



Bushland and
Biodiversity

2013 Annual Report

1.0 Introduction and Context

Hornsby Shire covers 50,874 hectares of which approximately 67% is bushland. The Natural Resources Branch, created in June 2012, includes the former Bushland and Biodiversity Team. The Branch manages 278 natural areas that are either owned by Council or are Crown land that Council manages. The natural areas are primarily bushland with some natural wetlands. Together with National Parks and Wildlife Service Council shares management of 3,596 ha Berowra Valley National Park which changed from Regional Park in September 2012. The Branch manages 4,968 ha of public bushland and provides biodiversity incentives, assessment and advice for large areas of private bushland. The Branch undertakes on ground bush restoration and regeneration and a large volunteer Bushcare Program. It manages the bushfire risk in its reserves and has a larger responsibility for bushfire management in the Shire. Appropriate bushland recreation is provided in the local bushland. These roles are guided through legislation, adopted Biodiversity Conservation Strategy, Plans of Management and other strategies adopted by Council. The more significant bushland reserves are:

Arcadia: Arcadia Park, Calabash Road Bushland, Calabash Point Bushland, Halls Creek Bushland

Asquith: Michigan Avenue Bushland, Mills Avenue Bushland

Beecroft: Beecroft Reserve, Byles Creek, Chilworth Reserve, Castle Howard Bushland, Edwards and Lamorna Bushland, Fearnley Park, Orchard Road Park

Berowra: Berowra Community Centre Bushland, Combora Circuit Bushland, Evanda Street Bushland

Berowra Creek: Bar Island, Neverfail Bay Bushland

Berowra Heights: Berowra Park, Cunio Point Bushland, Turner Road Bushland

Berowra Waters: Furber Park

Berrilee: Bay Road Bushland, The Woolwash

Brooklyn: Brooklyn Park, Brooklyn Railway Bushland, McKell Park, Seymours Creek Bushland

Canoelands: Pumpkin Point Creek Bushland

Carlingford: Ray Park

Castle Hill: Upper Pyes Creek Bushland

Cheltenham: Cheltenham Bushland

Cherrybrook: Kanangra Crescent Bushland, Lakes of Cherrybrook, Pyes Creek Bushland

Dangar Island: Kiparra Park

Dural: Muraban Road Bushland, Pyes Creek Bushland

Epping: Dence Park, Midson and Plympton Road Bushland, Terrys Creek Bushland, Vimiera Park

Fiddletown: Bloodwood Road Aboriginal Area, Calabash Point Bushland, Collingridge Bushland, Sunnyridge Road Bushland

Galston: Fagan Park (including Carrs Bush), Galston Park, Galston Recreation Reserve and Hayes Park, Knights Road Bushland

Glenorie: Campbell Crescent Bushland, Glenorie Park

Hornsby: Florence Cotton Reserve, Hornsby Park, Manor Road Bushland, Reddy Park, Rosemead Road Bushland, Waitara Creek Bushland

Hornsby Heights: Crosslands, Ginger Meggs Park, Rofe Park Bushland, Somerville Road Bushland

Laughtondale: One Tree Reach Wetland

Maroota: Molesworth Reserve, Wisemans Ferry Lookout Bushland, Wisemans Ferry Tip (decommissioned – bushland parcel)

Middle Dural: Forsters Reserve

Mount Colah: Berry Park Bushland, Bimbil Avenue, Excelsior Bushland, Judith Ave Bushland, Murralong Road Bushland, Oxley Drive Park, Sue Place

Mount Ku-ring-gai: Mount Ku-ring-gai Park

Pennant Hills: Azalea Grove Bushland, Britannia Street Bushland, Observatory Park, Tristania Way Bushland

Normanhurst: Begonia Road South Bushland, Kenley Park, Normanhurst Park, Pine Street Bushland, Waitara Creek Bushland

North Epping: North Epping Oval, Woods Street Oval

Thornleigh: Dog Pound Creek Bushland, Larool Crescent Children's Centre (bushland parcel), Larool Creek Bushland

Westleigh: Dog Pound Creek Bushland, Quarter Sessions Road Bushland, Western Crescent Playground (bushland parcel)

West Pennant Hills: New Farm Road Bushland

Wisemans Ferry: Singleton Mill Road Bushland and Wisemans Ferry Cemetery (bushland parcel)

2.0 Biodiversity Planning and Management

2.1 Biodiversity Conservation Strategy

The Hornsby Shire Biodiversity Conservation Strategy (2004, updated 2006) guides Council's priorities for undertaking conservation actions. Its objectives are to:

- Conserve species, populations and communities of native plants and animals, and allow for their continued evolution and survival in the Hornsby Shire in context of the region.
- Achieve an improvement in the quality and extent of existing indigenous vegetation in Hornsby Shire.
- Collect and update biodiversity conservation information.
- Develop key community incentive and partnership programs to maintain biodiversity on private properties in the Hornsby Shire.
- Ensure Council activities integrate with other agencies to achieve biodiversity conservation outcomes.

- Ensure environmental planning instruments and processes provide a strategic approach to achieving biodiversity conservation outcomes.
- Maintain and improve the management of biodiversity on publicly owned land in Hornsby.
- Effectively mitigate threats to conserving biodiversity in Hornsby.
- Conserve and recreate connectivity across fragmented landscapes.
- Develop and implement effective systems to fund and manage biodiversity conservation actions.
- Hornsby Shire has over 1,000 native plants and 388 terrestrial vertebrate animals. Of these, there are 26 threatened plants and 42 threatened fauna known or likely to occur.

Rare plant *Tetratheca glandulosa* in Hornsby Bushland



Annually, ten high priority actions are implemented from the Biodiversity Conservation Strategy.

Following the review of achievements from 2004-2009 and 5 year action plan for 2010-15, an action plan for 2011-12 was prepared. Major achievements for 2011-12 included:

- Bushland restoration of 170 ha equating to 12% of Council managed bushland met Council's target
 - contractors restored 102 ha in 56 Bushland Reserves through Council and grant funds
 - 780 Bushcare volunteers restored 68 ha at 94 sites
- Community nursery achieved
 - 52,458 tubestock plants propagated, the most ever for a financial year
 - 40 volunteers did 2,723 hours of plant production, a 27% increase from last year valued at \$64,410
 - 6,256 free native plants provided to over 1,200 residents at 4 open days promoting biodiversity in local gardens, with particular interest shown in native trees
 - 44,235 plants despatched for the year, a 37% increase from last year and
 - strong demand for plants from the Catchment Remediation Rate program, National Tree Day, Council bushland and Bushcare sites, advanced street trees and landscape projects, schools and Still Creek Landcare projects
- Sustainability and education
 - Bushcare trainers worked with 85% of Bushcare groups resulting in over 60% increase in Bushcare volunteer hours valued at \$525,000.
 - Continued sustainability improvements to the Earthwise Cottage as a demonstration venue
 - 380 Bushcarers and others attended 37 seminars, tours, talk and training
- 3 studies to assist in adapting to Climate Change
 - Estuarine Wetland and Migratory Bird Survey and Priority Habitat Mapping- completed
 - Native Flora and Fauna Conservation Study and Management Plan- completed
 - Eastern Pygmy Possum monitoring – ongoing
- Facilitated partnerships with:
 - LGSA, Council Works and Parks team for the 'Roadside Vegetation Implementation Project'
 - Wisemans Ferry and Laughtondale communities for the 'Wisemans Community and Environment Connections' project, Wisemans Cemetery restoration and bushfire protection works, and the One Tree Reach Wetland plan of management community field day - HNCMA and Heritage Office project sponsors
- National Parks and Wildlife through management of Bushcare and bush regeneration contracts in Berowra Valley National Park
- Local schools and monasteries through the Rural Lands Incentives Program at Cherrybrook Technical High School, Benedictine Monastery Arcadia, Marymount Mercy Centre Castle Hill and Environmental Trusts.
- Horse owning community through workshops delivered on sustainable environmental management of horse properties and native grasses
- Hornsby mountain bike community through Council's Trailcare Program with 169 volunteers contributed 493 hours valued at \$14,790; also Metropolitan Greenspace and Department of Sport and Recreation project sponsors
- Minimised environmental impacts on native flora and fauna:
 - Assessed 182 Development Applications and Tree Applications and investigated 83 compliance matters of unauthorised clearing
 - Responded to 298 private property Noxious Weed enquiries and requests inspecting 172 properties; undertook grant works for public land Noxious Weeds including Tussock Paspalum, vines and Boneseed
 - Inspections of high risk weed sites and other strategic inspections to manage noxious weeds totalling 506 inspections, 29 km of weed pathways inspected and 164 (80 proactive and 84 reactive) noxious weed notices
 - Revegetated 3800 sqm compared to 3930 sq m lost to development being a net loss of 130 sqm – this excludes unauthorised clearing
- Bushland recreation
 - 33 guided bushwalks for 380 residents
 - Opened Stage 1 of the Hornsby Mountain Bike Track of 3.25 km
 - 12 tracks over 49 kms in length with interpretive signs
 - Completed the Pyes Creek walking track
 - Completed the McKell Park track upgrade
- Completed bushfire mitigation measures in a sustainable manner in Bushland Reserves
 - Maintained 55 Asset Protection Zones and Works Access Lines affording protection to 220 properties along an interface length of 6180m immediately adjoining Council bushland
 - Maintained 92 km of Council managed Fire Trails, upgraded Sections 2 and 3 of the Woodcourt Fire Trail and Old Mans Valley Fire Trail
 - Adopted the Hornsby Ku-ring-gai Bushfire Education Strategy, delivered 3 Bushfire Education Workshops to 100 residents and completed the Bushfire Education Trailer fitout with Ku-ring-gai Council

- Completed 4 Hazard Reduction burns on Council land despite wet weather, 14 environmental assessments and on-ground works for burn preparation
- Issued 549 permits to burn on private land and investigated 4 breaches
- Finalised mapping of Bush Fire Prone Land in the Shire
- Reviewed the draft Hornsby LEP and DCP regarding Biodiversity and Protection of Native Vegetation and Trees, reviewed the Green Offsets Code, reviewed the proposed amendments to the TPO
- Achieving additional income and commitments of \$1,226,044 to achieve bushland management, restoration and enhanced recreational experience of Hornsby Shire's bushland
 - 19 grants and sponsorship commitments of \$1,216,044 being a 7% decrease from last year
 - Received 1 offset of \$10,000 continuing the slowdown in offsetting
 - 28 grants were implemented through funds of \$756,736 representing a 4% increase from last year as the team moved to implementation and delivery of grant projects.

One Tree Reach weir



2.2 Plans of Management for Natural Areas

In the 2012/13 year, actions identified in Plans of Management for natural areas covering 276 Bushland Reserves were implemented.

Wisemans Ferry Cemetery Bushland key actions for the Plan of Management include bushfire mitigation, noxious weed control and heritage protection of cemetery monuments. Grants were received from the Heritage Office for APZ implementation, monument restoration and weed management. Restoration works on grave sites was completed, fire trail gate installed and the Hazard Reduction burn completed.

One Tree Reach Wetland received ongoing financial support from NSW Recreational Fishing Trust, Hawkesbury Nepean Catchment Management Authority and Council to undertake weed control, restoration works and develop management strategies. Restoration contributed to the increased presence of water birds and the regeneration of the Swamp Mahogany Forest. A grant funded weir was installed to remediate acid sulphate soils, whilst retaining flows to the Hawkesbury. To complement previous works, an additional

grant from HNCMA allowed weed management along the northern channel adjacent to the weir, including the adjoining private property. Planning for a boardwalk was undertaken through a HNCMA grant and Council funding to provide public access to the wetland. Consultants drafted a Plan of Management for the wetland, held an on-site meeting with local residents and issued a questionnaire to provide their input into future management strategies.

2.3 Development Applications and Environmental Assessments

70 Development Applications (DA) and 112 Tree Application (TA) responses were provided to Council's Planning Division and Tree Management Team, being less DAs since last year's 82 and more TAs than last year's 108. Due to the level of impact on remnant bushland by these proposed developments there has been a requirement to provide ongoing advice during negotiations to attain a more sustainable development and avoid, minimise or mitigate the impacts. As a result of ongoing negotiations over 100 additional formal responses were provided by the Natural Resources Branch, and numerous on-site and office meetings with applicants and Council staff. There has been

Wisemans Ferry Cemetery - Solomon and Jane Wiseman's grave and William Warner's Tomb



a trend in recent years for developments adjacent to remnant bushland to not be referred to the Natural Resources Branch (see photo below). This resulted in impacts upon remnant vegetation including EEC's going unchecked.

The continuing most significant issue facing biodiversity and DA assessment is the increasingly limited amount of land available for providing a complying building envelope in minimum sized lots constrained by the presence of large remnant isolated EEC trees, threatened species or remnant roadside vegetation. These impacts are also experienced with larger commercial and industrial developments. Therefore, a majority of the subdivision and dwelling house applications request the removal of singular isolated trees and roadside vegetation in addition to having cumulative impacts on remaining trees. These impacts are often poorly addressed in consultant reports which fail to recognise the cumulative impacts of each DA removing singular trees from isolated patches, or patches of EEC's, and are overall having a significant impact upon the local population of EEC's. Implementation of Council's Green Offsets Policy, APZ requirements and DCP guidelines has been a key element of the Natural Resources Branch and Tree management Team when assessing applications. In some cases expert advice provided by these staff has been overturned and unsustainable

impacts upon threatened species, EEC's and remnant vegetation has been approved.

Subdivisions: The 2012-2013 financial year saw numerous subdivision applications under assessment on complex sites within adjoining bushland, including an ongoing Land and Environment Court appeal whereby Council's Biodiversity Planning Staff are representing Council as expert ecologists. Biodiversity issues included the presence of threatened Red-crowned Toadlet (*Pseudophryne australis*) overlap with other planning requirements including APZ and public open space issues were key elements to Council's deemed refusal of the application. There is an ongoing trend of subdivision application for larger urban properties with steep topography and bushland in urban areas with impacts on significant wildlife corridors and habitat, endangered ecological communities and urban habitat refugia resulting in loss of remnant native trees and hollows, clearing for Asset Protection Zones, increased sedimentation and weed growth.

Asset Protection Zones: Compliance with APZ requirements as prescribed by Planning for Bushfire Protection, AS 3959-2009 Construction of Buildings in bushfire prone areas and the NSW Rural Fire Service created a conflict between clearing and conservation of vegetation. The majority of the Shire is

One Tree Reach Wetland



Land and Environment Court views Nayla Road Subdivision

mapped as 'Bushfire Prone Land' which places potentially significant implications for management of bushland including threatened species, populations, Endangered Ecological Communities and other native vegetation in the vegetated buffers between residential and other development and remnant bushland. Recent training in the requirements and planning of APZ's at UTS enabled Natural Resources and Tree Management staff to undertake more holistic assessment of direct and indirect impacts of developments in bushfire prone land. A recent development application on Berowra Creek was recommended for refusal due to the impacts of the associated APZ on remnant bushland, requiring the clearing, modification and ongoing management of 7.47 hectares (26% of the total site).

Conditions of development consent were used to achieve positive biodiversity outcomes on land zoned for development. In particular development applications affecting Sydney Turpentine Ironbark Forest, Blue Gum High Forest, Blackbutt Gully Forest, *Persoonia mollis* ssp. *maxima* and *Darwinia biflora* were reviewed and extensively negotiated.

A working group between the biodiversity planning officers of Warringah, Hills, Ku-ring-gai, Manly and Pittwater Councils was initiated by Hornsby staff last year to exchange planning

tools and share experiences with development assessment and biodiversity conservation. This process has been ongoing and particularly effective for all those involved.

Significant infrastructure and other projects environmental assessments were reviewed for:

- M2 widening
- North West Rail Link
- Epping to Thornleigh Third Rail Track
- Pennant Hills Road widening
- Darwinia biflora Offset Agreement between Defence Housing Australia and Hornsby Shire Council
- Pennant Hills Road widening
- Sydney Water – Cowan Wastewater

Involvement with these projects required review of the environmental assessment reports and consultation with state government authorities, utilities and contractors. Negotiations have sought to limit potential impacts upon local biodiversity on private and Council land.

Environmental assessments reviewed included Reviews of Environmental Factors, Environmental Impact Statements, Assessment of Significance and ecological reports. 14

environmental impact assessment reports were prepared by the team for Council projects.

2.4 Illegal Land Clearing and Tree Loss

83 breaches or complaints were investigated by Biodiversity Planning staff for many instances of small scale vegetation clearing within private and public lands. In addition to these the Biodiversity staff assisted Council's Tree Management Officers to assess the impacts of tree removal on trees that form part of Critically Endangered Communities (CEECs) or Endangered Ecological Communities (EECs), such as Blue Gum High Forest or Turpentine-Ironbark Forest.

Some of the key issues for conservation are that CEECs and EECs occur primarily on private land, are often heavily impacted and their condition severely compromised by urban development, are poorly represented in Council's parks and reserves and National Parks estate and there is little suitable area for replanting to offset their loss. Unfortunately there are regular occurrences of trees being illegally removed in urban and rural areas of the Shire, with particular difficulties in monitoring and addressing compliance matters in the rural districts.

2.5 Flora and Fauna

The NPWS Wildlife Atlas indicates that 24 threatened fauna species (seven bats, four other terrestrial mammals, ten

birds, two frogs and one reptile) listed under the NSW Threatened Species Conservation Act 1995 reside within the bushland of Hornsby Shire and a further ten threatened species occasionally visit. Council's Manager of the Natural Resources Unit was actively involved as a member of the Australian Government's Recovery Teams for the Critically Endangered Blue Gum High Forest and Turpentine-Ironbark Forest, provided major input to Priority Action Statements for threatened plant species in collaboration with the NSW Office of Environment and Heritage and participated in reviewing vegetation mapping by NPWS for the Hornsby Local Government Area. Staff assisted OEH and a consultant in surveying for the rare plant *Asterolasia elegans* in the north of the Shire.

To better understand, manage and conserve the Shire's flora and fauna, three studies were undertaken this year.

Waterbird survey of Hornsby Shire: following Stage 1 estuarine and migratory wetland birds and priority habitat mapping by University of South Wales, the Stage 2 study was completed focussing on the upstream river flat habitats and farm dam habitats. The grant funded study found 61 native species including four threatened species listed under the TSC Act 1995, 13 species listed as migratory under the EPBC Act 1999 and two regionally significant species. Highest numbers of waterbirds were recorded in Brooklyn/ Dangar Island and Laughtondale. The most important site for migratory shorebirds is Dangar Island where it is used as a brief stopover for migration and

Survey of rare plant Asterolasia elegans



that there numbers have been declining and there is a need for a community education program. Upland dams were found to be important for waterbirds, with the best site being at Fagan Park, Galston. The greatest diversity of waterbirds was found at Laughtondale on a floodplain wetland which will be at greatest risk from the effects of climate change.

Native Flora and Fauna Conservation Study and Management Plan: a Shire wide plan was completed that undertook to survey, conserve and monitor terrestrial native flora and fauna in the Shire providing updated information on species diversity and current range to assist the Hornsby Shire Climate Change Adaptation Strategy (2010) which requires the assessment of potential impacts of climate change on flora and fauna in the Shire. Results indicate the presence of Australasian Bittern, Masked Owl, Sooty Owl, Barking Owl and Heath Monitor. The study also identified Priority Conservation Areas and potential habitat corridor maps. Updated priority actions were provided to build upon the previous HSC Biodiversity Conservation Strategy (2006).

Eastern Pygmy Possum: Biodiversity planning unit staff (Mark Hood and Alex Fraser) commenced a long term monitoring study using the threatened Eastern Pygmy-possum as a baseline indicator. A total of 50 specially made nest boxes (made from salvaged hollow timber) were installed across ten (10) sites in the Shire in consultation with Dr. Brad Law (Senior Ecologist, Forests NSW) and Paul Burcher (Aquila Ecological). The trial from the previous 2011-2012 period was so successful in detecting the targeted threatened species at each of the sites including areas where the possum had not been previously recorded, that five more sites (another 25 boxes) were added in total. The survey expanded into other locations and incorporated the use of remote camera traps to learn more about their behaviour. It is envisaged that the presence of this threatened species will be a good ecological indicator and assist with the way Council manages its bushland resources including implementing appropriate fire regimes. Other biodiversity monitoring techniques including bird, bat and frog recorders will be employed at the 10 sites to increase Council's knowledge of biodiversity in the Shire.

Council staff contributed to the collation of data with DA assessments providing information on the location of endangered flora and fauna. The presence and status of small cryptic marsupial mammals including Sugar Glider, Feathertail Glider and Eastern Pygmy Possum are hard to detect due to their shy and often cryptic nocturnal behaviour. This group of mammals also have specific food and habitat resources that are critical to their survival so they are extremely to habitat modification and removal practices. Interesting wildlife observations sent to Alex Fraser are recorded and all wildlife data was provided to the NSW Office of Environment and Heritage Wildlife Data Unit as per Section 132c licensing requirements

2.6 Biodiversity and Native Trees & Vegetation Preservation in draft Hornsby LEP & DCP

Council exhibited the draft Hornsby Local Environment Plan (LEP) and the new comprehensive Development Control Plan (DCP) from 5 June to 7 August 2012. The draft LEP and draft DCP largely addressed issues previously raised, through the LEP zonings and Biodiversity Map and DCP elements on Biodiversity and Preservation of Native Trees and Vegetation.

A study was undertaken to monitor the impact of Council's amended Tree Preservation Order (TPO) that protects only indigenous trees of Hornsby Shire and trees in Heritage Conservation areas. It found that no additional numbers of trees were removed, but that the trees removed were large and contributed to a significant canopy loss of 56% per annum in suburbs where the TPO had changed.

2.7 Offsets

In the 'Bushland Shire' there are significant areas of bush on private land and it is inevitable that development will have cumulative losses of native vegetation. Council's Green Offsets Code assists in providing an offset where there is no possibility of a development avoiding an impact on native vegetation. The policy has been regularly reviewed on a regular basis.

The Code has been updated in May 2013 to provide better definition as to the trees and vegetation that are covered under the Code and to better explain how the Code is implemented. Restoration costs have also been updated in accordance with CPI.

The principles of this policy are to 'Avoid, Minimise and Mitigate' impacts of a development that must be fully exhausted before examining the option to seek an offset. Some development proposals submitted to Council suggest that this is often ignored, by seeking an offset without any discussion of avoidance or alternative options as required under this policy.

Throughout 2012-13 over 180 applications for development that impact on native vegetation were referred to the Natural Resources Branch. In the majority of cases vegetation impacts were minimal and offsetting could occur on site through appropriate landscaping. A minority of developments had a larger impact on native vegetation and these impacts were able to be mitigated on site through approved Vegetation and Restoration Management Plans. For these and more significant impacts Natural Resources have utilised the Code and other guidelines to avoid, minimise or mitigate development impacts.

One of the offsetting options within this policy is the use of Voluntary Planning Agreements (VPA). VPAs enable the land owner to offset the loss by providing practical, managerial and financial offsets through a legally binding agreement. In accordance with the Code, if impacts cannot be offset

on-site then offsets on other land or financial contributions for conservation require a legally binding agreement (ie: a Voluntary Planning Agreement).

Four offsets were implemented during the year – two at Fullers Avenue and Kenley Park for the restoration of Blue Gum High Forest, another at Mt Ku-ring gai Park to offset the loss of bushland at Berowra Car Park and the fencing and installing interpretive signs at Berry Park, Mount Colah and Ron Payne Oval for Darwinia biflora. Other offsets included a topsoil translocation project for Darwinia biflora at the Wisemans Ferry tip revegetation site, financial contribution for additional impacts on remnant trees at Dural and a \$65 000 Voluntary Planning Agreement to offset the loss of Sydney Turpentine Ironbark Forest in Epping.

Wisemans Ferry Tip revegetation works



Darwinia sign and fencing at Berry Park

<p>The Principle of Avoid, Minimise and Mitigate. Offsetting should only be considered once all efforts to avoid, minimise and mitigate any negative impacts have been exhausted.</p>
<p>The Precautionary Principle - In conducting an offsetting action the precautionary principle should be applied so that a cautious and conservative approach is taken towards risk where there is uncertainty or lack of scientific confidence in an action.</p>
<p>The Principle of Net Gain - This code should lead to a net gain and improve the condition of the environment. The primary objective of an offset activity should be to create, enhance, or protect in perpetuity ecologically viable habitat for locally endemic species.</p>
<p>The Principle of Avoiding the Effects of Cumulative Impacts- Offsetting should not be used as a justification for granting approval to developments, where the cumulative environmental impacts of that development are greater than the benefit to be obtained from the offset action.</p>

Table 1: Offset Principles

3.0 Bushfire Management

The Natural Resources Branch has a significant responsibility for bush fire management in Hornsby Shire with 22,000 properties in the Shire being mapped as bushfire prone. A large proportion of Hornsby Shire has been rated as having extreme or very high bushfire risk and a 47 km interface occurs between public land and developed areas in the Hornsby LGA, with 27 km being Council managed bushland. Council is the local authority under the Rural Fires Act and is responsible for the prevention, mitigation and suppression of bush fires in the LGA, which is delegated to the RFS through a service agreement. Council is also a member of the Bush Fire Management Committee (BFMC) responsible for identification, planning and treatment of bush fire risk management through the Bush Fire Risk Management Plan and the Annual Fuel Management Program.

The Natural Resources Branch is responsible for addressing the bush fire risk on land owned or managed by Council and for controlling burning on private land through the issue of permits.

3.1 Bush Fire Risk Management Plan

The Hornsby Ku-ring-gai Bush Fire Risk Management Plan was implemented through the H-K Bushfire Management Committee's Annual Works Program for 2012-2013. Council implemented the plan and program on its land by preparing for hazard reduction burns, manual fuel reduction, education and fire trail works. The following activities undertaken in the Hornsby LGA during the year and were assisted by grant funding of \$135, 550.

Manual hazard reduction

Works identified in the Hornsby Shire Council Bushfire Risk Mitigation Manual Works Program 2010-2015 were carried out by Council contractors. Manual works were scheduled and undertaken with assistance of grant funding from the Bushfire Mitigation Fund:

- Treatment of 43 Asset Protection Zones representing an interface length of 6204m and affording protection to 219 properties immediately adjoining Council bushland; and
- 10 Works Access Lines were maintained.

Hazard reduction burns

Council undertook preparation for all burns scheduled for completion under Works Program:

- Fourteen environmental assessments were complete in preparation for hazard reduction burns identified; and
- On-ground site preparation for the majority of the scheduled burns.

Due to wet autumn weather only 4 burns were completed at:

- Cumbora Circuit Bushland
- Somerville Road Bushland
- Singleton Mill Rd Foreshore & Wisemans Ferry Cemetery
- Peat Park & Bimbil Avenue Playground

Unavoidable delays to 3 burns were encountered and alternate strategies developed. Gloucester Road was again delayed due to breeding period of the threatened Powerful Owl; Stokes Avenue was again rescheduled for the burn to occur outside the breeding period of the threatened Square Tailed Kite. Currawong works were completed manually due to fibre optic cable in the reserve.

Community Education– Council adopted the Hornsby Ku-ring-gai Community Fire Education Strategy 2012-2014.

Council ran three resident education events facilitated by the Nature Conservation Council at Beecroft/ Pennant Hills, Hornsby/Thornleigh and Mount Colah attended by over 100 residents.

A Community Education Trailer was fitted out for use by Hornsby and Ku-ring-gai Councils at community education events with grant funding of \$14,500.



Bush fire community education



Bush fire training



Woodcourt fire trail stage 3 works

3.2 Burning on Private Land – Clean Air Regulation

Permits to Burn: Council issued 549 'Approval to pile burn' permits issued under the Protection of Environment Operations (Clean Air) Regulation 2010.

Breaches of Protection of the Environment Operations Act, (Clean Air) Regulations 2010

4 inspections resulting from complaints regarding illegal burning were undertaken in the 2012-2013 financial year.

3.3 Council Fire Trails

Fire trail works

Council implemented the schedules for Bushfire Risk Mitigation Fire Trail Works Program 2010-2015 on Council land undertaking slashing and maintenance works at:

- Cumbora trail
- Fallon Drive trail
- Gully trail
- Keighran trail

- Koala Place trail
- Lonsdale trail
- Lyrebird Gully trail
- Mckinley trail
- Old Berowra trail
- Rofe Park trail
- Simon trail
- Thomas Wilkinson trail
- Turner trail
- Ulolo trail
- Banyula trail

Fire trail upgrades

Woodcourt Fire Trail Berowra Heights – a major upgrade of Sections 2 and 3 of the Woodcourt Fire Trail was completed with an RFS grant of \$70,000 for Stage 3 works and Council funds.

Old Mans Valley Fire Trail Hornsby was upgraded with an RFS grant of \$20,000.

Binnari Road entrance to Rofe Park Trail – the entrance was kerb and guttered to allow all weather access.

3.4 Bush Fire Hazard Complaints regarding Council Bushland

Nine hazard complaints against Council managed lands had works undertaken or planned. Works were completed include Dural Street Hornsby, King Road Hornsby, Currawong Reserve Berowra, Kiparra Park Dangar Island, Northview Place and 1143 Pacific Highway Cowan. Burns have been scheduled for Manor Road Hornsby, Gloucester Road Epping, Byles Creek Beecroft.

3.5 Council GIS support of the Bush Fire Management Committee

The Natural Resources Branch worked closely with the BFMC in particular the NSW Rural Fire Service (RFS) and Fire and Rescue NSW in all aspects of bushfire management to ensure optimum bushfire mitigation outcomes for the communities of the shire.

Fire Unit Database – as part of a continuing project Council

contributed to the development of a GIS management tool that will allow the efficient examination of relevant data to examining strategic locations and priorities for hazard reduction burning. The tool is being developed by NPWS as lead agency with major contributions from Council and other relevant land management agencies on the fuel management subcommittee.

3.6 Grants

Fire Mitigation Works: Council obtained \$90,000 and \$135,550 to fund works associated with Hazard reduction burns and within Asset Protection Zones.

Natural Disaster Resilience Program – Bushfire Risk Management Scheme: Hornsby and Ku-ring-gai Councils were successful in obtaining a further \$14,500 each for the fit out of the shared community education trailer.

3.7 Bush Fire Prone Land Mapping

Council undertook another round of bushfire prone land mapping addressing further issues raised in feedback from RFS Head Office.

4.0 Bushland Operation

4.1 Contract and Staff Bush Regeneration Program

Council's bushland regeneration program treated 56 sites on Council owned land and Crown land where Council is trustee or where management devolved to Council. Some sites were on Office of Environment & Heritage land that is co-managed with Hornsby Shire Council in Berowra Valley National Park under an agreement. One grant funded bushland restoration site was on private* land in conjunction with an adjacent public bushland reserve. Approximately 90% of the sites were contracted to 13 bush regeneration companies under year 1 of a 3 year tender with contracts renewed in August 2012. Works covered approximately 119 ha restoring small degraded urban bushland remnants to the mitigation of weed sources that threatened larger and more pristine bushland reserves.

Bushland Regeneration Sites

- Appletree Bushland, Cherrybrook
- Arcadia Park, Arcadia
- Arcadia Road, Fagans Road Arcadia - Roadside
- Bar Island
- Beecroft Reserve
- Begonia Reserve, Normanhurst
- Benedictine Monastery, Arcadia*
- Berowra Park Bushland and Turner Road Bushland
- Cheltenham Oval, Cheltenham
- Cherrybrook Tech High School Bushland
- Chilworth Recreation Reserve, Devlins Creek Reserve and Beecroft Reserve
- Dog Pound Creek Bushland and Ginger Meggs Park - Bluegum Forest
- Brickpit Park, Thornleigh
- Byles Creek - Britannia Street Bushland and Azalea Grove Bushland
- McKinley Place and Lambe Place - Callicoma Walk, Cherrybrook
- Murralong Road - Calna Creek - Hornsby Heights
- Carrs Bush, Arcadia – Fagan Park
- Carrs Road, Arcadia – Roadside
- Carters Road, Dural – Roadside
- The Lakes of Cherrybrook Bushland
- Cherrybrook Road Bushland
- Crosslands Reserve
- Dog Pound Creek Bushland, Westleigh
- Epping Road Bushland, Epping
- Fearnley Reserve, Beecroft
- Fishburn Road and unmade Bevans Road Bushland, Galston
- Flame Tree Close Bushland, Cherrybrook
- Florence Cotton Bushland Reserve, Hornsby
- Galston Recreation Reserve, Galston
- Greenway Park Bushland, Cherrybrook
- Hornsby Park, Quarry Road, Hornsby
- Old Mans Valley and Rosemead Road Bushland
- Kenley Park, Normanhurst
- Kent Street Reserve, Epping
- Kirkham Road, Beecroft Reserve
- Malsbury Road and Milsons Parade, Normanhurst – Roadside
- Marymount Mercy College, Castle Hill*
- McKell Park, Brooklyn
- Mills Park Bushland, Asquith
- Mountside Reserve, Mount Colah
- Mt Ku-ring-gai Hard Fill, Mt Ku-ring-gai
- Netherby Street Bushland, Wahroonga
- One Tree Reach Wetland, Loughtondale
- Osborn Road, Normanhurst – Roadside
- Erlestoke Park, Upper Pyes Creek Bushland and Pyes Creek Bushland, Dural
- Ray Park and Plympton Road Bushland, Epping
- Reddy Park, Hornsby
- Rofe Park Bushland , Hornsby Heights
- Arcadia Crescent , Berowra
- Singleton Road, Wisemans Ferry
- Stewart Avenue, Hornsby
- Sunnyridge Road, Arcadia – Roadside
- Upper Berowra Creek, Pennant Hills
- Upper and Middle Terrys Creek Bushland, Dence Park, Stanley Road Bushland, Epping
- Vimiera Park, Epping
- Waitara Creek Bushland and Normanhurst Park, Normanhurst
- Westleigh Drive Bushland and Duneba Drive Bushland South, Westleigh
- Wisemans Ferry Recreation Reserve- Riparian zone
- Wongala Crescent, Pennant Hills
- Zig Zag Creek, Pennant Hills

In addition to bushland regeneration works, maintenance of the native vegetation landscaped zones at 13 Catchment Remediation Rate (CRR) sites was carried out.



Funding included Section 94 contributions for capital upgrade of 18 sites at the cost of \$170,000. Council funds of \$50,000 were expended on ongoing bushland maintenance sites, grant and green offset funds totalling \$226,684 and CRR funds of \$75,000 for Catchment Remediation sites. This year had a threefold increase in grant and other funds spent.

4.2 Tree Management in Bushland Reserves

Council's Bushland Operations Team responded to approximately 135 Customer Service Requests from residents for tree assessment in Bushland reserves across the Shire from Epping to Wisemans Ferry. Contract tree works were undertaken subject to assessment.

4.3 Myrtle Rust and Phytophthora

Following successful treatment of Myrtle Rust in Tim Brownscombe Reserve, Bushcare volunteers were allowed to re-enter the reserve under strict hygiene protocols. The Tim Brownscombe Bushcare group was joined by other volunteers under a Bushcare Trainer to address the *Tradescantia fluminensis*. Treatment of Nursery stock before

and after open days continued and outbreaks at residents' properties were recorded.

Phytophthora was recorded at several sites in the Shire. Council reinforced hygiene protocols with staff and contractors and carried out some exclusion works.

4.4 Berowra Valley National Park (BVNP) Working Group

Gazetted as a National Park in September 2012 in recognition of its significant natural and cultural values, the park is owned and primarily managed by the National Parks and Wildlife Service (NPWS) and Council undertakes specific roles. A working group of NPWS (now part of Office of Environment and Heritage) and Council's Natural Resources Branch met regularly during the year to ensure the smooth running of the park by the two agencies for which Council prepared its annual service plan. Crosslands Reserve and its access road is managed by Council as the road and 50% of the reserve is under Council's direct ownership. Council conducted Park interface activities where Council land adjoins BVNP, including maintenance of existing and installation of four new catchment remediation devices that treat stormwater draining into the Park, training and coordination of

32 Bushcare groups with sites covering 14 ha, management of two strategic walking tracks and 9 contract bush regeneration sites over 26 ha.

4.5 Noxious Weed Control

Grant funding was received for Year 4 of the Regional Weed Action Grant Program which enabled proactive noxious weed inspections and control. Together with Council's reactive program, overall 784 inspections were made and 164 noxious weed notices issued.

Regional Noxious Weeds Program included inspections of private properties around 6 reserves with high conservation value and undergoing contract or volunteer bush regeneration activities for many years. They were inspected previously and incidence of weeds had decreased. Where noxious weeds were present advice letters were sent and 75% of residences removed the weeds, with the remaining few requiring a home visit for a one on one session to clarify the identification and control of the specified weeds.

Reserves inspected to protect significant native vegetation were:

- Florence Cotton Reserve, Hornsby - Blackbutt Gully Forest (139 inspections)
- Chilworth Reserve, Beecroft – Blue Gum Shale Forest (118 inspections)
- Bambara Reserve, Carlingford – Blue Gum Shale Forest (140 inspections)
- Valley Road, Hornsby – Blue Gum Diatreme Forest (54 inspections)
- Blackbutt Avenue, Pennant Hills – Blackbutt Gully Forest (24 inspections)
- Bridge Road, Hornsby – drainage reserve Bushcare site (31 inspections)

Council inspected Wallum Bulla, Council's Hard fill Depot for Boneseed, Pampas Grass and Tussock Paspalum, treating several specimens of Boneseed, with the other weeds absent. Staff undertook inspections for Monkeycomb, a new weed incursion but failed to locate additional specimens in Chilworth Reserve, Beecroft and Crosslands Reserve, Hornsby Heights where it was successfully treated several years ago.

Planting inside wallaby fence at Apanie Place Westleigh



Bushcare at Tim Brownscombe with Myrtle Rust



Council inspected and treated priority noxious weeds along 2 transport corridors:

- 14 km between Hornsby and Cowan for Tussock Paspalum, Boneseed, Pampas Grass and Tussock Paspalum
- 14 km between Pennant Hills to Glenorie for Boneseed and Tussock Paspalum
- Council inspected 2 additional transport corridors
- 1 km of Cockle Creek for Kidneyleaf Mud Plantain, a Class 1 Noxious Weed which is known to occur (and has been treated) at a site directly upstream
- A large infestation of Japanese Knotweed on railway land between Wahroonga and Waitara was monitored and referred to Railcorp who undertook treatment

Responsive noxious weed visits and education: 88 service requests were received for noxious weeds on private property. An additional 182 property inspections were also undertaken related to general enquiries, DAs and TAs. An additional 210 phone and email enquiries were received. The majority of weeds on private property were Large-leaf and Small-leaf privet (*Ligustrum lucidum* and *Ligustrum sinense*), Morning glory (*Ipomea indica*), Lantana (*Lantana camara*),

Noxious Weed - *Ludwigia longifolia*



Camphor laurel (*Cinnamomum camphora*) and Trad (*Tradescantia fluminensis*). A review and submission was made for the amended Noxious Weeds Act and for the proposed new Order 30.

Two committee meetings of the Sydney North Regional Noxious Weeds Committee were attended to keep aware of new grant and regional weed priorities and initiatives.

Common Name	Botanical Name	Class
African feathergrass	<i>Pennisetum macrourum</i>	5
African turnipweed	<i>Sisymbrium thellungii</i> and <i>Sisymbrium runcinatum</i>	5
Alligator weed	<i>Alternanthera philoxeroides</i>	3
Anchored water hyacinth	<i>Eichhornia azurea</i>	1
Annual ragweed	<i>Ambrosia artemisiifolia</i>	5
Arrowhead	<i>Sagittaria montevidensis</i>	4
Artichoke thistle	<i>Cynara cardunculus</i>	5
Asparagus fern	<i>Asparagus aethiopicus</i>	4
Athel pine	<i>Tamarix aphylla</i>	5
Balloon vine	<i>Cardiospermum grandiflorum</i>	4
Bear-skin fescue	<i>Festuca gautieri</i>	5
Bitou bush	<i>Chrysanthemoides monilifera</i> <i>subspecies rotundata</i>	3
Black knapweed	<i>Centaurea nigra</i>	1
Blackberry (exc cultivars black satin Chehalem, Chester Thornless Dirksen, Thornless Loch Ness, Murrindindi Silvan Smooth and stem Thornfree)	<i>Rubus fruticosus aggregate species</i>	4
Boneseed	<i>Chrysanthemoides monilifera subspecies monilifera</i>	2
Bridal creeper	<i>Asparagus asparagoides</i>	4
Broomrapes (incl all Orobanche species except native <i>O.cernua</i> variety <i>Australiana</i> and <i>O.minor</i>)	<i>Orobanche species</i>	1
Burr ragweed	<i>Ambrosia confertiflora</i>	5
Cabomba (inc all Cabomba species exc <i>C.furcata</i>)	<i>Cabomba species</i>	5
Camphor laurel	<i>Cinnamomum camphora</i>	4
Cape broom	<i>Genista monspessulana</i>	3
Cape ivy	<i>Delairea odorata</i>	4
Castor oil plant	<i>Ricinus communis</i>	4
Cat's claw creeper	<i>Macfadyena unguis-cati</i>	4
Cayenne snakeweed	<i>Stachytarpheta cayennensis</i>	5
Chilean needle grass	<i>Nassella neesiana</i>	4
Chinese violet	<i>Asystasia gangetica subspecies micrantha</i>	1
Climbing asparagus fern	<i>Asparagus plumosus</i>	4
Clockweed	<i>Gaura parviflora</i>	5
Corn sowthistle	<i>Sonchus arvensis</i>	5
Dodder (inc all <i>Cuscuta</i> species exc native species <i>C.australis</i> , <i>C.tasmanica</i> and <i>C.victoriana</i>)	<i>Cuscuta species</i>	5
East Indian hygrophila	<i>Hygrophila polysperma</i>	4
Elephant grass	<i>Arundo donax</i>	4
English broom	<i>Cytisus scoparius</i>	4
Espartillo	<i>Amelichloa brachychaeta</i> <i>Amelichloa caudata</i>	5
Eurasian water milfoil	<i>Myriophyllum spicatum</i>	1
Fine-bristled burr grass	<i>Cenchrus brownii</i>	5
Fountain grass	<i>Pennisetum setaceum</i>	5
Gallon's curse	<i>Cenchrus biflorus</i>	5
Giant reed	<i>Arundo donax</i>	4
Glaucous starthistle	<i>Carthamus glaucus</i>	5
Golden thistle	<i>Scolymus hispanicus</i>	5
Gorse	<i>Ulex europaeus</i>	3
Green cestrum	<i>Cestrum parqui</i>	3
Harrisia cactus	<i>Harrisia species</i>	4

Common Name	Botanical Name	Class
Hawkweed	<i>Hieracium species</i>	1
Heteranthera	<i>Heteranthera reniformis</i>	1
Horsetail	<i>Equisetum species</i>	1
Hydrocotyl	<i>Hydrocotyl ranunculoides</i>	1
Hygro	<i>Hygrophila polysperma</i>	4
Hygrophila	<i>Hygrophila costata</i>	2
Hymenachne	<i>Hymenachne amplexicaulis and hybrids</i>	1
Karoo thorn	<i>Acacia karoo</i>	1
Kochia (exc B.scoparia subspecies tricophylla)	<i>Bassia scoparia</i>	1
Kosters curse	<i>Clidemia hirta</i>	1
Lagarosiphon	<i>Lagarosiphon major</i>	1
Lantana	<i>Lantana species</i>	4
Leafy elodea	<i>Egeria densa</i>	4
Lippia	<i>Phylla canescens</i>	4
Long-leaf willow primrose	<i>Ludwigia longifolia</i>	3
Ludwigia	<i>Ludwigia peruviana</i>	3
Madeira vine	<i>Anredera cordifolia</i>	4
Mexican feather grass	<i>Nassella tenuissima</i>	1
Mexican poppy	<i>Argemone mexicana</i>	5
Miconia	<i>Miconia species</i>	1
Mikania	<i>Mikania micrantha</i>	1
Mimosa	<i>Mimosa pigra</i>	1
Morning glory (coastal)	<i>Ipomoea cairica</i>	4
Morning glory (purple)	<i>Ipomoea indica</i>	4
Mossman River grass	<i>Cenchrus echinatus</i>	5
Ochna	<i>Ochna serrulata</i>	4
Pampas grass	<i>Cortaderia species</i>	3
Parthenium weed	<i>Parthenium hysterophorus</i>	1
Pellitory	<i>Parietaria judaica</i>	4
Pond apple	<i>Annona glabra</i>	1
Prickly acacia	<i>Acacia nilotica</i>	1
Prickly pear	<i>Cylindropuntia species</i>	4
Prickly pear (inc all Opuntia species exc O.ficus-indica)	<i>Opuntia species</i>	4
Privet (Broad-leaf)	<i>Ligustrum lucidum</i>	4
Privet (narrow-leaf /Chinese)	<i>Ligustrum sinense</i>	4
Red rice	<i>Oryza rufipogon</i>	5
Rhizomatous bamboo	<i>Phyllostachys species</i>	4
Rhus tree	<i>Toxicodendron succedaneum</i>	4
Rubbervine	<i>Cryptostegia grandiflora</i>	1
Sagittaria	<i>Sagittaria platyphylla</i>	5
Salvinia	<i>Salvinia molesta</i>	2
Scotch broom	<i>Cytisus scoparius</i>	4
Senegal tea plant	<i>Gymnocoronis spilanthoides</i>	1
Serrated tussock	<i>Nassella trichotoma</i>	4
Siam weed	<i>Chromolaena odorata</i>	1
Smooth-stemmed turnip	<i>Brassica barrelieri subspecies oxyrrhina</i>	5
Soldier thistle	<i>Picnoman acarna</i>	5
Spotted knapweed	<i>Centaurea stoebe subspecies micranthos</i>	1
St John's wort	<i>Hypericum perforatum</i>	4
Texas blueweed	<i>Helianthus ciliaris</i>	5
Trad	<i>Tradescantia fluminensis</i>	4

Common Name	Botanical Name	Class
Tropical soda apple	<i>Solanum viarum</i>	2
Turkey rhubarb	<i>Acetosa sagittata</i>	4
Tussock paspalum	<i>Paspalum quadrifarium</i>	3
Wandering Jew	<i>Tradescantia fluminensis</i>	4
Water caltrop	<i>Trapa species</i>	1
Water hyacinth	<i>Eichhornia crassipes</i>	2
Water lettuce	<i>Pistia stratiotes</i>	1
Water soldier	<i>Stratiotes aloides</i>	1
Willow (inc all Salix species exc S.babylonica, S. x reichardtii, S. x calodendron)	<i>Salix species</i>	5
Witchweed (Striga species exc the native Striga parviflora)	<i>Striga species</i>	1
Yellow burrhead	<i>Limnocharis flava</i>	1
Yellow nutgrass	<i>Cyperus esculentus</i>	5

Class 1 - State Prohibited Weeds.

The plant must be eradicated from the land and the land must be kept free of the plant. The weeds are also "notifiable" and a range of restrictions on their sale and movement exist.

Class 2 - Regionally Prohibited Weeds.

The plant must be eradicated from the land and the land must be kept free of the plant. The weeds are also "notifiable" and a range of restrictions on their sale and movement exist.

Class 3 - Regionally Controlled Weeds.

The plant must be fully and continuously suppressed and destroyed.

Class 4 - Locally Controlled Weeds.

The growth of the plant must be managed in a manner that reduces its numbers spread and incidence and continuously inhibits its reproduction.

Class 5 - Restricted Plants.

There are no requirements to control existing plants of Class 5 weeds. However, the weeds are "notifiable" and a range of restrictions on their sale and movement exists.

4.6 Feral Animal Control

Council signed the Sydney North Regional Rabbit Management Plan which commits Council to undertaking an annual action plan including monitoring and controlling rabbits under relevant legislation, providing support for community control measures and workshops as funding is available.

4.7 Walking Tracks and Bushland Access

Council has over 49 km of formal and informal bushwalking tracks. Formal tracks include:

- Beecroft-Cheltenham Link Track, Beecroft-Cheltenham
- Historic Pioneers' Track, Epping
- Bluegum walk, Hornsby
- Mangrove walk, Brooklyn
- Callicoma walk, Cherrybrook
- Carrs Bush walk, Galston
- Crosslands salt marsh walk, Crosslands
- Mambara walk, Pennant Hills
- McKell Park walk, Brooklyn
- Terrys Creek walk, Epping
- Bar Island, Berowra Creek
- Links to The Great North Walk

Audits: Annual track audits were undertaken on all of Councils formal tracks.

McKell Park, Brooklyn Steps Upgrade: Stage 1 - Upgrade of the steps between lower McKell Park and William Street completed in June 2013. These works included realign of existing steps and install of new steps and landing at the William St entrance. Stage 2 works will be completed in September 2013.



Pyes Creek: the final stages of the Community Building Partnership Grant funded further improvements along the riparian bushland and residential interface. Timber was recycled to create a horse sculpture for children's play in the adjoining park, timber blocks to improve access over obstacles along the informal bushland track, bollards to act as informal barriers and two timber seats strategically positioned for the public to pause for a moment and appreciate the open natural space. Interpretative signs described the significance and majestic qualities of the Blue Gum High Forest – a critically endangered ecological community present at Upper Pyes Creek. Orientation signs highlighted areas of interest and the facilities. The Hawkesbury Nepean Catchment Management Authority provided additional funds to continue important bush regeneration along the riparian corridor. These have focused on areas of high resilience or high profile.

Ray Park Beecroft: construction of Steps and repair of a small section of the Pioneers Track in Ray Park Beecroft

Habitat Havens: the Ray Park Heritage Group was successful in applying for a \$20,000 grant through Caring for our Country in 2010. The work completed in 12/13 followed up on bushland restoration and rehabilitation and encouraged habitat creation and education. The site was

visited by 4 local schools to learn about the local environment and the importance of protecting and creating habitat for local fauna.

Minor works, maintenance and inspections occurred at:

- Bar Island Track - weed control
- Blue Gum Walk - cut all timber fallen across track, directional signage enhanced
- Terrys Creek Track – maintained northern section, cut back vegetation from Vimiera Park to Dence Park
- Waitara Creek - Bryan Ave Normanhurst - steps repair
- Brooklyn Boardwalk- inspection
- Mambarra Track - clearing overgrowth, leaf litter and soil removed from surface
- Beecroft-Cheltenham Link Track - vegetation along all tracks was cut back
- Pioneers Track - vegetation along all tracks was cut back
- Carrs Bush - all signs cleaned

McKell Park steps upgrade

Pyes Creek track and sign with artist Steve Pym





4.8 Mountain Bike Trail

Construction of Stage 1 of the Hornsby Mountain Bike Trail was completed and the trail was opened. Over 30,000 laps of the track had been ridden since the trail counter was installed. A volunteer Trailcare Program was launched with 169 volunteers working on site monthly contributing 493 hours valued at \$14,790. Funding of \$102,000 was received from Metropolitan Greenspace and \$50,000 Department of Sport and Recreation for the project. Staff undertook a monthly trail audit and site monitoring. Stage 2 of the Trail was planned during the year.

4.9 Roadside Vegetation Implementation Project (RVIP)

Council completed works in accordance with the grant funding from Local Shires Association 'Restoration of Roadside Corridors and Vegetation Linkages in Hornsby Shire'.

The RVIP project aimed to conserve and recreate vegetation connectivity across fragmented rural and urban landscapes. The project had 3 components which included on-ground restoration works, installation of 'Significant Roadside Vegetation' signs and in-house training of Council Works and Parks field staff to highlight significant vegetation within the Hornsby LGA.

The project commenced in March 2012 and works completed and final report submitted in June 2013.

The outputs of the RVIP were:

- Bush regeneration and weed control occurred across 8.3 ha of Council managed bushland. These works were undertaken at Malsbury Road/Midson Parade Normanhurst; Osborn Road, Normanhurst; Jasmine Road, Normanhurst; Arcadia Road, Arcadia; Blacks Road, Arcadia; Vision Valley Road, Arcadia; Singleton Road, Singleton Mill; Fishburns Road, Galston; Bevans Road, Galston; Carrs Road, Galston; Fagans Road, Galston; Belbowrie Road, Galston; Galston Road, Galston; Crusader Road, Galston; Bayfield Road, Galston; Farnborough Road, Dural; Carters Road, Dural; Laurie Road, Dural; Vineys Road, Dural; Vineys Lane, Dural; Wongala Crescent, Pennant Hills; Dartford Road, Thornleigh; Kenley Park, Thornleigh; Brooklyn Road, Brooklyn.
- 3 training sessions were held over 3 days with a total of 60 participants from Councils Works and Parks field staff. Environmental practises and identification of significant roadside areas in Hornsby LGA were highlighted. A booklet on Environmental Practises was developed and published for field staff.
- Installed 75 'Significant Roadside Vegetation' signs within the Hornsby LGA to raise community awareness to areas of significant roadside vegetation.

Hornsby Mountain Bike Track

Roadside environmental training



5.0 Bushcare and Community programs

5.1 Bushcare

Hornsby Shire Council Bushcare program established since 1998 has over 100 registered groups. With over 780 volunteers in the program, it is the largest volunteer program in the Shire and one of the largest Bushcare programs in the Sydney metropolitan area. Bushcare volunteers restored and enhanced 76 ha of native vegetation and habitat in Council's bushland reserves across the Shire. 62 new Bushcare volunteers signed up during this period in 2012-2013, almost double to last year. Bushcare volunteer hours are estimated at 17,500 during this period, which can be valued at \$525,000. This hourly figure increased significantly this period after a new trainer commenced in June and took over 20 groups that needed a trainer now providing 85% of groups with a regular trainer.

Bushcare celebrated its 23rd year in Hornsby Shire at the Annual Christmas Workshop in November 2012 with 120 attending the Hawkesbury River cruise. Two perpetual awards were presented, 'The Golden Trowel' to the Chilworth Reserve Bushcare group that has been with the program since the beginning and have achieved exceptional results and the 'Nursery Award' for exceptional interest and dedication was won by Mark Greaves. The Bushcare photo competition received over 32 general entries and where

showcased at the celebrations. A new category of 'Before and After' received 3 entries, displaying the results of bush regeneration over time. Bush poetry was introduced with four entries. This year the photo competition was displayed at all 4 Hornsby Council libraries and Wallarobba featured best photos as judged by the volunteers.

The Bushcare team provided a variety of seminars, talks, tours and training to Bushcare volunteers and some to the wider community. A total of 380 participated within 37 events held, an increase from last year. Bushcode training is compulsory for volunteers' accreditation and must be refreshed every 5 years. Other training supports ongoing learning and is provided across Hornsby and Ku-ring-gai Councils. Training included four Bushcode Workshops, two Bushcode Refresher Workshops, the new Bush Boosters, 3 ID workshops, five walks and talks, two site tours and the Bushcare Annual Christmas Party. Community events included National Tree Day and a number of stalls at community events.

A new campaign to promote and recruit Bushcare volunteers was introduced and resulted in 62 new volunteers joining the program.



Short Street in 2003 (above) and after Bushcare in 2012 (below) - photos Barry Tomkinson

Chilworth Bushcare Group wins Golden Trowel Award at Christmas party



Earthwise cottage activities and projects

The Earthwise cottage and Community Nursery is the office of the Bushland Community Programs team and is used as a venue to host plant giveaways, staff meetings and workshops. The site has undergone significant refurbishment to enhance it as a sustainable demonstration house and improve it as a facility for volunteers and staff activities. This year the new instalments to demonstrate retrofitting sustainable features included 2 solartubes and thermal window coverings of Australian made environmentally accredited fabrics.

This year the Earthwise Cottage and Nursery precinct was the venue for 18 meetings, 7 Bushcare training events, 3 external training workshops, three nursery open days, 73 nursery volunteer days, and nine nursery tours including four from Ryde TAFE student tours.

5.2 Community Nursery

The Community Nursery has over 40 active volunteers that contributed 2,723 hours this year over 3 half days a fortnight produced over 52,458 tubestock being the highest ever for a financial year. These plants are produced for public lands projects and educational provisions such as the Free Native Plant Giveaway, Council projects including CRR works, land rehabilitation projects and landscape works. 44,235 plants were dispatched providing a good turn around of stock. All seed is locally collected to maintain genetic integrity and

provenance planting. Volunteer work was valued at \$64,410 over 72 days.

The annual four Free Native Plant Giveaways provided 6085 native tubestock to about 2,000 ratepayers from every suburb in the shire. This promotes local native plants to home gardeners and the importance of protecting the bushland shire.

The nursery showcased best practice through its water recycling capturing on-site runoff rainfall, solar power, minimal waste production, recycling of materials and a low chemical reliance. Treatment for Myrtle Rust kept the nursery free of the disease again this year.

The nursery maintained relationships with other councils and industry professionals including Fairfield Council with an exchange program, an ongoing educational partnership with Northern Sydney Institute of TAFE Ryde College and technical assistance to a variety of customers across the community within the Hornsby Shire. The community nursery sets an industry benchmark and often gets requests for a tour, with nine official tours conducted this year to showcase its production and facilities.

The nursery maintained its Nursery Garden Industry of Australia accreditation to ensure its operations meet high standards

5.3 Guided Bushwalks

Council's free Guided Bushwalks program took 33 walks with 380 residents this year, with most being fully booked with a waiting list. The program repeated popular 'Nature Photography' walk at the Kurrajong Track and the Blue Gum walk. A wide variety of bushwalks of varying lengths and grades of difficulty promoted enjoyment of the bushland as well as education. Eight new walks were introduced including a preschoolers walk at Carrs Bush and Westleigh Loop.

5.4 Habitat Connectivity

Council's Habitat Connectivity and Rural Lands Program continued in 2012-13 through various Environmental Trust and Catchment Management Authority grants. This program allowed Council to reinforce the partnerships made with rural landholders, monitor and consolidate previous works strengthening vegetation connectivity on private and public land.

In 2012-13 a total of 3.3 ha of bushland on public and private land was restored. All works occurred within endangered and critically endangered communities of Sydney Turpentine Ironbark Forest and Blue Gum High Forest. On-ground restoration on private and public property continued at

Cherrybrook Technical High School, Benedictine Monastery, Arcadia, Marymount Mercy College, Castle Hill and road reserves at Galston, Pennant Hills and Normanhurst.

A Sustainable Horse Management Workshop was held at Dural Pony Club in May 2013 with 19 participants attending.

5.5 National Tree Day

The nursery provided 973 trees for National Tree Day on 31 July 2011 and Schools National Tree Day on 29 July. Community planting was held at 5 sites including Roselea, Wallumeda Wetland, Berowra Girl Guides and Asquith Boys High School.

5.6 Wisemans Ferry Community Connections

Council's Wisemans Ferry 'Connecting the Community and the Environment' project allowed connections to be made with the river community. School children undertook revegetation using local native plants and connected with their local environment. Council installed unity poles with the local indigenous and art community. The project was made possible with a Hawkesbury Nepean Catchment Management Authority grant.

Unity Poles - Wisemans Ferry

Native plant give away - Community Nursery



6.0 Budget and Strategic Issues

6.1 Grants, Income and Expenditure

A high number of grants were received during 2012-13 to fund environmental works required by the adopted Council strategies and plans such as Biodiversity Conservation Strategy, the Bushfire Risk Management Plan, the Plans of Management for Community and Crown Land and the Unstructured Recreation Strategy. Grant income was lower than in the previous year and other income was similar to

the previous year. This was reflected in less expenditure on casuals to assist with grant projects, with expenditure on permanent salaries remaining at \$1.1m, works of \$1.37m and volunteer contributions of \$604,200 being over 70% increase from last year reflecting a new Bushcare trainer and the new Hornsby Trailcare program. This reflects team functions of biodiversity assessment and planning, project managing specialised bushland and bushfire contracts and co-ordination of Bushcare and nursery volunteers.

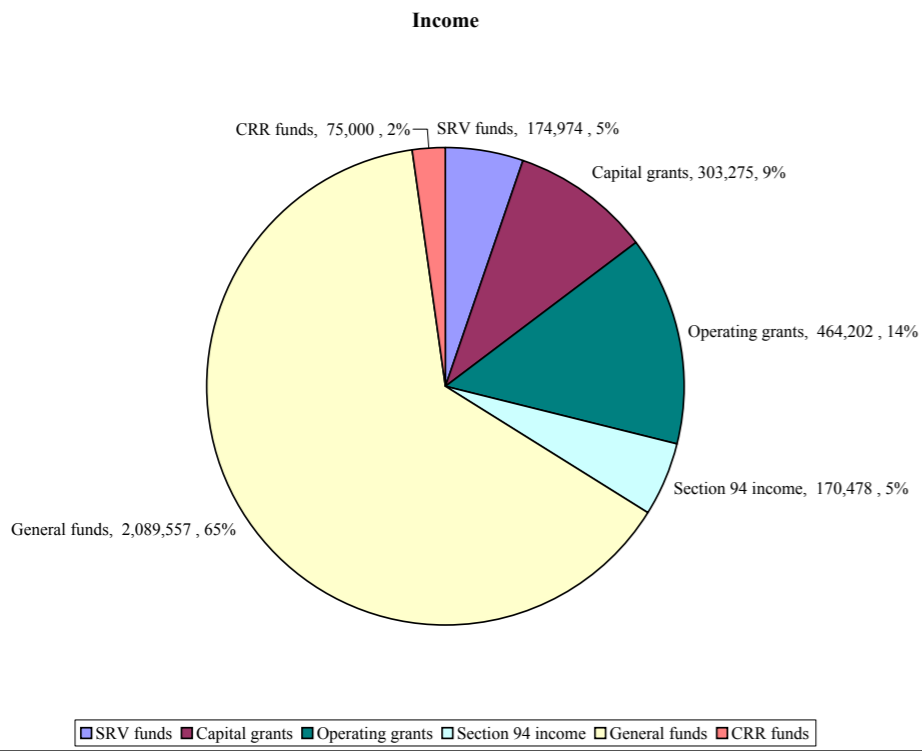
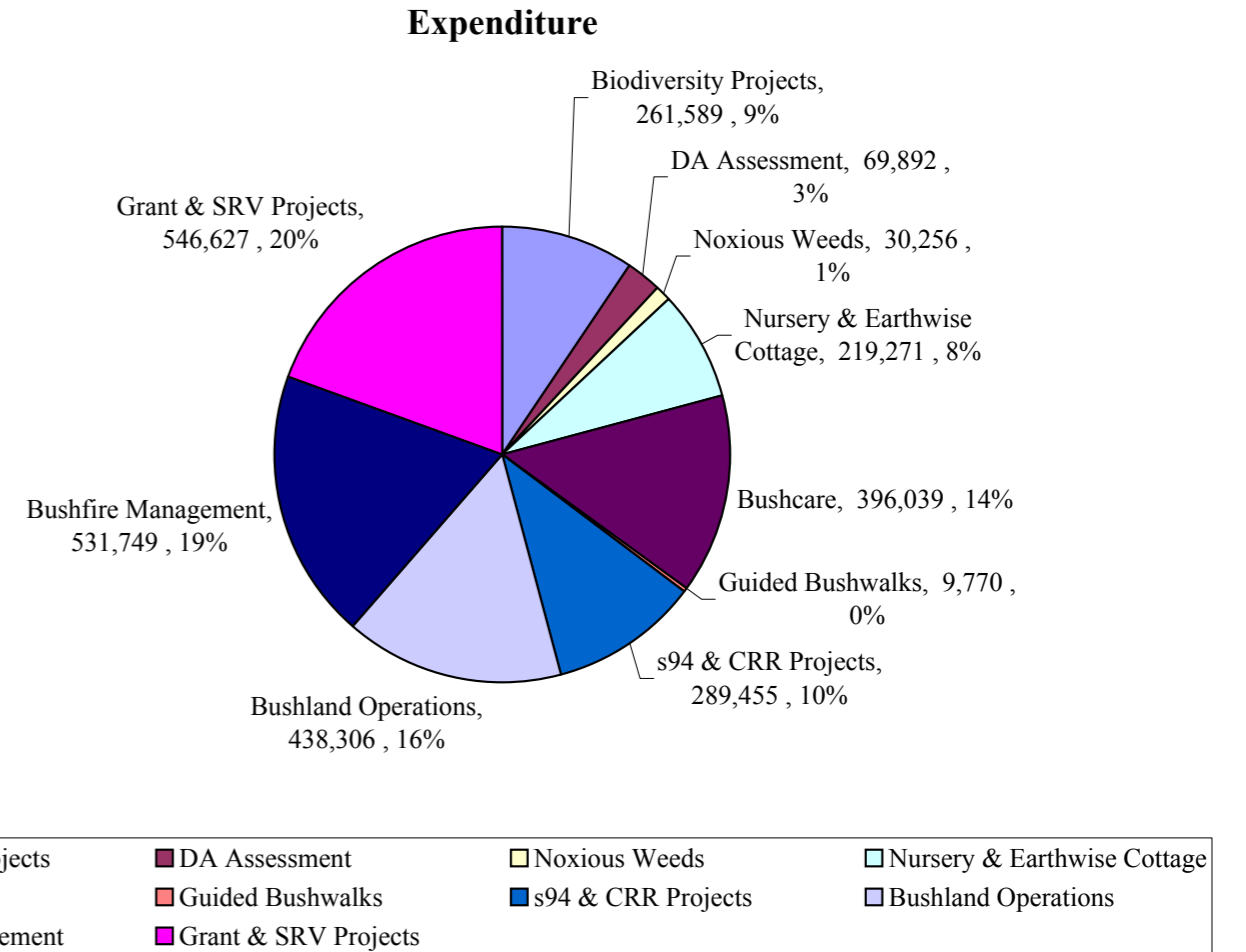
Grants and offset income and commitments received include:

Project	Grants, Offset Income and Commitments Received
Wetland Bird Survey	\$19,500 (Total commitment \$42,446)
Bushland Planning	\$1,980
Bush Nursery	\$2,448
Bushland Operations	\$1,451
Bushfire Asset Grant	\$135,550
NDRP Fire Education Trailer fitout	\$14,500 (Total commitment \$29,000)
Old Mans Valley and Woodcourt Fire trail	\$90,000
Bushland Grant Projects	\$42,000
Bush Noxious Weed Inspectorial	\$19,009
Wongala Offset	\$10,000
Surrey Street Epping Offset	\$65,000 (Income not yet received)
One Tree Reach Stage 4	\$5,906 (Total commitment \$38,500)
Bush - Bar Island Restoration	\$27,273
Bushland - Roadside Vegetation	\$24,750 (Total commitment \$49,500)
Bush - M2 Public Benefit Fund	\$30,601 (Total commitment \$400,000)
Wiseman's Ferry Cemetery	\$5,494 (Total commitment \$30,000)
SMCMA EEC Restoration	\$21,000 (Total commitment \$50,000)
Off Road Bike Facility	\$75,397 (Total commitment \$102,000)
Hornsby Park and Old Mans Valley Grant	\$42,000
WASIP EEC and Roadside Restoration	\$110,000
WASIP Bushcare Capacity and Incentives	\$39,000
Total	\$700,746



Grant and offset works undertaken during the year:

Project	Expenditure	Income 2012/2013 and prior
Wetland Bird Survey - Grant	27,300	-27,300
Wongala Offset	1,998	-10,000
Bushfire Asset Grant	128,050	-128,050
NDMP Grant Fire Education Trailer fitout	16,388	-29,000
Old Mans Valley Fire Trail Grant	13,893	-13,893
Woodcourt Fire Trail Grant	66,624	66,624
Bushland Grant Projects	5,496	
Noxious Weed Inspectorial Grant	13,937	-19,009
One Tree Reach Stage 3 Grant	15,922	-17,368
One Tree Reach Stage 4 Grant	6,940	-32,690
Kenley Park Offset	4,319	-14,630
Fuller Avenue Offset	5,500	-29,140
Habitat Connectivity Grant	16,115	-17,000
HNCMA CFOC Grants	20,239	-20,460
Berowra Car Park Offset	6,051	-23,191
CBP Upper Pyes Creek Track Grant	27,216	-30,235
Bar Island Restoration Grant	4,355	-27,273
Darwinia biflora Offset	20,487	-73,000
Roadside Vegetation Grant	48,837	-49,250
M2 Public Benefit Fund	30,243	-57,604
Wisemans Community Connections Grant	5,500	-5,273
Wiseman's Ferry Tip	32,151	-32,151
Wiseman's Ferry Cemetery Grant	33,591	-30,000
SMCMA EEC Restoration Grant	30,070	-50,000
HNCMA - Upper Berowra Creek	29,500	-69,091
Hornsby Heritage Steps Restoration Grant	9,690	
Mountain Bike Grant 1	27,285	-50,000
Off Road Bike Facility Grant	109,039	-102,000
Total	\$756,736	\$890,984



6.2 Offset Income

During the 2012-13 year Council received a lower level of offset funds of \$10,000 as opposed to \$20,000 in 2011-12 and a record high of \$133,255 in 2010-11. An offset commitment of \$65,000 was made during the year for a larger development however income was not yet received.

6.3 Broader Community Consultation

Bushland Management Advisory Committee continued in its role to advise Council on strategic direction and projects. During the year the Committee commented on the review of the Biodiversity Action Plan 2012-13, commented on monitoring of the new Tree Preservation Order and made recommendations for additional tree species to be protected, inspected the Hornsby Mountain Bike Trail during construction, inspected Wisemans Ferry Cemetery Restoration, assisted in reviewing applicants for BMAC. The Committee was reformed following the Council elections and four new members nominated to join.

Environmental Weeds - Current Policies and Practices: a presentation was given by the Manager of Bushland and Biodiversity at the NSW Weed Society's Annual Seminar on 'Implementing Weed Management Plans'.

7.0 References

Hornsby Shire Council (2012). Green Offsets Code. Hornsby Shire Council, Hornsby – accessed at <http://hsconline.hornsby.nsw.gov.au/appenquiry/user/policy/default.aspx?page=found&2=offset&4=33&4a=ALLPC&5=&6=>

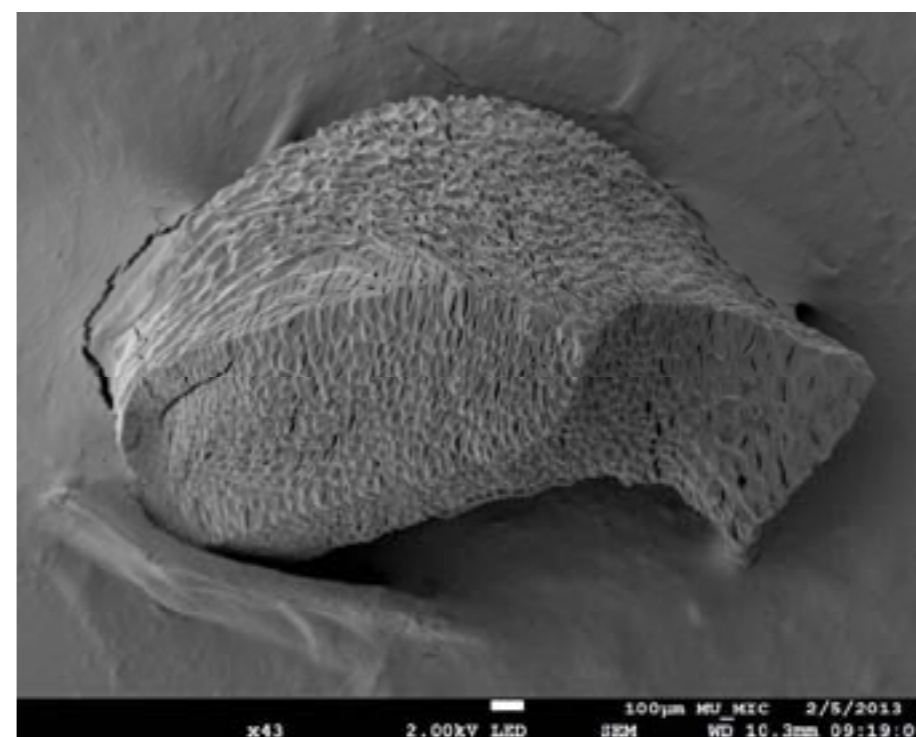
NSW Office of Environment and Heritage - Bionet the website for the Atlas of NSW Wildlife – accessed at http://www.environment.nsw.gov.au/atlaspublicapp/UI_Modules/ATLAS_/AtlasSearch.aspx

8.0 Appendix 1: Map of Hornsby Shire





HORNSBY SHIRE COUNCIL COMMUNITY NURSERY YEARLY REPORT FOR 2012-2013



Eucalyptus pilularis single seed photographed with electron microscope. Photo- Nicole Vella



Executive Summary

Hornsby Shire Council's Community Nursery is an integral part of the Hornsby Bushcare Program along with several other major council programs. It operates within the Natural Resources Branch in the Environment and Human Services Division.

The nursery achieved accreditation with the NIASA (Nursery Industry Accreditation Scheme Australia) complying with strict standards of environmental best practice nursery management. It has maintained accreditation since 2005, and aims to continue accreditation as a model of best practice to other nurseries across NSW. The Hornsby Community Nursery was the first local government run nursery to achieve this accreditation and to date continues to be the only Council Accredited Nursery in NSW.

The nursery aims to showcase best practice operations across the wider community. This is achieved through many initiatives including full water recycling system capturing on site runoff rainfall, solar power, minimal waste production, recycling of materials and a low chemical reliance.

Volunteers are an integral part of the community nursery with respect to production, a knowledge base and fostering a valuable community asset through their ongoing participation.

This financial year saw an increase of 37% in the volume of plants despatched at the nursery compared to the previous financial year. Total production has continued to be very strong with over 52,000 plants being produced, slightly more than the previous year.

Large plant orders are being worked on for revegetation at the new Hornsby Aquatic Centre, along with ongoing supply of plants for the Catchments Remediation Rate associated works, Nursery Plant Giveaway Days for ratepayers, local schools and revegetation of the former Wisemans Ferry landfill site this financial year.

The nursery also continues to foster and maintain relationships with other councils and industry professionals including Fairfield Council, Willoughby Council, North Sydney Council and recently Hawkesbury City Council. The nursery also continues an ongoing educational partnership with Northern Sydney Institute of TAFE and technical assistance to a variety of customers across the Hornsby Shire. Local schools are a major component for environmental information to be passed onto and we work closely with schools across the Hornsby Shire through supply of plants, hands on planting assistance and knowledge transfer through education.

Overview

The Hornsby Community Nursery aims to provide native plants to the Hornsby Shire through Community programs such as the Bushcare Volunteer Program, Plant Giveaway days for ratepayers, Citizenship Ceremonies, Schools, community groups and a variety of environmental workshops, events and activities across the Shire including National Tree Day.

The nursery also provides locally collected provenance stock to bushland restoration projects including Bushland Operations' works, CRR Water Catchment devices, Parks Department projects and other projects that are run within Council's core business.

The nursery aims to encourage the community to learn about the values of native plants, for biodiversity conservation goals, and to support Councils projects with the provision of sound environmental restoration techniques and technical advice to Council and associated project staff.

The nursery operates under the main outcomes of the Hornsby Biodiversity Conservation Strategy, the Environmental Education Strategy and Bushland Education Strategy and the Natural Resource Branch Action Plans.

The nursery operates on a recurring budget of 16,000 (operational) per annum and aims to achieve an income of 25,000 per year to support the ongoing maintenance of the site and required resources. The nursery operates within the Bushland Community Programs Team, with one full time Nursery Co-ordinator, and currently 40 dedicated volunteers.

The information recorded in this report is for the financial year 2012-2013 and illustrates the various areas that the nursery operates within to meet its set objectives.



Volunteer and Plant Production Statistics

Nursery Volunteer Program

Volunteer Hours	Volunteer Hours within the Nursery
Wednesday Volunteers (578 total individual participant visits by 24 people)	1870
Saturday volunteers (223 total individual participant visits by 16 people)	750
Other Hours	103
Total hours	2,723 (2,138 previous year)
No. volunteers	
Active volunteers for the year (24 on Wednesday / 18 on Saturday)	40
New volunteers joined program	6

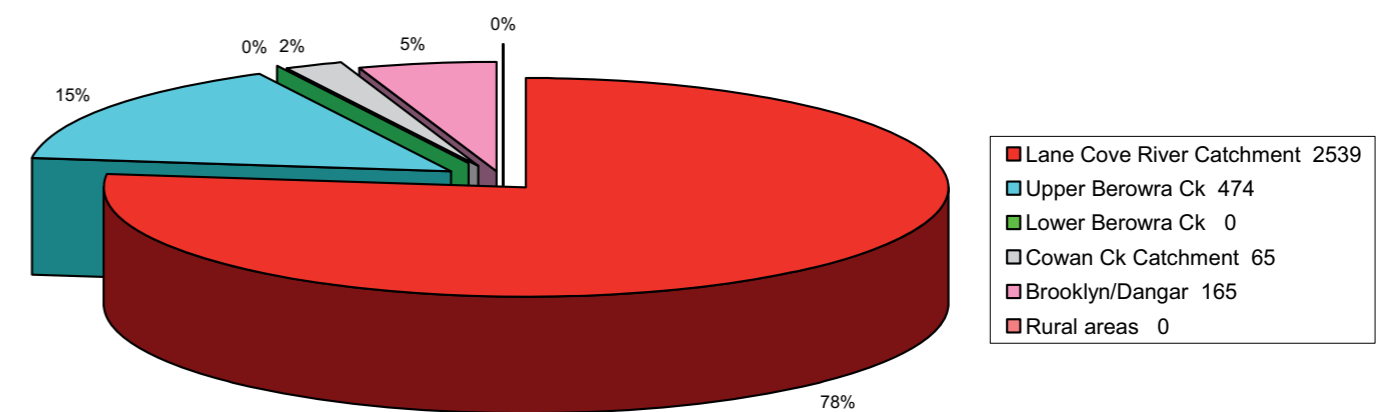
Plant Production	
Seed lots collected	50
Number of seed lots propagated Provided 90% of total production	135
Number of cuttings propagated (and no. of spp.) Provided 10% of total production based on an average of 93% cutting strike rate	5,372 (44)
Total number of tubestock produced July 2012 - June 2013	52,458
Holding capacity at nursery	35,000

Plants Supplied	
Total plants dispatched for July 2012 - 2013	44,265
Total number of residential properties that received plants through Nursery Open Days	1174 (6,085 plants)

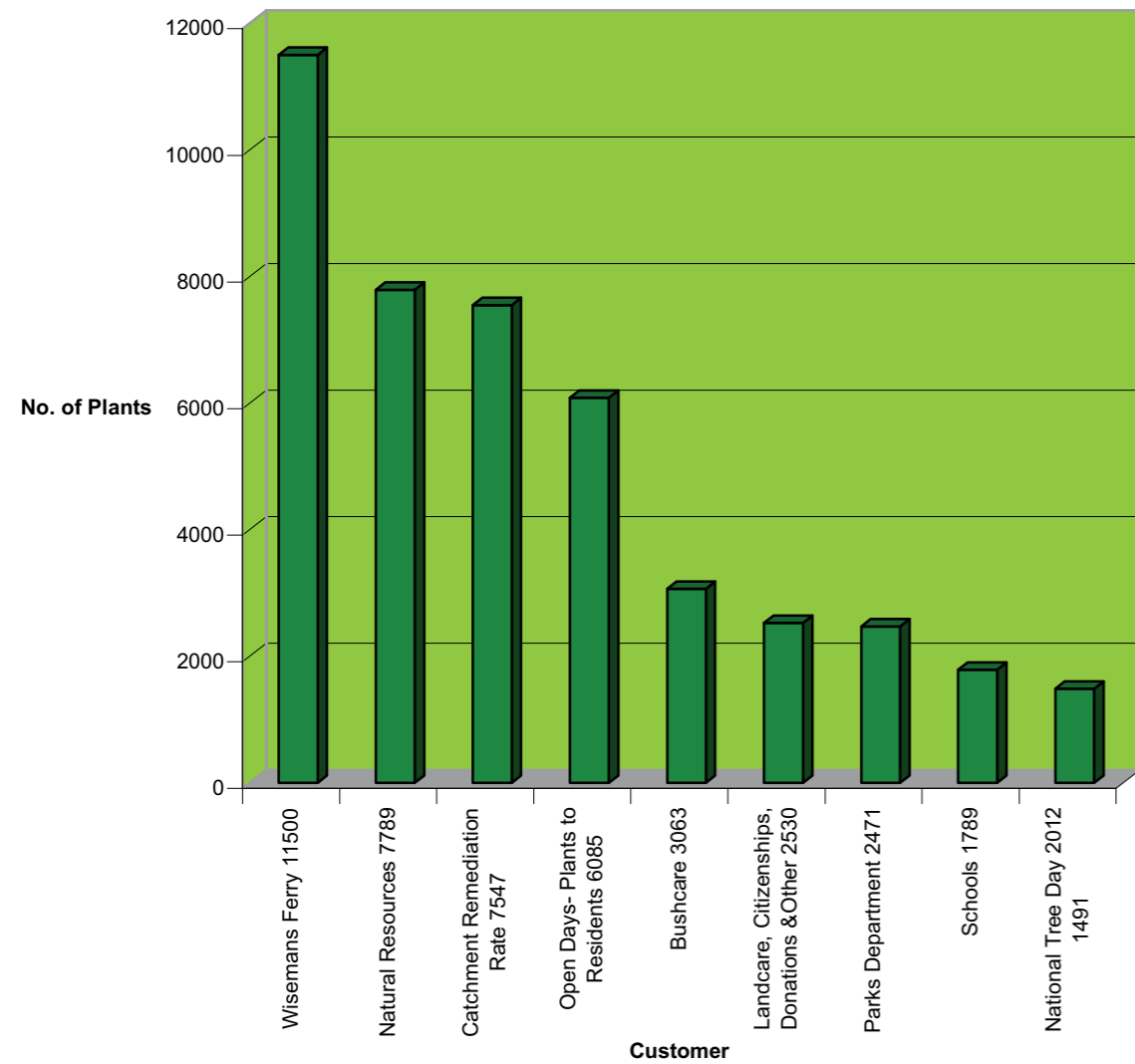
Council Programs and Plant Recipients

Customer	No. of Plants	\$
Wisemans Ferry Tip	11500	5,000.00 (50% paid last year)
Natural Resources	4789	11,209.00
Catchment Remediation Rate	10547	9,811.10
Giveaway days and associated - plants to residents	6085	
Bushcare	3063	
Parks Department	2471	6,572.00
Schools	1789	
National Tree Day 2012	1491	
Doantions	1086	
Landcare and other	820	
NPWS	420	630.00
Citizenship ceremonies	204	
Hornsby Aquatic Centre	Next F.Y.	2,340.00
Totals	44265	\$35,562.10

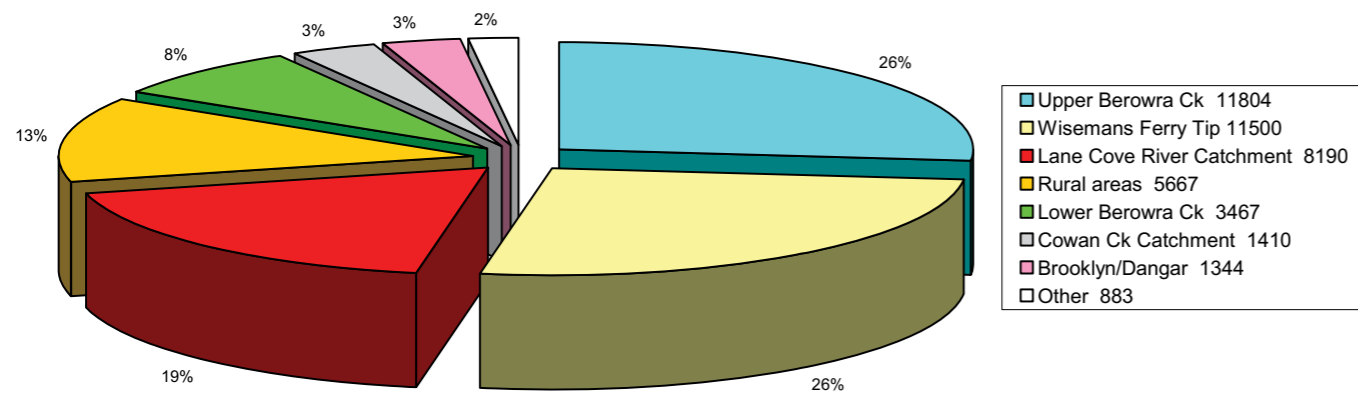
Bushcare Plants Distribution 2012- 2013 by area/catchment TOTAL 3063



Plant Distribution 2012- 2013



Total Plant Distribution of plants across the Hornsby Shire by catchment or area 2012- 2013



	Catchment Remediation Rate	Give Aways - Plants to Residents
Lane Cove River Catchment	3520	1020
Upper Berowra Creek	6467	1543
Lower Berowra Creek	560	2055
Cowan Creek Catchment	0	0
Brooklyn/Dangar	0	50
Rural areas	0	1117
Other	0	300
Total	10547	6085

	Greenstyle, Landcare, Citizenships, Donations and Other	Natural Resources
Lane Cove River Catchment	215	304
Upper Berowra Creek	396	1366
Lower Berowra Creek	212	349
Cowan Creek Catchment	420	50
Brooklyn/Dangar	44	0
Rural areas	660	2720
Other	583	0
Total	4591	4789

	Bushcare	Parks and Recreation Branch
Lane Cove River Catchment	2359	180
Upper Berowra Creek	474	152
Lower Berowra Creek	0	80
Cowan Creek Catchment	65	599
Brooklyn/Dangar	165	960
Rural areas	0	500
Other	0	0
Total	3063	2471

	Schools across whole year (exc. NTD)	2012 National Tree Day
Lane Cove River Catchment	47	545
Upper Berowra Creek	1171	235
Lower Berowra Creek	90	121
Cowan Creek Catchment	206	70
Brooklyn/Dangar	125	
Rural areas	150	520
Other		
Total	1789	1491

Wisemans Ferry Tip 11500

Table 2. Breakdown of plants by customer and area of distribution

Accomplishments

- July 2012 Hornsby Advocate interview for Guided Bushwalks Program
- July 2012 Jute mat laid at Hornsby South Public School for National Tree Day (NTD)
- July 2012 Strong participation from local schools for NTD with 8 schools participating (906 plants planted by school children).
- July 2012 Meeting for upcoming new Hornsby Aquatic Centre revegetation order
- August 2012 Outdoor Environmental Training delivered for field staff in Parks and Works Teams 2 and 9 August
- August 2012 Snake and Spider awareness training undertaken
- August 2012 Wisemans Ferry schools NTD held with HSC staff
- August 2012 Team Planting Day at Darmanin's Bushcare site- Beecroft
- August 2012 Atlas of Living Australia training
- August 2012 Warringah Council Community Nursery volunteers visited
- August 2012 Post Fire Regeneration Native Plant Workshop held at Cheltenham
- August 2012 Visit with volunteers and Fairfield Council to Mt Annan Botanic Gardens
- September 2012 Hornsby South Public School planting day
- September 2012 320 Canopy trees despatched for the month
- September 2012 New banners up for Plant Giveaway Days- results were great
- October 2012 Pennant Hills High School inspection to assist with school gardens renovations
- October 2012 Smooth Moves Manual Handling course delivered for nursery volunteers
- October 2012 Ryde TAFE tour 17/10/2012 16 people
- October 2012 Bush Fire Fighter training with Rural Fire Service
- November 2012 Seed Workshop at Mt Annan Botanic Gardens attended
- November 2012 Tour of nursery by staff and vols from Willoughby Council and North Sydney Council 14 people
- November 2012 Ryde TAFE tour 18 people
- November 2012 Foliage provided by nursery for Annual Arts Awards at Wallarobba Centre
- November 2012 Site meetings for upcoming revegetation works for Hornsby Aquatic Centre and Apanie PI Westleigh
- December 2012 Good volumes of seed collection undertaken across the whole month
- December 2012 Bushcare and Nursery volunteer Christmas Party held- Hawkesbury River cruise
- December 2012 Yr 10 student completed 8 hours of work experience in the nursery
- December 2012 Site visit to Dawson Ave CRR bioremediation basin during construction for upcoming plant requirements
- December 2012 TSC flora spp. check undertaken at Currawong Bushcare site for proposed hazard reduction work
- December 2012 Nursery end of year party held at nursery, 22 volunteers present
- January 2013 18/01/2013 46.1 degrees at nursery in shade
- January 2013 Loaned 22 Advanced Ironbarks to Community Events Co-ordinator for Australia Day celebrations
- February 2013 Site meetings for revegetation required at Parsley Bay and Hornsby Aquatic Centre
- February 2013 Tour of Nursery facility for Ryde Council's Habitat Haven Nursery
- February 2013 Tour of nursery for Councillor Mick Gallagher
- February 2013 Presentation of HSC Nursery Case Study at CMA Nursery Forum held at Coal Loader Sustainability Centre, Waverton
- March 2013 Ready Set Grow Propagation Vegetable Propagation Course delivered
- March 2013 CRR site visits and reviews
- March 2013 Tour of nursery for Councillors Robert Browne and Bernadette Azizi
- March 2013 Bushcare Seminar Series Bird Tour delivered
- March 2013 Easter Show plants - 1280 loaned out

- March 2013 Volunteer Eco Garden Vegie Vols program commenced
- April 2013 HSC Staff plant giveaway days 52 staff visited
- April 2013 Attended Bush Fire Fighter assessment
- April 2013 Nursery Plant Giveaway Day Marketing Strategy meeting attended
- April 2013 16 people from Willoughby and North Sydney Council visited for a cutting propagation workshop
- April 2013 Assisted NPWS with Asterolasia elegans surveys on council managed land at Loughtondale Gully
- May 2013 CRR site visit for upcoming planting- Bellamy Street Pennant Hills
- May 2013 Hawkesbury County Council Tour of the Nursery- 14 people
- May 2013 Site visit Pennant Hills Primary School for upcoming BGHF restoration
- May 2013 NGIA Nursery Accreditation Audit held
- May 2013 Fairfield Council staff inspected water harvesting system at nursery
- May 2013 Grasses workshop for Rural Land Incentive Program delivered at Arcadia
- June 2013 Ryde TAFE tour of the nursery 15 students
- June 2013 Recognising and Monitoring Pest and Diseases in container Nurseries Training on 12 and 13 June
- June 2013 "Danative" Nursery visited community nursery for inspection

Nursery Facility Improvements

- November 2012 Microscope donated to nursery
- November 2012 Water harvesting meeting at nursery for future maintenance work
- February 2013 Update of display garden behind cottage for showcasing smaller highly ornamental indigenous species
- March 2013 New Italian manufactured root training pots purchased for street trees
- April 2013 New irrigation drainage installed for recapturing run off water
- April 2013 New irrigation installed for street tree growing area
- June 2013 New pest and disease monitoring program implemented at nursery

Native plant give away - Community Nursery



