Appendix C:

Example of a flood inundation map drawn with RiverCAD

Figure 1 (after Birkhead *et al*, 2004) is an example of a floodplain inundation map drawn with RiverCAD, using the water stage levels at each cross-section from the HEC-RAS simulations. The figure shows the progression of flooding in the Nyslvey Reserve for the first six days of the first flow event in 2000, superimposed on a background orthophoto of the floodplain. The positions of cross-sections are indicated in yellow. The flows for the first, third and sixth days are given in Table 1.

Table 1: Modelled inflow and outflow discharges for the Nylsvley Reserve for a six day period in January 2000 (after Birkhead *et al*, 2004)

| Date | Average daily discharge (m ³ /s) | |
|------------|---|---------|
| | Inflow | Outflow |
| 15/01/2000 | 0.38 | 0.15 |
| 18/01/2000 | 2.21 | 0.23 |
| 21/01/2000 | 8.67 | 2.30 |

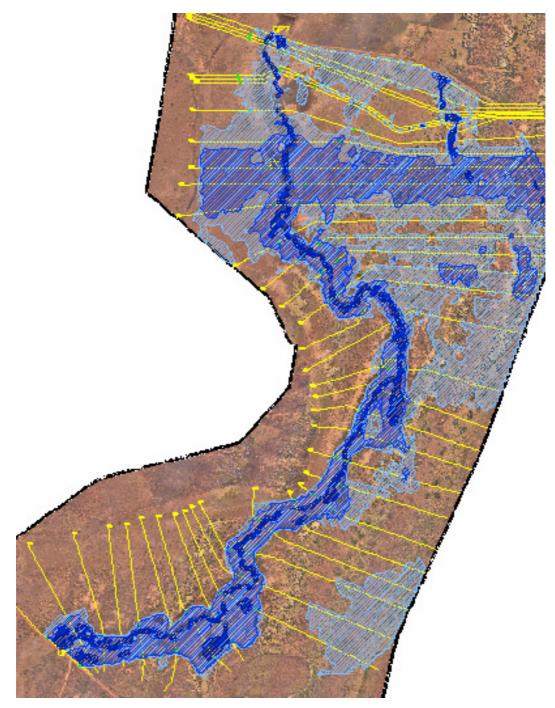


Figure 1: Modelled progression of a flood wave through the Nylsvley Reserve, plotted for 15, 18 and 21 January 2000 in reducing shades of blue (after Birkhead *et al*, 2004)