

### **3. ADDITIONAL STUDIES**

This Plan of Management has been developed to consider all management issues in relation to the Dee Why Lagoon Wildlife Refuge. It is recognised that a number of additional studies have been prepared for the Refuge. The Dee Why Lagoon Wildlife Refuge Plan of Management is designed to be the primary planning document for the Refuge. Works as proposed in the other planning documents must not conflict with the objectives of this Plan of Management.

#### **3.1 Vegetation Management Plan**

A Vegetation Management Plan for the Dee Why Lagoon Wildlife Refuge has been prepared by Kate Low & Associates. The area of study has the same boundaries as this Plan of Management.

The Vegetation Management Plan is a supporting document to this Plan of Management and it's objectives (in relation to vegetation management) are to:

- Identify major management issues;
- Carry out a site assessment;
- Develop a bush regeneration plan; and
- Develop a monitoring program.

The Vegetation Management Plan has been developed to provide specific information that fulfils some of the objectives of this Plan of Management. The recommendations developed as part of the Vegetation Management Plan should be adhered to when managing the Refuge, as long as they are not in conflict with management objectives of this Plan of Management.

#### **3.2 Estuary Processes Study, Estuary Management Study and Estuary Management Plan**

An Estuary Processes Study has been undertaken for Dee Why Lagoon. The investigations cover an area greater than that covered by this Plan of Management as catchment processes have been taken into account. The study area comprises the estuarine areas of Dee Why Lagoon and it's catchment. This includes the foreshore, wetland surrounding the lagoon, remnant wetland within Cromer Reserve, tidal waterway, lagoon entrance, dunes, tributaries and drainage features.

Investigations have also been conducted on the physical, chemical and biological processes that operate within the lagoon and it's catchment. An Estuary Management Study and an Estuary Management Plan are currently underway subsequent to the Estuary Processes Study.

The Studies and Plan will provide specific information in relation to estuary processes and management that fulfils some of the objectives of this Plan of Management. The recommendations developed as part of the Estuary Management Plan should be adhered to when managing the Refuge, as long as they are not in conflict with the management objectives of this Plan of Management.



A study of migratory and resident water birds has been developed as a component of the Estuary Processes Study. The study is to be consulted when determining a suitable location for the proposed boardwalk and viewing platform.

### **3.3 Bush Fire Risk Management**

The Rural Fires Act 1997, requires a Bush Fire Management Committee to be formed in each Local Government Area containing a rural fire district or a fire district with a bush fire risk. The Warringah/Pittwater Bush Fire Management Committee has prepared a Bush Fire Risk Management Plan for it's area of responsibility. The Bush Fire Risk Management Plan includes the Dee Why Lagoon Wildlife Refuge.

The purpose of bush fire risk management is to protect the community and its assets from the adverse affects of wildfire. The outcome sought is to achieve better integration of community preparedness and prevention strategies as key elements of bush fire management. The strategies established in the Bush Fire Risk Management Plan address the following issues:

- Bush fire hazard;
- Vulnerability of assets to fire;
- Safety of the community and fire fighters;
- Protection of the land and environment from fire; and
- Biodiversity management through the application of appropriate fire regimes upon the landscapes.

Bush fire risk management priorities are to be allocated according to the bush fire risk ratings. Those areas faced with an extreme bush fire risk are given the highest management priority, while those areas with an insignificant risk have the lowest management priority. The bush fire risk management priority influences:

- When the risk is likely to be treated – high priority areas will be addressed first;
- The resources allocated to the treatment – more resources will be allocated to manage the risk in high priority areas, as more work will be needed to reduce the risk; and
- The range of treatment strategies required to manage the risk – a greater range of management strategies will be implemented to manage the risk in high priority areas, as more factors contribute to the risk.

A series of bush fire management zones, described in Table Five, have been identified in the Bush Fire Risk Management Plan. Bush fire management zones identify those areas where the bush fire risk management strategies will focus on the management of the bush fire hazard (or fuel).

**Table 5. Bush Fire Risk Management Zones.**

Asset Protection Zone	To protect human life, property and highly valued public assets.
Strategic Fire Advantage Zone (Fire Management Access Zone)	To provide strategic areas of fire protection which will reduce the speed and intensity of bush fires, and reduce the potential for spot fire development.



Land Management Zone	To meet relevant land management objectives in areas where Asset Protection or Strategic Fire Advantage Zones are not appropriate.
Fire Exclusion Zone	To exclude fires (both bush fire and hazard reduction burning) due to the presence of fire intolerant assets.

A “Management Strategy for Weed Control and Fire Management Access Zones (Urban Bushland Boundaries)”, has also been produced by Warringah Council. The fire management aim of the Strategy is to *“identify areas of urban bushland boundaries within Warringah that are a fire hazard and that require access for fire fighting organisations to undertake fire management operations”*. The Strategy outlines the procedures for the implementation of fire management access zones along urban bushland boundaries.

The Strategy provides professional and operational staff with the relevant guidelines and understanding of the criteria and constraints for both weed and fire management principles.

Investigation into bush fire risk and fire management access zones for the Refuge should be carried out in accordance with the Warringah Pittwater Bush Fire Risk Management Plan and the Management Strategy for Weed Control and Fire Management Access Zones (Urban Bushland Boundaries), 1996. Investigations should be carried out in consultation with the NSW Rural Fire Service (Warringah – Pittwater District).

### **3.4 Heritage Assessment of the Timber Piles, Dee Why Lagoon**

Consultants Mayne-Wilson & Associates were engaged to carry out a Heritage Assessment of the timber piles in Dee Why Lagoon. This was deemed necessary as a plan of management must determine any areas of Cultural Significance. Preliminary investigations indicated that the piles were constructed between the early to mid 1900’s, however a conflict in accounts of their previous purpose was apparent.

The assessment of the significance of the piles was made on the basis of the criteria contained in the Burra Charter and the State Heritage Manual. The following is an extract from the “Heritage Assessment of the Timber Piles, Dee Why Lagoon” (pp.4-5, June 2000).

“The timber piles have a *moderate degree of historical significance* as remnant items of the extensive coastal defence network that extended across Sydney’s northern beaches during World War II. Whilst many WWII concrete fortifications, including gun emplacements and bunkers, are available for public examination along the Sydney and NSW coastline, most anti-tank structures were removed at the conclusion of the war for public safety, access and aesthetic reasons. These piles, therefore, are the only remaining physical evidence that demonstrate part of the beachfront military defence fortifications along Dee Why. The original structure, which linked into the beach fortifications, was an essential component of the defence scheme designed for the Dee Why beachfront.

The piles have a *negligible degree of aesthetic significance*, and cannot be considered to have a landmark quality, many locals being unaware of their



existence. Restrictions on pedestrian movement along the northern and western edges of the Lagoon mean that the piles can only be experienced from a small segment along the southern shore. They do, however, have a somewhat evocative quality as ‘ruins’, and provide good roosting points for local waterbirds.

The timber piles have a *low to moderate degree of social significance* being remembered by some older residents as distinctive, defence items during World War II. Some have advised of their involvement in supplying the timber piles and witnessing the laying out of these beach and lagoon fortifications. Numerous present and former residents of Dee Why have confirmed that as children they used to fish from, or jump from pile to pile, and/or tie their small boats to them.

The piles have a *negligible degree of technical significance*. The techniques used for the construction and placement of anti-tank and personnel beach fortifications were simple, practical and cost-effective. Moreover, they do not serve any functional role for the Lagoon today.”

The Heritage Assessment recommended two options (p.5), given that the piles have only a moderate degree of historical and social significance, that they are no longer ‘intact’ enough to demonstrate their original role as an anti-tank system, and that they are largely ignored or unnoticed by the present community:

- “they could either be left in their present condition, where they will continue to deteriorate. While they remain, however, they will serve to remind some members of the community of the defensive measures of World War II, especially if a conspicuous plaque explaining their role was set up in a place where the public could read it; or
- they could be removed altogether (which some people, and waterbirds, may regret).”

Section 7 of this Plan of Management defines the management actions for the timber piles.



Photo 3: Tank Trap in Dee Why Lagoon.

