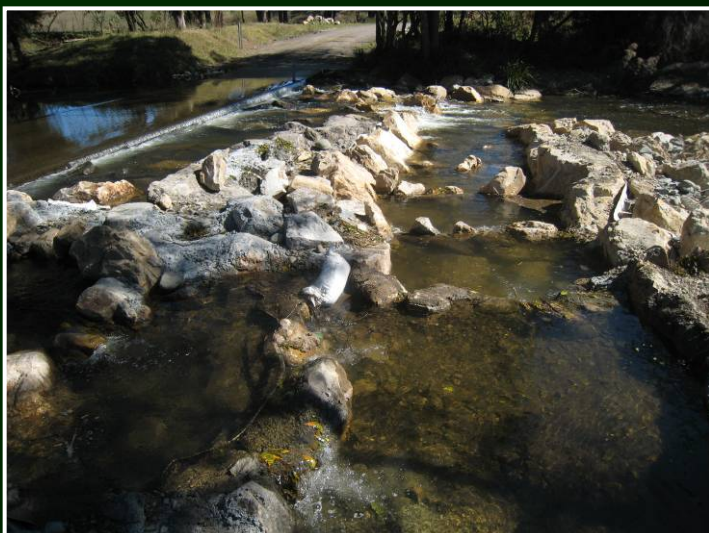
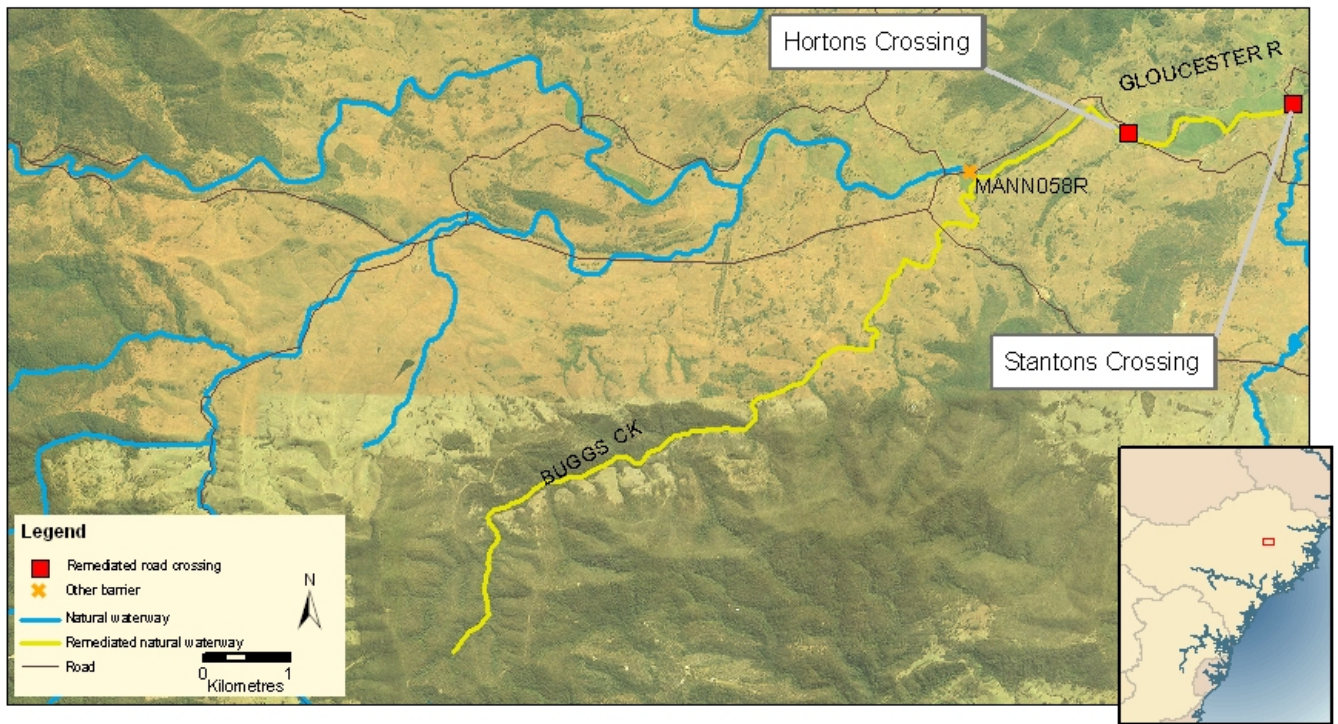


# STANTONS CROSSING, GLOUCESTER RIVER

Stantons Lane, Manning Catchment



## Remediation Works

- Bed control causeway crossing
- First barrier on Gloucester River
- Headloss barrier – 750 mm
- Insertion of partial-width rock-ramp fishway with low-flow channel.
- Works completed in September 2008.

## Remediation Benefits

- Improved fish access to 2 km
- One of four causeways on Gloucester River remediated over two year period

## Project Costs

- Total expenditure - \$34,233

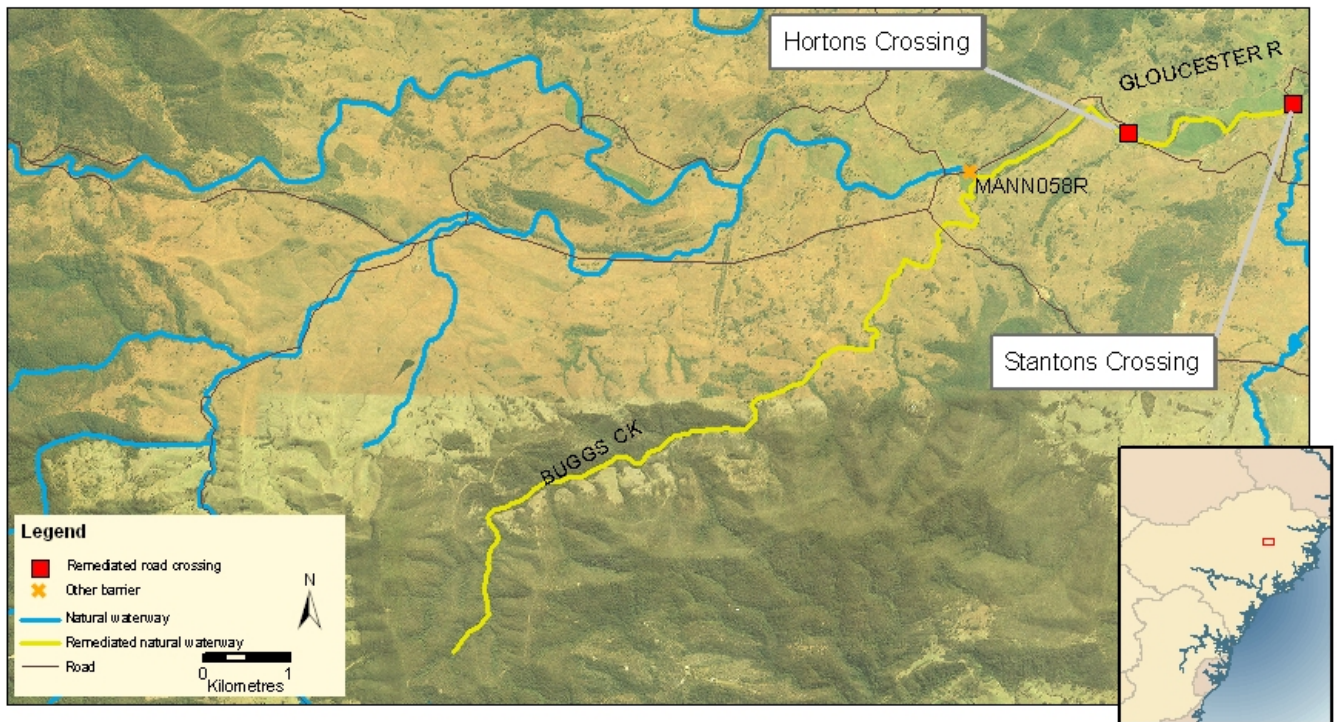
## Partners

- Gloucester Shire Council, Streamline River Restoration, Fishway Consulting Services



# HORTONS CROSSING, GLOUCESTER RIVER

Faulkland Road, Manning Catchment



## Remediation Works

- Bed control causeway crossing
- Second barrier on Gloucester River
- Headloss barrier – 1300 mm
- Insertion of partial-width rock-ramp fishway with low-flow channel.
- Works completed in February 2009.

## Remediation Benefits

- Improved fish access to 12 km
- One of four causeways on Gloucester River remediated over two year period

## Project Costs

- Total expenditure - \$35,957

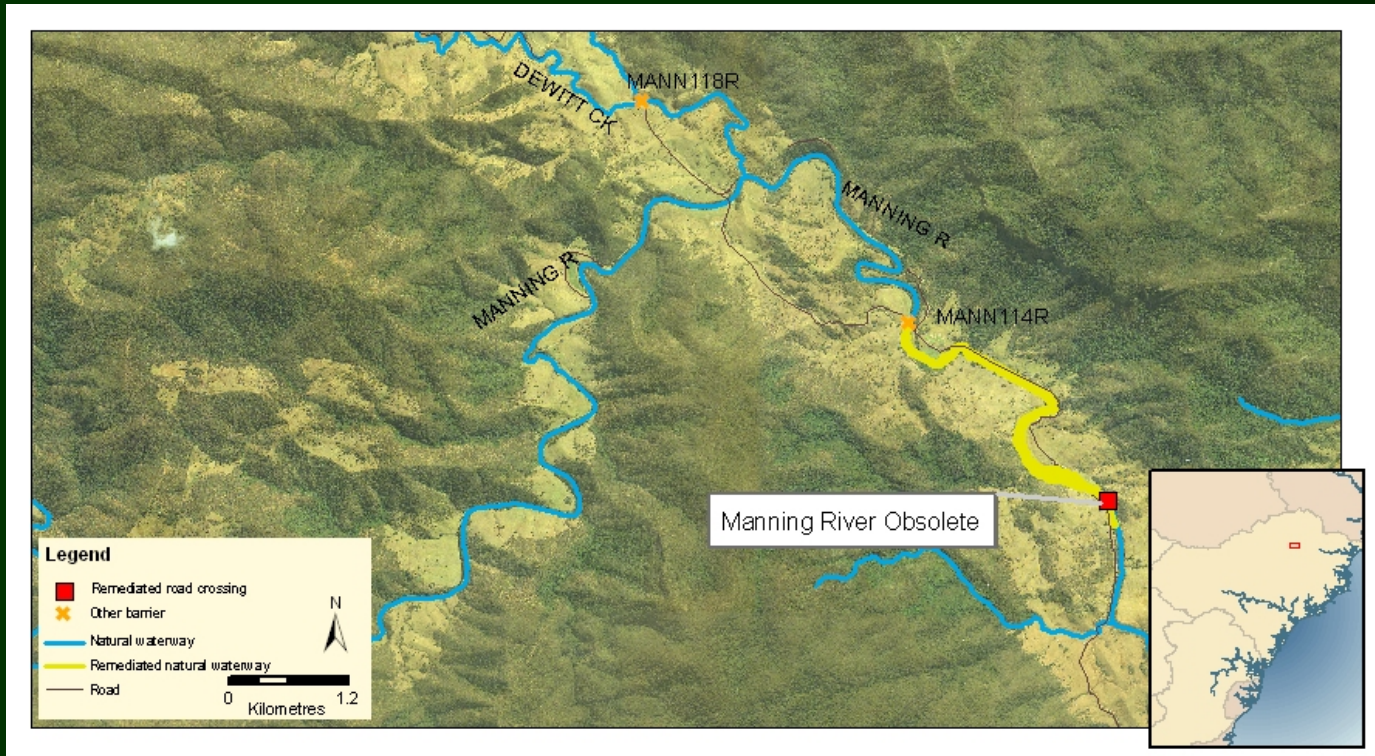
## Partners

- Gloucester Shire Council, Streamline River Restoration, Fishway Consulting Services



# OBsolete CROSSING, MANNING RIVER

Off Curricabark Road, Manning Catchment



## Remediation Works

- Obsolete crossing made redundant from historic road realignment
- Headloss barrier – 1000 mm
- Channel spanning bedrock control structures upstream of crossing
- No identified private or public use.
- Full removal proposed
- Works completed over two days in June 2008.

## Remediation Benefits

- Improved fish access to 4 km.

## Project Costs

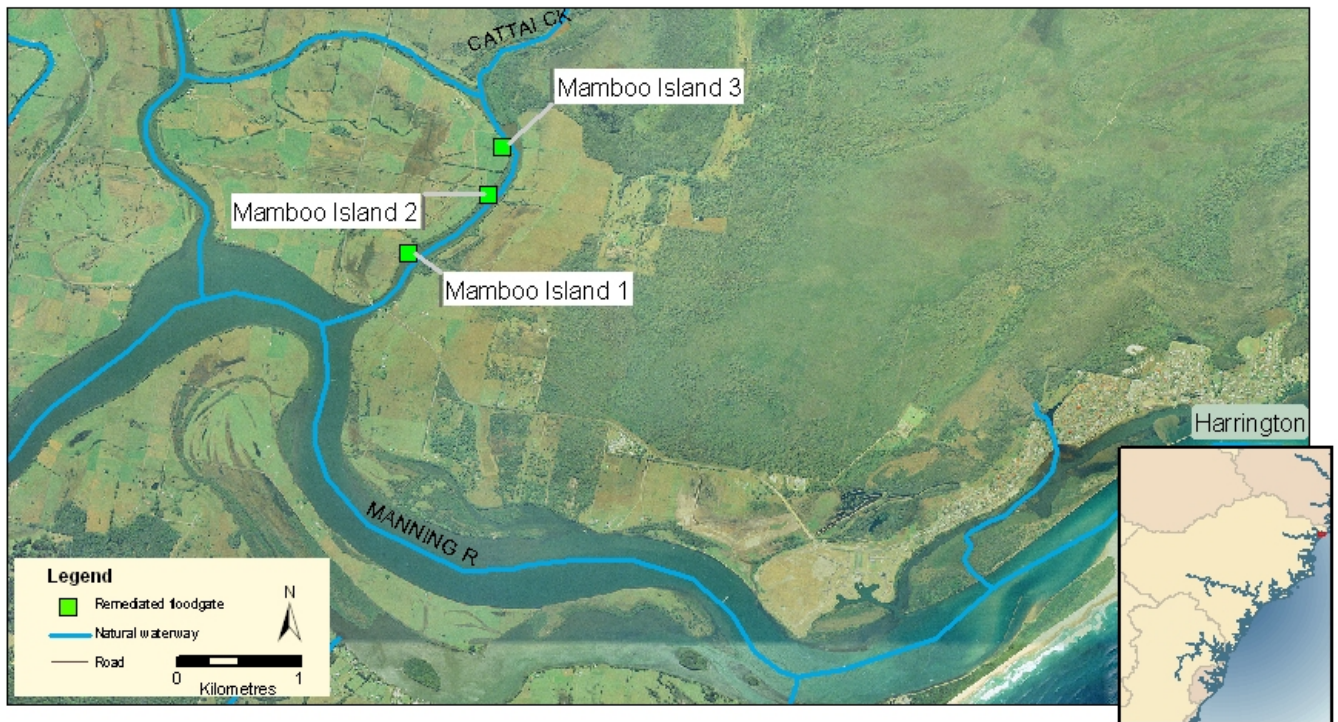
- Crossing Removal - \$7,744

## Partners

- Gloucester Shire Council, LPMA, Streamline River Restoration



# MAMBOO ISLAND FLOODGATES, CATTAI CREEK Manning Catchment



## Remediation Works

- Three floodgates on single property
- Acid Sulphate Soil drainage and discharge into Cattai Creek
- Drainage of upstream wetland complex
- Removal of degraded floodgates and insertion of new gates with raised invert level set at 0.5 AHD
- Works completed in Autumn 2009.

## Remediation Benefits

- Reduced ASS discharge into Manning Estuary.
- Increased water retention in upstream wetland (30 ha)

## Project Costs

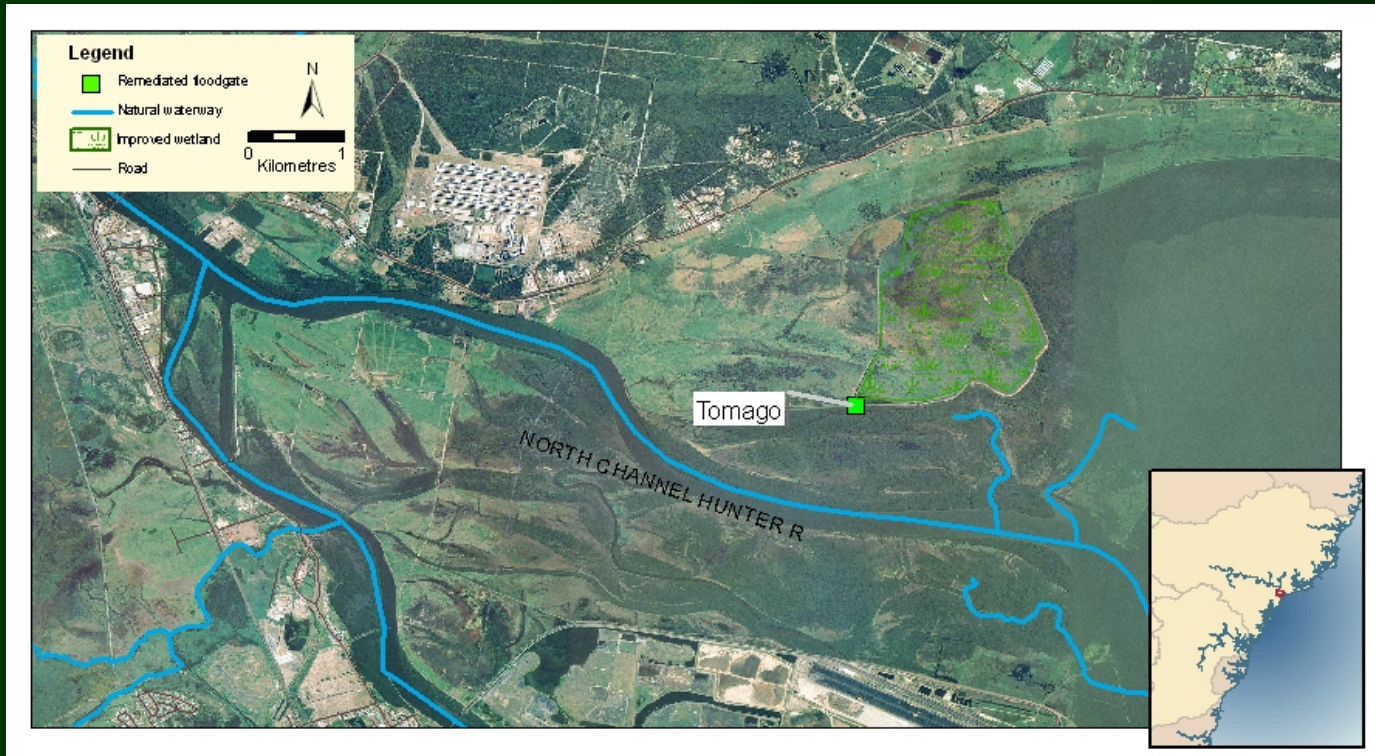
- Total expenditure - \$49,955

## Partners

- Greater Taree City Council, Private Landholders, Shearwater Marine



# TOMAGO FLOODGATE, FULLERTON COVE Hunter Catchment



## Remediation Works

- Hinge-flap floodgates limited tidal exchange to wetland and ring drain.
- Smartgate installation proposed for four gates at one site for active management
- The site is located in an identified area of high risk acid sulphate soils.

## Remediation Benefits

- Improved fish access to 1 km of waterway.
- Enhanced management of acid sulphate soils and better water quality.
- Improved management of 226 ha of SEPP 14 wetland
- Negotiation to enable fish passage by better management and timing of the 'trash guards' with DECCW who installed the Smartgates

## Project Costs

- Total project expenditure - \$80,000

## Partners

- DECCW (overall project managers),  
HRCMA (provided extra funds and support)



# LOWER WALLAMBA ESTUARY HABITAT SITE

## Wallis Lakes



### Remediation Works

- Darawakh Wetland and lower Wallamba River
- Darawakh Wetland impacts - ASS discharge and limited water exchange
- Wallamba River impacts – severe bank erosion resulting from historic vegetation clearance and boat wash.
- Proposed works included wetland drain decommissioning (1 km), insertion of rock fillets, and riparian fencing and revegetation
- Works completed in 2009

### Remediation Benefits

- Reinstated water exchange to 107 ha in Darawakh Wetland
- Stabilised 1 km of banks using rock fillets
- Riparian fencing (1 km) and revegetation (1 km)

### Project Costs

- Total expenditure - \$362,943

### Partners

- Great Lakes Council, LPMA, NSW Recreational Fishing Trust