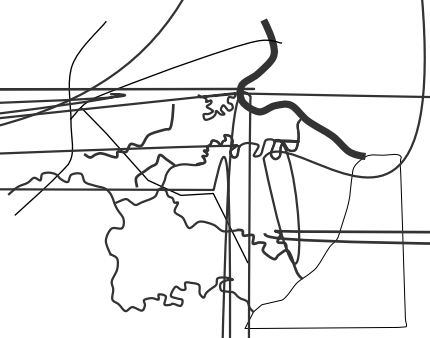


Stuart Creek floodplain Townsville Port Access Road fishways		PS05
(Photo: Ross Kapitzke 17/03/08)	(Photo: Ross Kapitzke 17/03/08)	(Photo: Ross Kapitzke 17/03/08)

- 0 Townsville Port Access Road crosses major waterways the Stuart Creek and Ross River floodplain in Townsville
- 0 Stuart Creek and coastal wetlands provide valuable freshwater and estuarine habitat for up to 25 native freshwater fish species
- 0 the new road incorporates a number of bridge and culvert crossings of major waterways and fish movement corridors
- 0 provisions for fish passage have been made at priority road-waterway crossings – the project is scheduled for completion in 2011

CLIENT AND PARTNERS	Department of Main Roads	
PROJECT OBJECTIVES	x establish priority road-waterway crossings for fish x provide for upstream fish passage at priority sites	x develop mitigation measures for drainage design x retain hydraulic capacity and function of crossings
SCOPE OF WORK	x aquatic fauna connectivity impact assessment: road corridor scale – fish movement corridor / structure x design of fishway facilities for drainage crossings	
CROSSING DESCRIPTION	x options for multi-span bridges and multi-cell box pipe culverts at major waterway crossings	x floodplain waterways experience flood flows (unidirectional) and tidal flows (bidirectional)
MIGRATION BARRIERS	x potential high velocities in box culvert crossings x velocities, no shelter, shallow flow in pipe culverts	x potential flow concentration / channel simplification at bridge crossings
MITIGATION MEASURES	x bridge crossings adopted at most major crossings for drainage, geotechnical and ecological reasons	x Quad Baffle fishway within (raised-invert) end culvert barrels within multi-barrel pipe culvert
OTHER FEATURES	x access for hydraulic and biological monitoring	x provide for aquatic fauna connectivity at fish movement corridor / road crossings / infrastructure



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