

1 Introduction (A Bryant & D Steller)

The terrestrial component of the *Biodiversity of the Georges River catchment* report was conducted by DEC (then NPWS). Commissioned late in 1998 the survey work began in earnest early in 1999 and was largely completed by mid-2000. In October 2000 DIPNR and DEC hosted a series of workshops with key stakeholder groups to translate biodiversity information into an effective planning framework. This exposure of the data allowed stakeholders to identify problems and comment on findings, as well as to contribute to possible solutions for the ongoing management of biodiversity in the catchment.

The study consisted of five major components:

1. mapping of remnant patches of vegetation on the Cumberland Plain using aerial photograph interpretation (API) techniques and selective site-based assessment
2. predictive modelling of the pre-1750 distribution of vegetation communities
3. an assessment of the fauna and floristics of specified sites
4. studies of the locations of selected species of flora and fauna
5. habitat modelling for selected species for which sufficient information was gathered.

i) Complementary surveys—Cumberland Plain and the Georges River catchment

The NPWS has been carrying out a similar study throughout the Cumberland Plain as the first step in preparation of the Cumberland Plain Endangered Ecological Communities Recovery Plan. As the Georges River catchment includes a significant area of the Cumberland Plain there is significant overlap between these two projects. As a result the survey planning and fieldwork were executed in two separate phases.

The first phase covered the greater western Sydney area between the latitudes 33°30'S and 34°30'S, and longitudes 150°30'E and 151°30'E comprising the Cumberland Lowlands (Bannerman & Hazelton 1990), an area that stretches from Wilberforce (north) to Thirlmere (south), and east of the Nepean River to Parramatta. East of Parramatta the lowlands are truncated by the Hornsby Plateau in the north and by the Woronora Plateau in the South. The study area boundary in this phase was defined by the extent of soils derived from three main geological units:

- Wianamatta Group shales,
- Tertiary Alluvium, and
- Holocene Alluvium (in areas draining Wianamatta Group shales).

The second phase of the survey extended the study area to include the whole of the Georges River catchment, incorporating the geological transition from Wianamatta Shale to Hawkesbury Sandstone. This area includes the Woronora Plateau north of latitude 34°30'S and east of longitude 151°05'E.

ii) Campbelltown Local Government Area

Additional sampling in the Campbelltown LGA was concentrated along the geological transition from Wianamatta Shale to Hawkesbury Sandstone between Long Point and Wedderburn.

NOTE: The data collated by these reports provides the primary basis for regional planning and to guide refinements at the local scale, however they do NOT replace the need for site-specific surveys with regard to requirements under state and commonwealth threatened species legislation.