excellent condition and complies with water quality objectives. The water-bug community at most biological monitoring sites is equivalent to reference condition.

## Nature of system

- Long residence time and poor flushing in the upper estuary
- Saltwater 'wedge' formation during the wet season – increasing freshwater flows to the estuary form a buoyant plume of freshwater which results in partially 'stratified' conditions
- Phytoplankton biodiversity typically greater in dry season
- Higher salinities in upper estuary during the dry season with no freshwater inputs
- Light limitation during the wet season

## Sources of pollution

- High sediment and nutrient loads during the wet season from diffuse sources



View of lower Elizabeth River estuary looking towards Blaydin Point and Hudson Creek









