



The commercial harvest, salvage and propagation of protected whole plants

Sustainable management plan 2013–2017

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Front cover photo: The *Cymbidium suave* orchid is a protected whole plant species in NSW (Brendon Neilly/OEH).

OEH 2013/0001
ISBN 978 1 74293 965 0
May 2013

This plan should be cited as:

Office of Environment and Heritage 2013, *The commercial harvest, salvage and propagation of protected whole plants: sustainable management plan 2013–2017*, Sydney.

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Terms and definitions

Approved harvester	A person who is licensed to undertake the sustainable or salvage harvest of whole protected plants on land not owned by the licensee.
Artificially propagated	A plant grown from seeds, cuttings, callus tissue, spores or other propagules under controlled conditions. The resulting plant is cultivated in soil or pots of growing media.
AP	An artificial propagation program approved under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> .
Authorised officer	A person authorised by the Chief Executive of the Office of Environment and Heritage, or a person holding an office, position or rank prescribed to exercise a power under the <i>National Parks and Wildlife Act 1974</i> (NPW Act).
Bare root	The condition of the root ball (or equivalent) of plants. When referring to species such as grass trees and tree ferns, 'bare root' refers to transporting plants that are not in a pot or other container. At harvest, the minimum necessary volume of soil and root material must be removed to ensure the plant's survival. For orchids, 'bare root' refers to plants sold that are not attached to and/or growing on a growing media such as a tree-fern slab or pot.
CFMP	The <i>Protected and threatened plants in the cut-flower industry: sustainable management plan 2013–2017</i> . This plan provides management protocols for species in Part 1 of Schedule 13 of the NPW Act in relation to commercial cut-flower use.
Chief Executive	Office of Environment and Heritage.
Club	A club, society or formal group (incorporated or otherwise) involved in growing protected native plants as a hobby and who may, from time to time, sell protected plants.
Commercial	Of or engaged in all forms of the purchase and sale of goods and services.
Critically endangered species	Species listed in Part 1 of Schedule 1A of the TSC Act, which face an extremely high risk of extinction in NSW in the immediate future.
Cultivate	To plant, tend, harvest or improve plants.
Cut-flower	Any plant part that is sold in the commercial cut-flower industry, including flowers, stems, foliage, fruit and seed heads.
DSEWPC	Commonwealth Department of Sustainability, Environment, Water, Population and Communities.
Destroy and destruction	The destruction of the plant with no subsequent use of the plant or its parts.
Director General	NSW Department of Premier and Cabinet.
Endangered population	A population of a species listed in Schedule 1, Part 2 of the TSC Act that is likely to become extinct or is in immediate danger of becoming extinct.

EP&A Act	<i>Environmental Planning and Assessment Act 1979.</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth).</i>
Extractive use or licence	Either a wild harvester or approved harvester licence, where the material in trade is sourced from the wild.
Grower	A person or company licensed under Section 132 of the NPW Act who propagates, cultivates or harvests material from artificial sources, protected or threatened native plants on land that they own or occupy. A grower may be either the land owner or occupier.
Harvest and harvesting	Removal of plants for horticulture, or to extract chemicals, or for food, or for other purposes involving the use of parts of plants. It encompasses plants or plant parts removed by pickers, wild harvesters, approved harvesters and growers.
In the wild and from the wild	In relation to native plants, an independent state of natural liberty.
Local area office	The OEH office responsible for administering and issuing protected plant licences under the NPW Act.
Native plant	Any tree, shrub, fern, creeper, vine, palm or plant that is native to Australia, and includes the flower and any other part thereof.
NV Act	<i>Native Vegetation Act 2003.</i>
NPW Act	<i>National Parks and Wildlife Act 1974.</i>
NPWS	National Parks and Wildlife Service NSW, part of the Office of Environment and Heritage.
OEH	Office of Environment and Heritage, which includes the National Parks and Wildlife Service NSW.
Pick	To gather, pluck, cut, pull up, destroy, poison, take, dig up, remove or injure the plant or any part of the plant.
PBR Act	<i>Plant Breeders Rights Act 1994.</i>
Plant parts	Parts of a plant which are collected for purposes other than propagation, such as for cut-foliage or cut-flowers, but does not include divisions of plants which are taken for the purpose of propagation.
Pot	A container in which plants may be grown and offered for sale, which contains growing media suitable for the species. A pot may include but not be limited to pots, bags, cells, punnets, flasks, tubes or tubs. For epiphytes or lithophytes, a pot may be a slab, board or other appropriate substrate to which the plant is attached.
PR Act	<i>Plantations and Reafforestation Act 1999.</i>
Private land	Freehold land and land leased, held under licence or permit from a natural person, company or the Crown under a tenure that grants an exclusive right of occupancy, or which is in the course of alienation by the Crown under any Act.

Productive use or licence	A grower licence or material produced under a grower licence where the source of the material in trade is not from the wild.
Propagate	See artificially propagated.
Propagule	Any part of a plant capable of forming a new individual when separated from the original plant.
Protected native plant	A species or other taxon listed in Schedule 13 of the NPW Act. These species may be common in the wild but are listed to enable monitoring and regulation of activities associated with them.
PWG	Parks and Wildlife Group (PWG) of the Office of Environment and Heritage, formerly the NSW National Parks and Wildlife Service.
Salvage	Removal of plants from an area that is being, or is to be, drastically altered by approved urban and rural development, forestry activities, mining or infrastructure development, where the plants would otherwise be destroyed.
Seed	For the purposes of this plan, this includes a fertilised ovule produced by a seed plant and the asexual reproductive cell produced by the sporophyte phase of ferns and other non-seed plants. A seed does not include vegetative propagules such as cuttings or division.
Seed harvester	A person licensed to harvest seeds from protected plants for the purpose of selling the seeds.
Sell	As defined in the NSW <i>National Parks and Wildlife Act 1974</i> . The full definition within the Act should be used where any doubt exists but it includes: <ul style="list-style-type: none"> • auction, barter, exchange or supply • offer, expose, supply or receive for sale • send, forward or deliver for sale or on sale • dispose of under a hire-purchase agreement.
Site	A single property held under individual title or a specific parcel of land managed by a public authority. For example, a specific state forest is a single site but may include several picking locations. However, state forests with different names, even though they may adjoin, or adjoining parcels of private land with separate titles are regarded as separate sites. In the case of roadside picking, a site is a 5 km stretch of road.
Taxon (plural taxa)	Any living thing described by a genus name or any other name or description. Taxonomic units are formatted in a nested hierarchy (i.e. variety or cultivar, species, genus, family, order, class, phylum, kingdom).
Threatened ecological community	An assemblage of species occupying a particular area as listed in Part 3 of Schedule 1, Part 2 of Schedule 1A or Part 2 of Schedule 2 of the TSC Act.
Threatened species	A species listed in the schedules of the TSC Act. The schedules are updated on the OEHS website (see www.environment.nsw.gov.au/committee/SchedulesThreatenedSpeciesConservationAct.htm).

TSC Act	<i>Threatened Species Conservation Act 1995.</i>
Vulnerable species	A species specified in Schedule 2 of the TSC Act.
Whole Plant Industry Consultative Committee (WPICC)	The group formed to provide a forum on the range of issues pertaining to the sustainable harvest or use of native plants in NSW.
Wholesaler	A person who buys and sells as a dealer, or on-sells material to an end user for use in the whole plant industry. A wholesaler does not include a person who harvests or cultivates the material.
Wild harvest	Any harvest from naturally occurring wild stands of protected or threatened plants on property of which the licensee is the owner.
Wild harvester	A person or company, licensed under Section 131 of the NPW Act (Wild harvest licence) to harvest from naturally occurring stands of native vegetation on property owned by the harvester. Harvest from land where the person occupies the land under lease is to be dealt with as for an approved harvester licence.
Wildlife	Fauna and protected native plants.
WLMU	OEH Wildlife Licensing and Management Unit, which oversees the licensing program.
WTMP	Wildlife Trade Management Plan, approved under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> .

1. Introduction

In NSW, the value of the native plant industry is estimated to be between \$60 and \$100 million dollars with protected whole native trees and shrubs such as grass trees, cabbage tree palms and macrozamia forming approximately nine per cent (9 %) of steadily growing sales (Danelon 2010).

While the proportion of material in trade from propagated sources is rising, a large number of plants are still collected from the wild. For many species, this poses little threat to their ongoing conservation. However for some species in high demand such as grass trees (*Xanthorrhoea* species), wild harvest is of concern due to potential overharvesting and illegal collection from the wild.

Harvesting plants from the wild can pose risks to both the harvest site itself and the conservation of *in situ* native plant populations including the:

- removal of soil, nutrients, biomass and fauna habitat
- introduction of pathogens and weeds
- reduction in genetic diversity within harvested populations
- introduction of threats to non-target species or populations through habitat modification
- decreased reproduction or recruitment of species through the removal of plant reproductive parts
- modification of abiotic (non-living) factors that influence a species or population.

Illegal harvesting practices can also reduce the viability of legitimate harvesters in the industry, compromising plant quality and undermining consumer confidence in native plant products.

As the lead government environmental agency in NSW, the Office of Environment and Heritage (OEH) has an obligation to work with industry, other agencies and the community to protect and manage the use of whole protected native plants through licensing and other credible regulatory tools.

OEH currently issues licences under the NPW Act to persons seeking to extract and grow whole protected native plants for commercial purposes. This management plan refines and consolidates the existing licensing framework to deliver on two objectives: first that regulation is targeted toward species at risk from unsustainable harvesting and second that best practice management is applied consistently across NSW.

This plan describes the legislative framework, including:

- how it fulfils Commonwealth requirements for a wildlife trade management plan (section 3)
- the types of licences that can be issued for the harvest and cultivation of plants and how and where they may operate (section 4)
- the factors governing the placement of protected whole plants into Schedule 13 of the NPW Act and how they apply to each licence type (section 5)
- an outline of all the detailed operational matters that need to be taken into consideration by licensees (Appendices B to L).

The plan is an educational resource designed to raise awareness among industry stakeholders and the broader community of the range of issues affecting the management and conservation of protected and threatened plants used commercially.

Fundamental to this plan's success is correctly identifying any species being traded. Licensees, OEH staff and the broader industry are encouraged to seek professional assistance in identifying any plants subject to this plan.

Throughout this plan the nomenclature is consistent with that published on the PlantNET website, New South Wales FLORA online and is current at the date of publication (see plantnet.rbgsyd.nsw.gov.au/floraonline.htm).

2. Objectives

The objectives of this plan are to:

- establish a risk-based framework of regulation that focuses effort on higher risk activities and reduces or removes the regulatory burden on low-risk activities or industries
- provide guidance to OEH staff, people working in the whole plant industry and the general public about the management protocols for harvesting, storing, propagating and selling protected whole plants
- manage the sustainable harvest of protected whole plant species by land owners for commercial use, where the species, age or size classes are not readily available in cultivation
- manage the commercial use of whole plants obtained from sustainable harvest and salvage situations, where the species are not available in cultivation, and limit the commercial use of salvage material where equivalent material is available in cultivation
- provide protocols for collecting and using the seeds from protected plants for commercial purposes
- facilitate the reuse of vegetation resources within development approvals
- support the transition to artificial propagation of protected plant species thereby maintaining wild populations of high-value products and reducing long-term incremental loss
- provide guidelines and protocols which allow sustainable commercial use of protected whole plants
- support research by providing access to data collected through the licensing system
- establish a management regime in NSW that complies with the Commonwealth requirements for a wildlife trade management plan (WTMP) and an artificial propagation (AP) program.

3. Legislative framework

3.1 Commonwealth legislation

3.1.1 Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act provides a legal framework for protecting and managing nationally and internationally important flora, fauna, ecological communities and heritage places.

It allows management arrangements to be established that protect, conserve and manage a plant or animal under a WTMP or an AP program where there is commercial use of native species. Species or products sourced under these plans and programs are eligible for an export permit.

This management plan meets the EPBC Act requirements for a WTMP and the proposed regime for NPW Act grower licences meets the requirements for an AP program. Approval of this plan by the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (DSEWPC) means the export requirements for both wild harvested and propagated plants will be reduced on providing a copy of the appropriate NSW licence. Further information on the commercial export of regulated plants is available on DSEWPC's website (see www.environment.gov.au/biodiversity/trade-use/index.html).

3.1.2 Plant Breeders Rights Act 1994

The PBR Act allows Australia-wide proprietary rights to be granted to breeders of new varieties or cultivars of plants and fungi.

A licence under this plan will not be required for growing plant material that has been accepted under the PBR Act. However, it will be the responsibility of the applicant to demonstrate the status of PBR Act material. It is an offence under this Act to use material without the approval of the owner of the property. It is also an offence for anyone to claim PBR Act protection when they do not have such protection.

3.1.3 CITES

The Commonwealth Government is responsible for Australia's participation in a number of related international environmental agreements, such as the Convention on International Trade in Fauna and Flora (CITES) to which Australia is a signatory.

3.2 NSW Legislation

3.2.1 National Parks and Wildlife Act 1974

The NPW Act is the primary legislation for regulating the commercial use of native plants in NSW. Part 9, sections 131 and 132, of the Act permits OEH to license the commercial use of protected native plants, specifically those plants listed as protected in Schedule 13 of the NPW Act.

Under Section 115A of the NPW Act, OEH may prepare management plans to help regulate and monitor the commercial use of protected plants to ensure both their sustainable use and preservation of wild populations. When preparing a management plan, the following matters must be taken into consideration:

- ecology of the species
- sustainability of the proposed management regime
- Aboriginal cultural practices
- standards to be adhered to in the picking or growing of plants

- whether limits need to be imposed on the number of licences that may be issued for a commercial activity if a licence is required to carry out the activity
- protocols for the extraction of plant material from the wild
- consistency with any threat abatement plan, or recovery plan, within the meaning of the *Threatened Species Conservation Act 1995*
- monitoring the activity
- any other matters that the Director General considers relevant.

Protected native plants in NSW are listed in Schedule 13. Unless otherwise stated, this management plan relates only to those species listed in Part 2 of the Schedule (Appendix A).

Part 2 of Schedule 13 has been amended to ensure that only those species considered at risk from unsustainable harvest, trade or other commercial activities will be subject to regulation. Appendix A is the proposed amended schedule.

Under the NPW Act, there are no restrictions on the commercial use of plants not listed in Schedule 13, or on the non-commercial use of plants listed in the schedule.

3.2.2 Threatened Species Conservation Act 1995

The TSC Act provides protection for native plants and animals listed as vulnerable, endangered or critically endangered. The Act places restrictions on using or destroying threatened species and lists the processes that are a significant threat to threatened species, populations and ecological communities. All threatened species are included in this plan.

3.2.3 Native Vegetation Act 2003

The NVA focuses on sustainably managing native vegetation and it also regulates land clearing. This plan places limitations on applying routine agricultural management activities and property vegetation plans under the NVA that relate to the commercial use of protected native plants.

3.2.4 Plantations and Reafforestation Act 1999

Under the PR Act, plantations with an area over 30 ha, or with environmental plantings which exceed the exempted area of 30 ha, require approval from Department of Trade and Investment, Regional Infrastructure and Services. The harvest of whole protected plants in private forestry operations may be regulated under this plan.

3.2.5 Environmental Planning and Assessment Act 1979

The EP&A Act regulates planning and development in NSW. Some local environmental plans prepared under this Act may regulate horticultural activities. Growers need to contact their local council to check what is permissible in their area.

Tree preservation orders (TPOs), which are also implemented under local planning instruments, provide protection for trees in areas where the NVA does not apply. Some protected plants may also be protected under local orders. For more information on TPOs and tree control provisions in development control plans, contact your local council.

3.2.6 Western Lands Act 1901

Holders of Western Lands leases under this Act may have additional restrictions placed on growing and/or picking native vegetation on their lands.

4. Policy and administrative framework

4.1 Licensing for whole plants

This plan regulates the commercial whole-plant industry under four licence types. Three of these regulate activities that extract plants from the wild. They are referred to as 'wild harvester', 'approved harvester' and 'seed harvester' licences. The fourth licence type relates to propagating protected whole plants and is termed a 'grower' licence.

Licensing in this plan only applies to the primary source of plant material. Hence, those persons or businesses that buy and on-sell protected whole plants that have been acquired from a legal source will not be subject to the requirements of this plan. However, wholesalers and retailers should be able to demonstrate that materials are legally obtained and are tagged where required.

4.2 Wild harvester licence (Section 131 NPW Act)

A wild harvester licence authorises a freehold landowner to undertake sustainable harvest from naturally occurring stands of native plants on their property. Only species in Group 1 of Part 2 of Schedule 13 may be taken under this licence type (see section 5.1). Tagging (see section 4.11) and record keeping requirements (see section 4.13) will apply.

Licence application requirements and procedures for wild harvester licences are outlined in Appendix B. Harvest site controls must be provided with licence applications as indicated in Appendix D.

4.3 Approved harvester licence (Section 131 NPW Act)

An approved harvester licence permits harvesting from natural stands of native plants on land not owned by the licensee. It falls into two categories – 'sustainable harvest' and 'salvage harvest'.

Applicants for this licence type are required to demonstrate a minimum level of experience, equipment and facilities before a licence will be issued. A single licence may cover harvest at multiple sites and under both 'sustainable' and 'salvage' situations. Detailed information on licence application requirements and procedures is provided in Appendix C. Harvest site and stockpile site controls must be provided with licence applications as indicated in Appendices D and E. Tagging (see section 4.11) and record keeping requirements (see section 4.13) will apply.

4.3.1 Sustainable harvest

An approved harvester may sustainably harvest some protected whole plants from stands of native vegetation on private lands. This plan defines sustainable harvest as harvesting at a rate which allows the population of the target species to persist indefinitely.

Sustainable harvest activities act as an incentive for landowners to maintain vegetation on their property and are only permitted when the plant species proposed for extraction are not readily replaced by cultivated material and the likely impacts on the harvest site are assessed as acceptable or can be mitigated.

Sustainable harvest is restricted to species in Groups 1 and 2 of Part 2, Schedule 13. As stated, the harvest site, stockpile site and transport controls must be provided with the licence application.

Applicants seeking an approved harvester licence to undertake sustainable harvest must demonstrate in their application that the proposed harvest is, or is likely to be, sustainable for each species. This requirement will apply only to the initial application. However, where a

licensee reapplies for a licence for land under a previous application, OEH may request additional information to aid its assessment process.

4.3.2 Salvage harvest

Approved harvesters may salvage certain protected plants, where construction, mining, forestry or infrastructure development will result in their destruction. The plants of interest to salvage operators in this context are usually those offering a financial return.

Salvage harvest will only apply to an approved development under the EP&A Act. It will not be considered for activities that are deemed 'exempt development'. Salvage harvesting does not limit or mitigate land-clearing impacts.

For forestry operations, salvage will only be permitted from that area of an approved plantation that is currently being harvested (see 4.8.5).

Only protected whole plants in Groups 1 to 3 of Part 2, Schedule 13 can be the subject of salvage harvest. Also, restrictions apply to the size class of plant that can be harvested (see Appendix L). Unharvested products of an unsuitable size class will either be destroyed or left to decompose on site. Otherwise they may be reused onsite as part of site-specific revegetation works or landscaping where appropriate. These restrictions aim to support a transition to cultivated material by reducing access to cheaper salvaged material where equivalent material is commercially cultivated.

Routine agricultural management activities (RAMA) under the NV Act do not qualify for salvage harvest. An application to harvest protected plants from areas subject to a RAMA will be considered as sustainable harvest and all applicable restrictions will apply.

Property vegetation plans (PVP) under the NV Act may endorse the harvest of protected native plants from these areas. However a PVP does not provide an explicit defence to picking or selling native plants. Harvesting must therefore be undertaken with a licence issued under the NPW Act and only activities authorised under the CFMP and this plan are permitted.

OEH encourages consent authorities to incorporate the reuse and salvage of on-site vegetation resources into planning approvals that propose clearing or modifying native vegetation. This may include the on-site reuse of protected plants that cannot be utilised commercially under this plan, the re-use of non-protected species or collecting local seed and other propagules prior to clearing.

4.4 Seed harvester licence (Section 131 NPW Act)

A seed harvester licence is required for those parties wishing to harvest seeds from wild protected plants for the purpose of selling the seeds. Application requirements for a seed harvester licence are provided in Appendix F. Harvesting seed for sale from material in cultivation (see 4.8.7) will be licensed under a grower licence.

This licence type can be issued for any species in any part of Schedule 13 with the exception of individually listed threatened species. Harvest from threatened ecological communities or critical habitat may only be undertaken in a salvage situation (see Appendix F). However, individual licences may have limits or restrictions imposed on the species and quantities that may be harvested. Collection of vegetative material, e.g. cuttings or plant divisions, is not permitted under this type of licence as the impacts from these actions are significantly greater than from seed collection.

Consistent with the defences in the NPW Act, a seed harvester licence may not be required to harvest seeds to grow plants for sale when the seed is harvested with the land owner's permission. However, a grower licence is required to grow plants to sell. Additional details are provided in section 4.9.

4.5 Grower licence (Section 132 NPW Act)

A grower licence is required to grow protected native plants for the purpose of sale. Grower licences may permit the propagation and sale of threatened species. Tag requirements may apply (see section 4.11). Growers may access propagating material from a number of sources including stock plants or through other licensing provisions under this plan (see sections 4.8 and 4.9).

Growers fall into distinct sectors within the industry, such as tube-stock and production nurseries, and societies and species interest groups. The management requirements for each differ slightly to balance the needs of different licensees. A summary of these sectors is described in the following sections.

4.5.1 Tube-stock nurseries

Tube-stock nurseries propagate a range of protected plants with seed obtained from seed merchants or wild stands. Despite some questions about the source of seed material, this sector supports sustainable use of material through low-impact methods. Products are generally sold in tubes or similarly small size classes.

4.5.2 Production nurseries

Most plants in production nurseries are propagated but some may 'grow on' smaller-sized wild harvested or salvaged material. Nurseries producing protected plants tend to specialise in specific taxa such as orchids, palms, ferns and increasingly, high-risk plants such as *Xanthorrhoea* species.

4.5.3 Societies and special interest groups

Possession and trade of protected whole plants by and between hobbyists have specific defences in the NPW Act under Section 117(3)(d) and Section 118(3). There has been some confusion surrounding the extent of this defence and how it applies.

Societies and special interest groups may possess and trade protected plants between members and small-scale growers without the requirement for a licence when the:

- trade occurs at a society meeting at their nominal meeting venue, or between members of the society at any time
and
- the material has been obtained according to this plan or is lawfully in the possession of the person supplying it (see section 4.9).

Societies and special interest groups will require a grower licence to sell to the general public where the material has not been sourced under this plan. They may apply for a licence to sell plants donated by members for sale at shows and other events. A society may produce a grower tag (see section 4.11) and must record the source of all donated material. Where the material is purchased from licensed growers for sale at society events, it should already be tagged.

4.5.4 Small-scale and hobby growers

Without limiting the application of sections 4.5.1 to 4.5.3, individuals who propagate and sell protected native plants to the general public, or to wholesalers or retail outlets require a grower licence.

The plan recognises that some businesses may overlap between these sectors. Only a single grower licence will be required where the business undertakes growing activities across more than one of the above sectors. The application requirements and procedures for a grower licence are explained in Appendix G.

4.6 Traditional use of whole protected plants

Australia's Aboriginal people possess significant knowledge of native flora which extends to the specific use and broad management of wild native plants. Land management and nursery practices may be informed and improved through cooperation with traditional owners and by applying traditional knowledge.

Clause 75 of the *National Parks and Wildlife Regulation 2009* provides an exemption to Section 117 of the NPW Act so that Aboriginal people and their dependants may gather or harvest from certain lands and have in their possession the fruit, flowers or other parts of protected native plants for domestic purposes.

This exemption does not extend to the commercial use of protected whole plants or plant parts.

4.7 Commercial harvest for bush tucker and other purposes

There are many circumstances other than those included in this plan and the CFMP that utilise protected native plants for commercial purposes such as bush tucker production and paperbark harvesting. To ensure the long-term sustainability of these industries, OEH encourages establishing plantations of these materials.

These industries are not regulated by this plan except where the intention is to collect seed material from protected native plants from the wild to either:

- establish a bush-tucker crop in cultivation, or
- supplement an existing crop by collecting material for propagation.

Further details can be found in section 4.9.

4.8 Location of harvest

The extraction of whole protected plants for commercial purposes is permissible from a range of land tenures. However, specific limitations on harvesting may apply to each of these tenures and in locations where species or habitat of high-conservation significance are known to occur.

4.8.1 Private land

Most plant material is sourced from private land. Applicants must obtain written permission from the landowner to access the land and its plants before lodging a licence application.

4.8.2 Land held under the National Parks and Wildlife Act 1974

Wild harvester, approved harvester or seed harvester licences will not be issued to harvest from any lands managed under the NPW Act. However, a licence under Section 132C of the NPW Act may be issued under certain circumstances for the harvest of seed or other propagation material from these areas (see section 4.9).

4.8.3 State forests

Harvest of plants from state forests requires an approved harvester licence from OEH and a forest products licence from Forests NSW. An approved harvester licence will only be issued on receipt of written approval of the proposed harvest by Forests NSW. It must state the harvest location, target species and quantities and include a statement that Forests NSW believes the proposal is sustainable. The harvest level endorsed by Forests NSW may be further limited by OEH. Seed may also be harvested from state forests under a seed-harvester licence. Should Forests NSW require harvested material to be tagged with Forests NSW tags, these must be applied in addition to any other tagging requirements specified under this plan.

4.8.4 Other public land

For leased public land, applicants must obtain written permission from the lessee before applying for a licence. For unleased land, applicants must obtain permission from the authority responsible for the land. Authorities may impose access restrictions or limit the use of native plants on land that they manage.

4.8.5 Private forestry operations

Where protected native plants colonise an approved plantation, harvesting of the plants will be licensed according to this plan. OEH will set harvest rates for approved plantations except during salvage operations. Harvest will not be permitted from buffer zones or specified exclusion areas, such as habitat areas, drainage lines or streams as described in the *Plantations and Reafforestation Act 1999*. During selective logging only those plants directly impacted will be available for harvest.

4.8.6 Fruit orchards or precious timber production

Protected native plants, predominantly epiphytes, can colonise trees in some agricultural production settings such as macadamia and avocado orchards. Where such colonisation has occurred on crop or timber trees and, where the species may be harvested under either a wild harvest or approved harvest licence, OEH may issue a licence. In such cases OEH may choose not to impose harvest limits.

4.8.7 Seed orchards

The term 'seed orchard' refers to the cultivation of plant material to produce seed for a specified purpose. This practice is well established in the forestry industry and is becoming more widespread to produce seed for revegetation and rehabilitation projects.

The material to establish a seed orchard must be lawfully sourced as described in sections 4.2 to 4.4 or section 4.9. As the species used in seed orchards may be derived from threatened species, critical habitat or threatened ecological communities, seed orchards, once established, will be licensed under the grower provisions in this plan.

4.8.8 Threatened ecological communities, critical habitat and the habitat of threatened species

Harvest is prohibited from critical habitat or the habitat of threatened species, and applications for an area likely to be, or identified as, a threatened ecological community (EEC) will be refused unless the proposed harvest is a salvage operation.

Where such an application is refused the applicant may appeal to the Minister, as described under Section 135 of the NPW Act.

4.8.9 Other considerations

Threatened species

Applicants are responsible for determining the presence or likely presence of threatened species at the proposed site.

This plan does not permit the commercial harvest of threatened species from the wild. Threatened species may only be picked from the wild to establish artificial propagation programs and only if the applicant meets the licence requirements for a licence under Part 6 of the TSC Act or a scientific licence under Section 132C of the NPW Act. See also section 4.9.

4.9 Sourcing seeds and other propagating material

This management plan permits sourcing seeds and other propagating material from various land tenures. Restrictions or exclusions may apply in some situations.

On land tenures other than NPWS estate, a seed harvester licence can be issued for species in both Part 1 and Part 2 of Schedule 13, excluding species listed under the TSC Act as identified earlier in section 4.4.

Consistent with the defences in the NPW Act, the following licensing requirements apply for seed collection:

1. Anyone wishing to collect seeds of protected plants from private property or any public land (excluding NPWS estate) to grow for sale can do so without a licence. However they must be able to demonstrate written permission from the landowner and prove the species occurs on that land. A grower licence will be required to grow plants to sell.
2. Anyone wishing to collect seeds of protected plants from private property or any public land (excluding NPWS estate) to sell them directly must hold a seed harvester licence and they must be able to demonstrate written permission from the landowner and prove the species occurs on that land. Record keeping and other restrictions will apply.

A seed harvester licence will not be issued for seed harvesting from land managed under the NPW Act.

Harvest of seed material from the NPWS estate may be considered for authorisation under a scientific licence (s132C), with the concurrent approval of the relevant NPWS area manager, and in situations where:

- it assists in establishing a commercial crop, or identified variants of existing crops, and where propagules are not available, or are very limited from other sources, and where the establishment of a cultivated population contributes to the conservation of the species
or
- the NPWS estate is the only, or most appropriate, source of seed material and the seed is to be used for planting activities in, surrounding or adjacent to the NPWS estate
or
- the collection is for legitimate research purposes.

4.10 Managing harvest impacts

The harvest of whole protected native plants from the wild can impose some risk to the harvest site and local populations of target and non-target species. Licensees need to be aware of these risks and set up management practices that reduce the potential impacts. Key elements of a damage mitigation strategy are described below.

4.10.1 Maximising survivorship

Plants which are harvested incorrectly often die. Digging up or otherwise harvesting a plant places it under considerable stress by potentially damaging the root system, trunk and/or foliage. Changes to watering and fertilising regimes, altered drainage and soil conditions can also affect the plant.

This plan specifies minimum holding periods for some harvested materials. In addition, harvest and stockpile site requirements and product specifications may apply to maximise post-harvest survival. See Appendices D and E for more information.

4.10.2 Population estimates

These will be required to help assess harvest sustainability for all extractive licences. For example, applications for a wild harvester licence or an approved harvester site approval, must include an estimate of the target species population at each proposed harvest site. Also, a harvest plan must be included with the application. It must describe the condition of the site, including access points, and the capacity of the population to recover from harvesting.

Wild harvester and approved harvester (sustainable harvest) licensees must also maintain a map of the area identifying each harvest event to help manage harvest effort and intensity over time. Further information is provided in Appendix K.

4.10.3 Setting harvest levels

Restricting the number of plants that can be harvested limits the impact of harvesting and helps ensure the sustainability of the harvest activities.

OEH may restrict the number of plants that can be harvested. This may include imposing quotas or setting licence conditions. Restrictions may be varied according to criteria such as rainfall, effects of fire, impacts on non-target species and on the overall ecosystem and/or other land use considerations. OEH may also set a lower rate of harvest for new licensees. In some circumstances, there may be a ban on harvesting a species for a specified period or from a specified area.

Minimum population thresholds apply for wild harvesting, particularly where there is doubt about the sustainability of harvesting or the proposed level of harvest. The following criteria may be used for guidance when setting harvest levels:

- harvest no more than ten per cent (10%) of the available population of approved size classes for Group 1 species
- where available and appropriate, national harvest guidelines will apply
- harvest no more than one per cent (1%) of the available population of an approved size class (see Appendix L) for Group 2 species
- all individuals of an approved size class for species in Groups 1, 2 or 3 may be available for salvage harvesting (see Appendix L).

OEH may further restrict harvest rates where the current rates impact or are likely to impact on the sustainability of the target product.

4.10.4 No multiple licences per site

This plan seeks to manage the intensity of harvesting at a site. To this effect, only a single wild harvester or approved harvester (sustainable harvest) licence per species will be issued for a specified harvest site within any five-year period. This does not limit the renewal of an existing licence but precludes additional licences being issued, other than a grower licence.

For example, if a wild harvester licence has been issued for a species in Part 2 Group 1, an approved harvester licence (sustainable harvest) will not be issued for the same site and species.

Should a site subject to licensing – under either a wild harvester or approved harvester (sustainable harvest) licence – be approved for salvage harvest, the wild harvester or approved harvester licence will cease to have effect over that section of the site subject to the clearing works. The salvage licence will be subject to the size class limitations in Appendix L.

Should a site subject to licensing be sold, the licence is not transferable. Should the new owners wish to harvest or grow protected plants, a new application will be required and it will

be assessed on its merits. Any new licences issued will be limited to the same or lesser activities as permitted under the previous licence.

Where a site that is subject to harvest by an approved harvester is sold, harvesting must cease until the approved harvester can demonstrate written permission from the new owner. Where this is done within six months of the date of sale, no new site approval fees will apply. Any notifications outside this period will be subject to a new site approval application and associated fees.

A grower licence may be issued in conjunction with any wild harvest or approved harvester licence on the same property.

4.10.5 Hygiene management

The wild harvest of plants may facilitate the transfer of weeds or pathogens between localities. For example, some taxa such as grass trees (*Xanthorrhoea* species) are susceptible to *Phytophthora*, a contagious and damaging soil-borne infection. The sustainability of harvesting will be jeopardised should a site become infected and landowners and licensees should report all possible outbreaks.

Precautions such as cleaning tools and washing shoes between visits to different sites must be taken, particularly for approved harvesters who often work and travel between different areas.

OEH will not issue a licence, and may cancel existing licences, for sites affected by pathogens or weeds where such invasions are likely to have significant conservation impacts. Further information on hygiene procedures is provided in Appendix D.

4.11 Whole plant tagging requirements

Section 115A (9) of the NPW Act states that where a flora management plan requires protected whole plant products to be tagged, it is an offence for a person to offer or consign that product for sale without the appropriate tag.

This plan requires plant species at high conservation risk, in high demand or at significant risk of illegal harvest to have tags attached.

Tagging is a useful way to ensure continuity of lawful possession throughout the supply chain, from harvest site to end user, particularly when they are on-sold many times. The use of tags eliminates the need for all parties in the supply chain to be licensed. Tags also identify legally sourced plants, making it easier for consumers to preferentially select cultivated specimens.

Under this plan, tags attached legally to protected and threatened plants from interstate are recognised under this plan.

Sellers should ensure that suppliers (whether in NSW or elsewhere) are appropriately licensed and that products comply with the tagging requirements set down in a relevant flora management plan.

Two types of tags referred to as 'NPWS tags' and 'grower tags' are specified in this plan and their use will vary according to licence type and species.

4.11.1 NPWS tags

These are prefixed and numbered tags produced by OEH that enable the origin of plants to be traced to both a specific licence and harvest site. Each NPWS tag will include the NPWS logo and a brief description of plant origin or species.

NPWS tags will be required for all plants acquired from extractive sources under wild harvester and approved harvester licences. Persons with a grower licence may require an

NPWS tag for some plants such as *Xanthorrhoea*, however, this will not apply to all size classes of plant (see Appendix L). A grower licensee may choose to use NPWS tags for their products, including those species and size classes where it is not mandatory. These tags will be produced on request and will be charged at cost recovery rates. NPWS tags must be used in addition to grower tags in this case.

Tags will be issued for the number of plants approved – either in bulk on licence approval and payment, or periodically on request throughout the licence period. Tags will be issued from local area offices directly to licensees or an approved nominee. These must be signed for on receipt by the licensee. Alternatively, tags may be sent to licensees via registered mail. The licensee will be responsible for postage costs should tags be delivered via registered post.

NPWS tags are single use and must be attached to individual plants at the harvest site or managed in such a way that tags are immediately allocated to harvested plants. Transporting harvested plants that are not appropriately tagged is a breach of licence conditions (Appendix D). NPWS tags must not be cut down or modified. They must be permanently attached, as issued, in a manner appropriate for the product. This might be done using staples, nails or string. Alternatively, if the tag design allows it, loop the tag around the product.

If plants that are tagged are lost or die at any time prior to sale, the tags must not be reused on replacement plants. Lost or damaged tags may be replaced if OEHL is provided with both satisfactory evidence for their replacement and any damaged ones that remain. Replacement tags must be paid for by the licensee.

OEHL will charge a fee for each tag. NPWS tags for most products will be charged at cost-recovery rates only. The current fee is approximately 20c per tag. These fees are current at the time of publication but may alter in the future.

For medium- to high-risk plants, such as those species listed in Schedule 13, Part 2 Groups 2 to 3 (see sections 5.1.2 and 5.1.3), a premium fee on tags may be charged. This is to provide additional incentive to reduce levels of wild harvest and to encourage the use of material grown from cultivated sources. The proposed tag fee for these premium species is likely to be set at \$3 to \$5 per plant.

Funds from tag fees over and above cost recovery will be used to support compliance and research activities.

Tags are only issued for the term of a licence. If tags are not used within the term of the licence they must either be returned to OEHL or destroyed, and a record of the tag numbers noted.

Unused tags from an expired licence may be reallocated by OEHL on renewal of the licence. OEHL may charge a fee to cover costs of tag production but will not charge an additional processing fee.

Licensees must report which tags were used and the survivorship status of the harvested plants to OEHL's Wildlife Licensing and Management Unit (WLMU).

4.11.2 Grower tags

All growers will be required to attach a grower tag to any plant they produce under their licence. In certain circumstances, such as described above for *Xanthorrhoea* species, an NPWS tag will also be required.

Grower tags may take the form of a sticker, label or sleeve and must be attached to the plant or container directly. They must have sufficient information to trace the product to its origin, such as the species' botanical name, the term 'plantation grown' and the supplier's name.

It is recommended that grower tags comply with the national tagging guidelines produced by the Nursery and Garden Industry Australia (see the 'National plant labelling guidelines' at [www.ngia.com.au/Category?Action=View&Category_id=501&Highlight1=National plant labelling guidelines&Highlight2=National plant labelling guidelines&Highlight3=National plant labelling guidelines&Highlight4=National plant labelling guidelines](http://www.ngia.com.au/Category?Action=View&Category_id=501&Highlight1=National%20plant%20labelling%20guidelines&Highlight2=National%20plant%20labelling%20guidelines&Highlight3=National%20plant%20labelling%20guidelines&Highlight4=National%20plant%20labelling%20guidelines))

Grower tags must not be placed on a plant harvested under an approved harvester or wild harvester licence.

Where a person purchases juvenile plants (including orchids in flasks) from a licensed grower with the intent of dividing and growing the material to a saleable size, they must ensure each new plant is appropriately tagged prior to sale. This may be done by:

- sourcing additional grower tags for each individual plant from the primary grower
- producing tags with the details of the primary grower and the on-seller
or
- producing tags with the details of the on-seller and keeping records of the purchase of the primary product sufficient to prove legal ownership.

4.11.3 Use of old NPWS tags

To help change to these new tagging provisions, any existing old NPWS tags must be retired.

These old NPWS tags are square or rectangular, buff or white coloured, with an alphanumeric identification sequence of a single letter and six numbers. These tags have not been issued since 2008 and are only valid where they are attached to material currently in trade. All products requiring NPWS tags produced since 2008 use the new tagging design.

Old NPWS tags will not be valid for material in trade from 12 months after the date this plan commences. Subject to the provisions below, it will constitute an offence under Section 115A of the NPW Act to sell a product with an old NPWS tag.

Licensees still holding any old NPWS tags must surrender tags not attached to plant material as they are deemed to be not yet 'in trade'.

For old NPWS tags already attached to material 'in trade', the licensee or seller may contact the local OEH office for 'transition tags'. These are issued on a cost-recovery basis with a fixed expiry date not exceeding three years. This provision does not apply to material produced under a grower licence, where the expired NPWS tag may be removed and replaced with a grower tag.

4.11.4 Tags for plant hybrids

Because plant species have been intentionally hybridised, many recognised varieties and cultivars have been developed that are now registered under the PBR Act. Many hybrids cannot be readily distinguished from the parent stock until flowering occurs, making identification of hybrids very difficult without flowering parts.

Tags for plant hybrids produced under a grower licence must include the word 'hybrid' and identify the parent material. However, material that has been accepted under the PBR Act will not be subject to tagging or licensing requirements under the NPW Act (see www.environment.nsw.gov.au/wildlifelicences/PlantLicenceDetails.htm).

It is the licensee's responsibility to demonstrate the status of varieties under the PBR Act, should an exemption be required.

4.12 Monitoring requirements for wild harvesters and approved harvesters

Wild harvesters and approved harvesters (excluding salvage sites) must establish monitoring plots to help them monitor harvest sustainability. All licensees, excluding growers, must provide harvest data to OEH, which can be analysed to monitor harvesting levels. Specific requirements are provided in Appendices D and E.

Licensees must clearly identify the locations where harvest is undertaken. This may be achieved by either:

1. Establishing a clearly defined photographic monitoring point at wild harvest and approved harvest sites (excluding salvage harvest sites). The photo point must be permanently marked with the licence number and clearly identified on the site plan submitted with the licence application
- or
2. Providing accurate (± 10 m) geographical coordinates of harvest sites. The boundaries of harvest sites must also be mapped and provided to OEH when harvest return sheets are submitted.

4.13 Record-keeping requirements

Record keeping assists in monitoring harvest rates and supports consumer confidence in legally harvested products. It also provides clear, accurate data on where, when, what and how much is being harvested.

This plan requires records to be maintained by all licensees. For example:

1. Wild harvester and approved harvester licensees must complete both a harvest site condition sheet and a harvest return sheet. A harvest site condition sheet must be completed for each harvest site as defined in this plan. A harvest return sheet must be completed for each day of harvest. Minimum requirements include the botanical name of the species harvested, the date of harvest and the quantity harvested. Copies of these forms will be available on the OEH website.
2. Approved harvesters must also maintain records for each plant at the stockpile site which detail the location of harvest and the time since harvest.
3. Details of NPWS tags used or lost must also be forwarded to WLMU annually or as requested by an authorised officer.
4. Grower licensees must maintain records of the source of all propagating material and a list of propagated species in propagation.

OEH will maintain a database of all licences and tags issued, as well as including details of plant species, harvest activities, numbers picked and grown. This information will be used to report to DSEWPC on how this management plan is implemented and will also help to inform future management decisions.

Records provided to OEH by licensees will remain confidential. However, aggregated data will be made publically available. Records may also be analysed to monitor overall harvesting levels.

4.14 Licence fees

Licence fees vary depending on the cost incurred by OEH to assess, regulate and monitor the various licensed activities. A current schedule of fees is in Appendix M and on OEH's website at www.environment.nsw.gov.au/wildlifelicences/CommercialUseOfNativePlants.htm.

People seeking licences to undertake multiple activities at the same location will pay a single licence fee, which is based on the activity with the highest fee. The term will be that of the shortest licence.

4.15 Public listing of licensees on the OEH website

To assist the public and nurseries in sourcing legally harvested and grown protected plants, licensees may request their details be included in a listing on the OEH website.

4.16 Importing and exporting protected plants

OEH is not directly involved in approving the international trade of plant products. However, as this plan meets the requirements of the *Environment Protection and Biodiversity Conservation Act 1999* as both WTMP and AP programs, the materials produced under NSW licences may be eligible for international trade.

Section 132A of the NPW Act allows licences to be issued to import and export protected native plants between Australian states and territories. At the time of endorsement, no species are subject to these requirements. However, tracking of imports and exports may be considered for some high-risk species. Should these provisions be enacted, all current licensees will be notified.

5. Management protocols

5.1 Managing risk through plant groupings in Schedule 13 Part 2

Under the NPW Act, Part 2 of Schedule 13 comprises five separate groups of whole plants. All of these plants/groups are subject to different regulatory requirements depending on their risk from unsustainable harvest practices.

The schedule and groupings are dynamic. Over time species may be included or removed, or existing species moved between groups. This plan proposes to remove and/or rearrange some species in the schedule, which will act to reduce the licensing requirements for a range of species.

Plants in higher numbered groups are considered to be at greater risk of illegal harvest or of greater conservation concern. The strategy of grouping plants according to risk enables OEH to better direct compliance and regulation activities to those species where illegal harvest operations may impact on the conservation of these species in the wild.

A description of each group on the schedule and the requirements for commercially harvesting component species is described in the following sections.

5.1.1 Part 2 Group 1

Plants in this group are those known to be harvested from the wild to support current market demand, are relatively fast growing and commercial sales are, in part, supplemented by cultivated material.

Harvesting and post-harvest management of these species is considered to be relatively simple and survivorship of harvested material is reported to be high. Overall, these species are considered to be at low to moderate risk from unsustainable management practices. However, harvesting should be monitored to ensure that it is sustainable.

Plants currently listed in this group include various fern, elkhorn and staghorn species.

In summary, the requirements to commercially harvest or grow any species in Part 2, Group 1 are:

- a wild harvester, approved harvester or grower licence will be required
- harvest site protocols apply for wild harvester and approved harvester licensees (see Appendix D)
- OEH may impose restrictions on the quantities that can be harvested, except for material produced under a grower licence
- NPWS tags must be applied to wild harvester and approved harvester products
- grower tags must be applied to grower products
- a DSEWPC export permit will be required (unless the species is in DSEWPC's list of exempt native species).

5.1.2 Part 2 Group 2

Plants in this group are known to be harvested from the wild to support current market demand. They are slow growing and are only just beginning to be supplemented by cultivated material. Harvesting and post-harvest management can be difficult. Survivorship of harvested material can be low when not undertaken by experienced harvesters. These species are considered to be at risk from overharvesting. Strict harvest limits will be imposed for extractive licences.

Plants currently listed in this group are grass trees (*Xanthorrhoea* species), cycads and several orchid species.

In summary, the requirements to commercially harvest or grow any species in Part 2, Group 2 are:

- only approved harvester or grower licences will be issued for species in this group to ensure product quality and survivorship (see Appendices C and G)
- harvest site and stockpile site requirements must be complied with for approved harvester licensees (see Appendices D and E)
- OEH may impose restrictions on the quantities that can be harvested, except for material produced under a grower licence (see Appendices H and K)
- approved harvester licences for orchid species in Part 2 Group 2 will not be issued after 31 December 2016
- NPWS tags are required for approved harvester products
- grower tags must be used for grower products, unless otherwise described
- a DSEWPC export permit will be required (unless the species is in DSEWPC's list of exempt native species).

5.1.3 Part 2 Group 3

Plants in this group are known to be harvested from the wild to support current market demand. These products are slow growing and they are unlikely to be directly supplemented by cultivated material. Harvesting and post-harvest management can be difficult, and survivorship of harvested material can be low when not undertaken by experienced harvesters.

Part 2, Group 3 currently includes palms (Arecaceae family), all species of pandanus, the king fern and some orchid species.

In summary, the requirements to commercially harvest or grow any species in Part 2, Group 3 are:

- only approved harvest (salvage only) or grower licences will be issued for species in this group
- harvest site and stockpile site requirements must be complied with for approved harvester licensees (see Appendices D and E)
- OEH may impose restrictions on the quantities that can be harvested, except for material produced under a grower licence
- NPWS tags are required for approved harvester (salvage-only) products
- grower tags to be used for grower products, unless otherwise described
- a DSEWPC export permit will be required (unless the species is in DSEWPC's list of exempt native species).

5.1.4 Part 2 Group 4

Plants occurring in this group fall into two distinct categories:

1. Species listed as threatened under NSW or Commonwealth legislation and
2. Those species that are well established in cultivation but where the cultivated material is not readily discernable from wild harvested material and maybe subject to illegal wild harvest. This currently includes NSW endemic orchids (Orchidaceae).

The requirements to cultivate any species in Part 2, Group 4 are provided in Appendix I and summarised here:

- only a grower licence will be issued for species in this group
- no production limits will be imposed
- grower tags are to be used for this group unless otherwise described for some size classes (see Appendix L)
- a DSEWPC export permit will be required (unless the species is in DSEWPC's list of exempt native species).

5.1.5 Part 2 Group 5

Plants in this group include those that are identified as having special requirements. The group currently has only one species, the Wollemi pine (*Wollemia nobilis*), but in future may include other listed threatened species or other species that are of particular concern to other jurisdictions.

To support the conservation of species within this group, OEH may impose specific restrictions or tagging requirements on these products, such as these:

- only a grower licence will be issued for species in this group
- grower tags are to be used for this group unless otherwise described
- no production limits will be imposed
- a DSEWPC export permit will be required (unless the species is in DSEWPC's list of exempt native species).

5.2 Education

All relevant forms, procedures and fact sheets supporting the plan's implementation will be available via the OEH website.

A targeted education strategy will be prepared in consultation with stakeholders to deliver information to those involved in the whole plant industry. This includes government agencies, harvesters, growers, wholesalers, retailers and the broader community. It will raise awareness of the legislative and management requirements outlined in this plan, reinforce the impacts of illegal harvesting and identify species at high risk of exploitation.

Information will be delivered via direct contact, presentations at conferences or meetings and fact sheets. OEH will engage with the industry to help develop codes of practice where they can assist with industry compliance. OEH will work with industry associations to help them advise their respective industry sectors of the changes and likely impacts.

5.2.1 Foster cooperation

OEH encourages the whole-plant industry to be self-sustaining and self-regulating through improved awareness of biodiversity and ecological sustainability. To this effect, OEH will encourage and develop partnerships with the industry to promote the use of cultivated or sustainably harvested products. Members of the public and the industry at large will be encouraged to report suspected illegal plant sales to OEH.

5.3 Compliance

Compliance is essential to preserve wild plant populations, promote the use of cultivated and sustainably harvested material and support legitimate operators. Compliance is enhanced by fostering industry collaboration through regular communication and encouraging the cooperation of industry stakeholders and the public in reporting suspected unlawful activities.

There is a close link between education, effective licensing and compliance in controlling commercial harvesting. Monitoring and regulation is designed to ensure legislative compliance, and investigations are necessary to prevent illegally produced plants entering commercial sectors.

Industry-developed and supported best practice is an important strategy alongside government regulation. OEH encourages the industry to be self-sustaining and self-regulating through improved awareness of biodiversity and ecological sustainability. OEH will encourage and develop partnerships with the industry to promote the use of cultivated or sustainably harvested products.

OEH will implement the following compliance actions as part of the implementation of this plan.

Penalties for offences relating to protected native plants are described in Appendix J.

5.3.1 Property inspections

OEH will inspect properties that are subject to wild harvester and approved harvester licence applications to verify the availability of species. There will also be random inspections of properties for which licences have been granted to ensure harvesting complies with this management plan and licence conditions. Records maintained by licensees may also be inspected.

OEH officers will report on random inspections of wholesale and retail outlets, and any investigations of tagged and untagged plants. A summary of all inspections will be provided by each local area office to WLMU, and included in its annual report.

5.3.2 Monitoring tag use

OEH will monitor the use of tags and follow up reports of protected plant species offered for sale without the appropriate tags attached. Breaches of the legislation, licence conditions or the requirements of this management plan will be investigated.

5.4 Research

OEH will seek to foster research that:

- monitors long-term impacts on populations of target taxa
- identifies species and community changes associated with harvesting
- investigates strategies for improving post-harvest survival by modifying harvest practices, post-harvest handling and consumer education.

OEH will also encourage the whole-plant industry to introduce programs that monitor post-harvest survival of target taxa through to the consumer and invest in *ex-situ* propagation to encourage a shift from harvesting wild plants to grower cultivation.

The proposed research will be used to inform OEH management strategies and future revisions of this plan.

5.5 Review of plan

This plan will be reviewed at least every four years in line with EPBC Act requirements or as directed by the Chief Executive should significant changes be identified in the industry. To facilitate consistency with other Australian states and territories, national codes or guidelines will be incorporated into the review where required.

The first scheduled review is in 2017.

6. References

Borsboom A 2005, *Xanthorrhoea: A review of current knowledge with a focus on X. johnsonii and X. latifolia, two Queensland protected plants-in-trade*, Environment Protection Agency (Queensland), Brisbane.

Danelon M 2010, Nursery and Garden Industry NSW and ACT, pers. comm.

Lamont BB & Downes S 1979, 'The longevity, flowering and fire history of the grasstrees *Xanthorrhoea preissii* and *Kingia australis*', *Journal of Applied Ecology*, vol. 16, pp. 893–99.

Appendix A: Schedule 13 – protected native plants

Table 1 Part 2: Whole plants

Scientific name	Common name(s)
Group 1	Wild harvester licence
<i>Asplenium australasicum</i>	Bird's-nest fern
<i>Asplenium polyodon</i>	Sickle spleenwort, mare's tail fern
<i>Asplenium harmanii</i>	Fern
<i>Cyathea</i> species	Treeferns
<i>Dicksonia</i> species	Treeferns
<i>Platyserium</i> species native to NSW	Elkhorn and staghorn ferns
Group 2	Approved harvester (sustainable harvest)
<i>Dendrobium aemulum</i>	Ironbark orchid, White feather orchid (until 31 December 2016)
<i>Dendrobium gracilicaule</i>	(until 31 December 2016)
<i>Dendrobium linguiforme</i>	Tongue orchid (until 31 December 2016)
<i>Dendrobium speciosum var hillii</i>	King orchid, rock lily, tar-beri (until 31 December 2016)
<i>Xanthorrhoea</i> species	Grass trees
Zamiaceae native to NSW	Cycads
Group 3	Approved harvester (salvage only)
Arecaceae native to NSW	Palms
<i>Cymbidium suave</i>	Snake orchid
<i>Oberonia complanata</i>	
<i>Oberonia titania</i>	
<i>Pandanus</i> species native to NSW	Pandanus
<i>Taeniophyllum muelleri</i>	
<i>Todea barbara</i>	King fern
Group 4	Grower only
Orchidaceae native to NSW	Orchids unless otherwise listed
NSW-listed threatened species	All other species of plant listed in Schedule 1, 1A or 2 to the TSC Act, unless otherwise listed in Schedule 13
Commonwealth-listed threatened species	All other species of plant included in the list of threatened species, as amended from time to time, established under Section 178 of the EPBC Act of the Commonwealth and published in the Commonwealth of Australia Gazette
Group 5	Special requirements
<i>Wollemia nobilis</i>	Wollemi pine

With the exception of seed harvester licences, Part 1 of Schedule 13 of the NPW Act is not relevant to the whole-plant industry so it is not reproduced in this plan. For guidance for harvest of cut-flowers please refer to the CFMP.

Appendix B: Wild harvester licence application requirements

A wild harvester licence may be issued under Section 131 of the NPW Act to the freehold owner of a property to harvest from naturally occurring stands of native plants on their property.

The licence may permit the harvest of species listed in Part 2, Group 1 of Schedule 13 only. No species listed under the TSC Act may be taken under a wild harvest licence and no harvest is permitted from critical habitat or threatened ecological communities.

Applications must be lodged through the local area office that oversees the proposed harvest location. Applicants for a wild harvester licence must provide or be able to demonstrate the following at the time of application:

1. Confirmation of the applicant's status as the land owner.
2. Documentation of procedures identified in the harvest site controls (Appendix D).
3. Maps identifying the general and specific location of the proposed harvest site and identifying discrete harvest blocks on the land.
4. Ability to identify the target material to species level.
5. Capacity to undertake population assessments (Appendix K).
6. A count of the target species (and size classes where required) present within each harvest block.
7. A description of the habitat from which the harvest will be undertaken.
8. A list of any threatened species that may occur in the harvest area.
9. A declaration that the proposed harvest site is neither critical habitat nor a currently listed threatened ecological community.
10. All other information requested on the application form.
11. The relevant fee for the application.

Where plants are sold directly to the public, OEH recommends providing purchasers with post-planting care sheets.

Where available, applicants may be directed to relevant guidelines or similar material.

Appendix C: Approved harvester licence application requirements

An approved harvester licence may be issued under Section 131 of the NPW Act where the applicant intends to harvest plant material from natural stands of native plants on land not owned by the applicant, and where a minimum level of experience, infrastructure and equipment, and holding facilities can be demonstrated.

Applications for an approved harvester licence are to be submitted to WLMU. Once authorised, approved harvester licensees are required to seek individual site approvals for each salvage or sustainable harvest location. Site approvals will be issued through the local area office.

Site approvals may be issued either for sustainable harvest or salvage harvest (but not both from a single location). Written permission is required from the landowner before an approved harvester site approval can be issued.

Sustainable harvesting is restricted to those species listed in Part 2 Groups 1 and 2 of Schedule 13 (see Appendix A). Harvesting plants listed in Part 2 Group 3 may be approved as a salvage operation.

Picking species listed in Groups 4 or 5 of Schedule 13 is not permitted. No species listed under the TSC Act may be taken under an approved harvester licence. Harvest is not permitted from critical habitat or threatened ecological communities unless approved in a salvage situation.

Applicants for an approved harvester licence must demonstrate or supply the following requirements at the time of application:

1. A current Australian Business Number (ABN).
2. Summary of experience and expertise in the harvest of the target taxon and any relevant qualifications.
3. Demonstrated ability to identify the target material to species level.
4. Demonstrated capacity to undertake population assessments (Appendix K).
5. Identify the stockpile site as an address or location on a map.
6. Documented procedures identified in the harvest site controls (Appendix D) and stockpile site controls (Appendix E).
7. Documented quality assurance procedures to maximise survival of harvested material.

Sustainable harvest

The following additional information must be supplied to the local area office to consider each sustainable harvest site approval proposed by the approved harvester:

- contact details for the land owner/manager
- written confirmation from the land owner agreeing to the harvest, and proof of ownership of the land
- a map or maps identifying the general and specific location of the proposed harvest site
- a map identifying discrete harvest blocks on the land
- other required information as identified in the harvest site protocols (Appendix D)
- a count of the species (and size classes where required) present within each harvest block
- a list of any threatened species that may occur in the harvest area
- a declaration that the proposed harvest site is neither critical habitat nor a currently listed threatened ecological community

- the relevant fee for the application
- fees for any tags required (these must be paid prior to tags being issued).

Salvage harvest

The following additional information must be supplied to the local area office for consideration of each salvage operation proposed by the approved harvester:

- contact details for the land owner/manager
- written confirmation from the land owner and where necessary, the consent authority, approving the salvage operation
- a copy of the final/approved development application or other consent for the land-clearing operation
- a map or maps identifying the general location and footprint/extent of the land-clearing operation
- the total number and size classes of species targeted by the salvage operation
- other required information as identified in the harvest site controls (Appendix D)
- the relevant fee for the application
- fees for any tags required must be paid prior to tags being issued.

Granting of specific site approvals will be at the discretion of the local area office which may also approve, refuse or otherwise limit the number of plants that may be taken from any sustainable harvest or salvage area.

Where plants are sold directly to the public, OEH recommends providing purchasers with post-planting care sheets.

Approved harvester licensees must produce a copy of their licence at the request of an authorised officer.

Appendix D: Harvest site controls

All applicants for wild harvester and approved harvester licences must develop and implement a series of controls, which may be subject to inspection and approval by an authorised officer. It is the licensee's responsibility to ensure that any named parties operating under the licence are aware of, and comply with, these requirements. These controls are described below.

Hygiene

1. Hygiene procedures must be developed and documented for all equipment, machinery, tools and personnel involved. A copy of the hygiene procedures must be submitted with any harvest licence application.
2. Hygiene procedures must include but not be limited to:
 - vehicle and machinery cleaning
 - cleaning hand tools and other equipment that comes into contact with in situ material
 - personal equipment management (clothing, footwear)
 - nominated wash-down sites (commercial or otherwise)
 - a record sheet for recording cleaning/hygiene activities
 - any other factors the applicant considers relevant.
3. Documented hygiene procedures must be carried by, or be available to, all parties authorised under the licence at all harvest sites, and must be made available to any land owner on whose property harvest activities may be undertaken.
4. Documented hygiene procedures must be made available to an authorised officer on request.
5. All contact tools and equipment must be cleaned prior to accessing and leaving the harvest site.
6. Records of cleaning and hygiene activities must be kept and made available on request to an authorised officer. (This requirement does not apply to wild harvester licensees unless third parties are assisting with the harvest activity.)
7. Approved harvester licensees must nominate a dedicated site (nominally the stockpile site) where suitable cleaning and wash-down facilities are available.

Harvest, handling and transport

8. Documented procedures must be prepared which detail the methods of harvest site selection, harvest and transport for each of the proposed harvest species. These procedures must be submitted with the application form and include, but not be limited to:
 - harvest site selection (site access, abundance of target species and other factors such as weed invasion or fire in the harvest site etc)
 - method for determining appropriate harvest rate to ensure compliance with the plan (see 4.10.3 and the relevant appendices)
 - harvest target selection (size class, health etc)
 - pre-harvest treatment (foliage removal, site preparation)
 - extraction procedures
 - strategies for reducing incidental site damage
 - preparation for and transport of the harvested material
 - quality control systems
 - a site map identifying the location of the handling and loading areas and proposed access trails
 - any other factors which the applicant considers relevant.

9. All efforts must be made to minimise disturbance to the harvest site.
10. Clearing vegetation to construct trails or roads must not be undertaken to support harvest activities without permission from the property owner. Note that material damaged through such activities can only be harvested under a salvage approval (see Appendix C).
11. At harvest the minimum necessary volume of soil and root material must be removed to ensure plant survival.
12. Harvested material must not be potted with soil from the harvest site. Plants must be transported 'bare rooted' but should be covered in suitable materials to minimise transpiration.
13. All harvested material must be tagged before transporting it from the harvest site. Where tagging at the site is neither possible or practical, tags must be allocated to harvested material and a record-keeping system must support this. Any record-keeping system must be documented and submitted at the time of application.
14. Tags must be attached directly to the plant for all species except epiphytes, where tags must be attached to the board or substrate. For tag details see section 4.11.

Record keeping

15. A harvest-site conditions sheet must be completed once for each site and returned to WLMU for approved harvest licensees and the issuing office for wild harvesters. This sheet includes information on biophysical factors such as slope, aspect, soil type and the amount of time that has elapsed since the last fire.
16. A harvest return sheet must be completed for each day of harvesting. It must include:
 - the date and site of the harvest, including the time spent on site
 - a list of all parties involved in the harvest
 - the number of plants harvested (and their relevant size classes, if appropriate)
 - the tag numbers allocated to the plants from the site
 - any other relevant comments, including product-specific requirements.
17. Harvest return sheets must be made available for inspection on request and must be sent annually to WLMU in an electronic format. No new licences or site approvals will be granted until all documentation is returned.

Copies of all relevant forms and return sheets will be made publicly available on the OEH website at www.environment.nsw.gov.au/wildlifelicences/CommercialUseOfNativePlants.htm

Appendix E: Stockpile site controls

Poor post-harvest management can lead to low plant survivorship when products are on-sold. This increases the demand for additional plants and undermines consumer confidence.

Licensees must therefore implement stockpile site controls to meet the particular post-harvest requirements of products harvested under this management plan. It is the licensee's responsibility to ensure any named parties operating under the licence are aware of, and comply with, these requirements. Stockpile sites may be subject to inspection by OEH officers.

Stockpile site requirements

1. All licensees harvesting products under an approved harvester licence must transport products to a designated stockpile site for post-harvest care.
2. All stockpile facilities and care procedures must be documented and submitted as part of an approved harvester application.
3. Plants must be maintained at the stockpile site for a period of not less than 30 days, or as specified under individual species requirements.
4. The stockpile site must meet the minimum requirements for maintaining the products in care until plants are eligible for sale. This may include pest control, irrigation, shade or other protection structures.
5. A stockpile site must be made available on request for inspection and auditing by authorised officers.
6. Harvested plants in Groups 2 and 3 must be sorted and stored in groups according to the site they were harvested from until eligible for sale.
7. For harvested plants in Groups 2 or 3, signage or labelling must be installed at the stockpile site, identifying the harvest site from which the stockpiled plants were harvested.
8. NPWS tags cannot be reused (see 4.11.1).
9. Unused tags and tags attached to plants that subsequently died must be returned to OEH.

Documentation and reporting requirements

10. An applicant for an approved harvester licence must supply documented evidence with their application of stockpile site facilities including but not limited to:
 - the location and size of the stockpile site
 - water and irrigation infrastructure
 - potting and other facilities available at the stockpile site to adequately support the harvested plants.
11. An authorised officer may inspect the nominated stockpile site prior to any licence being issued.
12. An applicant for an approved harvester licence must document and submit with their application the procedures for post-harvest management of harvested material. These procedures must include but are not limited to:
 - potting procedures, including attachment of epiphytes to substrates where applicable
 - irrigation regimes
 - fertiliser regimes
 - procedures to manage weeds and soil-borne pathogens such as *Phytophthora*
 - survivorship monitoring procedures.
13. An annual report must be provided to WLMU indicating the tag numbers used and the survivorship status of the harvested plants.

Appendix F: Seed harvester licence application requirements

A seed harvester licence may be issued under Section 131 of the NPW Act to pick and sell seeds or spores of any species in Part 1 or Part 2 of Schedule 13, excluding species listed under the TSC Act. Harvest is not permitted from critical habitat or threatened ecological communities unless approved in a salvage situation.

All harvesting should comply with Florabank guidelines (see www.florabank.org.au/default.asp?V_DOC_ID=877).

Submit applications for a seed harvester licence to WLMU. They must include or demonstrate the following:

1. Written confirmation from the land owner agreeing to the harvest, and proof of ownership of the land.
2. Ability to identify the target material to species level.
3. A map or maps identifying the general and specific location(s) of the proposed harvest site(s).
4. The species and proposed quantities of seeds of protected plants to be harvested.
5. A list of any threatened species that may occur in the harvest area.
6. A declaration that the proposed harvest site is neither critical habitat nor a currently listed threatened ecological community.
7. All other information requested on the application form.
8. The relevant fee for the application.

Applicants seeking to harvest seed from salvage situations must provide the following additional information to the local area office for consideration:

9. Contact details for the land owner/manager.
10. Written confirmation from the land owner and where necessary the consent authority, approving the salvage operation.
11. A copy of the final/approved development application or other consent for the land-clearing operation.

An authorised officer may restrict or limit the species and quantities that may be harvested under the licence.

During the licence term, a seed harvester licensee may request additional sites be included under the licence. It is essential to provide the information outlined above for each site.

Appendix G: Grower licence application requirements

A grower licence may be issued under Section 132 of the NPW Act for propagating and selling artificially cultivated species listed in all groups of Part 2 of Schedule 13, which includes both protected and threatened species.

In some cases, non-threatened species are restricted to grower licences to facilitate a move away from wild harvest where evidence suggests there are impacts on wild populations.

Grower licence applications from societies, special-interest groups and small-scale growers should be submitted to the local OEH area office. Applications from tube-stock and production nurseries should be submitted to WLMU.

Applicants for a grower licence must provide or demonstrate the following at the time of application:

1. The legal source of the propagating material.
2. The species and proposed quantities of the protected plants to be grown. Note that no harvest levels will be set for grower licences.
3. A copy of the 'grower tag' or details of the tagging method to be used (see 4.11.2).
4. Growers of *Xanthorrhoea* species must be able to demonstrate compliance with the requirements of this management plan that relate to growing grass trees (Appendix H).
5. Orchid growers must be able to demonstrate compliance with the requirements of this management plan that relate to orchid growing (Appendix I).
6. All other information requested on the application form.
7. The relevant fee for the application.

Growers must keep a copy of their licence at the property where the plants are grown.

Where the grower licensee has a retail or wholesale outlet, a copy of the licence must be available on request by an authorised officer. OEH recommends that the licence be displayed at the point of sale.

Appendix H: Genus *Xanthorrhoea*

The grass tree family Xanthorrhoeaceae is endemic to Australia. It contains a single genus, *Xanthorrhoea*, comprising 28 species with 13 occurring in NSW. The main species harvested in NSW are *X. australis*, *X. glauca*, *X. johnsonii* and *X. resinifera*. Other species are likely to be harvested from time to time due to misidentification.

No species are currently listed under the TSC Act. However, grass trees form part of 12 threatened ecological communities (TECs) in NSW. Harvesting whole plants from TECs is not permitted under this plan. There are two species listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, neither of which naturally occurs in NSW.

Grass trees are renowned for their slow growth, and plant height for arborescent species has a direct correlation to plant age (Borsboom A 2005). Published growth rates vary considerably between species and the most commonly harvested individuals (trunk heights between 50 cm and 100 cm) are likely to be at least 56 years old, ranging up to at least 113 years old for the larger plants based on an average growth rate of 8.8 mm per annum (Borsboom A 2005).

For the purposes of this management plan, calculations of plant age for arborescent species are made at 8.8 mm per annum.

General requirements

The requirements for harvesting and growing *Xanthorrhoea* species are as follows.

1. All whole-plant harvesting of *Xanthorrhoea* species under this plan must be undertaken by an approved harvester.
2. Identify the target plants to at least species level (or subspecies level, where appropriate).
3. Population assessments for harvest estimates must count individuals within the following size classes for arborescent species:
 - non-trunked plant with less than 40 leaves (class 1)
 - plants with a trunk height or length less than 30 cm (class 2)
 - plants with a trunk height or length between 30 and 50 cm (class 3)
 - plants with a trunk height or length between 50 and 100 cm (class 4)
 - plants with a trunk height or length greater than 100 cm (class 5).
4. Plants are to be measured from the top of the root ball to the 'flat' of the crown.
5. All harvested material must have the foliage removed at the harvest site. Foliage must be cut to a length not greater than 150 mm. Cut foliage must be left at the harvest site.
6. Plants must be maintained at the stockpile site for a minimum period of 120 days.
7. Plants cannot be removed from the stockpile site 'bare rooted'.
8. Plants cannot be moved from the stockpile site or sold until foliage regrowth of 500 mm has occurred.
9. For wild harvest and salvage, a minimum survivorship of 85 per cent (85%) at the stockpile site must be demonstrated. Failure to meet this benchmark will be sufficient grounds for cancellation or non-renewal of a licence.
10. All material harvested from the wild must be tagged with NPWS tags.
11. All *Xanthorrhoea* species whole plants must be sold in a pot including growing media.
12. All plant material which has an identifiable 'trunk' and is produced under any licence, including a grower licence, must have NPWS tags.

Sustainable harvest

The following specific requirements apply to sustainably harvesting *Xanthorrhoea* species.

13. Must demonstrate a minimum population of 10,000 plants on the property to undertake any harvest.
14. Must demonstrate recruitment of plants is occurring to undertake harvest.
15. Must provide count of individuals in size classes to support the recruitment statement.
16. Harvest is only permitted for plants in size classes 3 and 4.
17. Harvest rates will be set according to section 4.10.3
18. Harvesting is not permitted from rocky terrain as survivorship of material harvested from these situations has been shown to be poor.
19. The applicant is responsible for ensuring that any other approvals are obtained.

Salvage harvest

The following specific requirements apply to *Xanthorrhoea* species harvested under a salvage licence:

20. OEH may require salvage plants to be specifically identifiable through the use of salvage-specific tags or similar methods.
21. For salvage harvest, only plants in size classes 3 to 5 may be harvested.

Grower production

The following specific requirements apply to *Xanthorrhoea* species grown in artificial cultivation:

22. Grower licensees may produce plants in all size classes. As sales are most likely in size classes 1 to 2, material in size classes larger than these should be carefully examined due to the possibility that wild harvested material may be passed off as 'grown'.
23. Foliage length requirements do not apply to products produced under a grower licence.
24. All material produced under a grower licence must have a grower tag that meets the requirement set out in 4.11.2.
25. All material with an identifiable 'trunk' produced under a grower licence must also have an NPWS tag in addition to a grower tag.

Appendix I: Family Orchidaceae

Orchidaceae is one of the largest known plant families, with up to 35,000 species recognised worldwide. There are over 600 recognised species in Australia and over 450 in NSW, including naturally occurring hybrids.

Orchids can generally be divided into two broad groups: epiphytes (those that grow on trees, rocks or in tree hollows, including climbing species) and terrestrials (those that grow on or in the ground). There are approximately 74 species of epiphyte and 390 species of terrestrial orchid in NSW. Many have very restricted geographical ranges and 60 species are listed under the TSC Act.

Harvesting and propagating orchids is an established part of the whole-plant industry. The vast majority of trade focuses on the epiphytes which are renowned for their beautiful flowers. Terrestrial orchids are seldom seen in trade outside of specialist orchid clubs and societies.

While cultivation techniques exist for most orchids, effort is mainly focused on epiphytes with the largest flowers or best perfume. Other species have primarily been supplied through wild harvest, and there is strong anecdotal evidence of significantly reduced populations and local extinctions. Since many of these species can be readily propagated there is little justification for continuing wild harvest.

OEH supports a transition to propagated material through ending wild harvest for all orchids that can be cultivated. All species are restricted to grower licences with the exception of those few epiphytes listed in Part 2 Groups 2 to 3 (see details below).

The requirements for harvesting and/or growing orchids are described below.

Sustainable harvest

1. Orchid species listed in Part 2, Group 2 may be harvested from the wild by approved harvesters in sustainable harvest situations only.
2. Approved harvesters must ensure that the population assessment is sufficient to cover the harvest proposed.
3. Harvest rates will be set according to section 4.10.3
4. All products must be tagged with NPWS tags. Harvested material cannot be divided and must be tagged as harvested; OEH will not support the subsequent division of material.
5. Plants cannot be offered for sale without being established on a growing media. Specifically, plants cannot be offered for sale in a 'bare root' form.
6. Plants cannot be offered for sale attached to the 'endemic' growing media from which they were harvested.
7. For the purposes of a population assessment and tagging requirements for *Dendrobium aemulum*, *D. gracilicaule* and *D. speciosum* var *hillii*, a 'plant' is considered to be a cluster of not more than 10 pseudobulbs.
8. For the purposes of a population assessment and tagging requirements for *Dendrobium linguiforme*, a 'plant' is considered to be a cluster of not more than three leads.
9. Stockpile site requirements apply and plants may not be on-sold for 120 days following harvest.
10. The applicant is responsible for ensuring that any other approvals are obtained, such as the land owner's permission.

Salvage harvest

1. Orchid species listed in Part 2, Group 3 may be harvested from the wild by approved harvesters in salvage situations only.
2. Approved harvesters must ensure the assessment of the population is sufficient to cover the harvest proposed.
3. All products must be tagged with NPWS tags. OEH will not support the subsequent division of material.
4. Plants cannot be offered for sale without being established on a growing media. That is, plants cannot be offered for sale in a 'bare root' form.
5. Plants must be sold with a tag attached to each item as harvested; e.g. per stump or log for *Cymbidium suave*.
6. For other species, a 'plant' will be considered to be a single plant or cluster of not more than 20 pseudobulbs.
7. Stockpile site requirements apply and plants may not be on-sold for 120 days following harvest.

Grower production

8. Growers producing orchids (in any group) must be able to demonstrate that the species is being cultivated.
9. Vegetative division is acceptable, but divided plants must meet the following requirements:
 - plants cannot be offered for sale without being established on a growing media; that is, plants cannot be offered for sale in a 'bare root' form (this does not apply to material sold in flasks or similar containers)
 - plants cannot be offered for sale attached to an 'endemic' growing media. Selling plants on lengths of branch or other substrate which can clearly be identified as collected from the wild is prohibited.

Societies and special interest groups

Societies require a licence to sell plant material to the general public. Societies may apply for a single licence to cover material donated by their members for sale to the general public at shows and other events. Where this is the case, the society may produce a 'grower tag'. It will also be necessary for the society to maintain records of the source of all donated material.

Where the material is purchased from other licensed growers for sale at club events, the material should already be tagged according to this plan. Where sales are directed to the general public and/or not at the nominal club venue, the material must be produced under a grower licence and tagged according to this plan.

Appendix J: Penalties

Penalties for offences relating to protected and threatened native plants are specified in the NPW Act and its regulations, and in the TSC Act.

Section 160 of the NPW Act allows penalty notices to be issued for certain offences. The *National Parks and Wildlife Regulation 2009* lists the fixed-penalty notice offences. They include offences related to protected native plants, providing false or misleading information in a licence application or records and non-compliance with licence conditions and restrictions. These fixed-penalty notices incur fines of \$300 or more.

Under Section 117 of the NPW Act, it is an offence to pick or possess a protected native plant except with the consent of the landowner. The maximum penalty is \$11,000 plus an additional \$1,100 for each whole plant, imprisonment for six months, or both. It is also an offence, under Section 118 of the NPW Act, to sell a protected native plant unlawfully. The maximum penalty is \$11,000 plus an additional \$1,100 for each whole plant, imprisonment for six months, or both.

Under the TSC Act, it is an offence to pick, buy, sell or possess threatened species, populations or ecological communities. The maximum penalties are:

- for endangered species: \$220,000, imprisonment for two years, or both
- for vulnerable species: \$55,000, imprisonment for one year, or both.

Penalties are also specified for damaging the habitat of threatened species, populations and ecological communities. The maximum penalties are:

- for damaging critical habitat: 2,000 penalty units (\$220,000), imprisonment for two years, or both
- for damage to habitat of a threatened species, population or ecological community: 1,000 penalty units (\$110,000) imprisonment for one year, or both.

In addition to, or instead of, a financial penalty, offenders may be required to mitigate the damage or restore the habitat and provide security for the remediation.

Under Section 134 of the NPW Act, the Director General of the Department of Premier and Cabinet or the NSW Minister for the Environment responsible may cancel a licence. The licensee has the right of appeal under Section 135 of the NPW Act.

Appendix K: Tools for assessing population and harvest numbers

Effective data collection provides a basis for monitoring populations and adapting management practices to ensure harvesting whole native plants is sustainable.

Determining a sustainable rate of harvest requires reliable data on factors such as fecundity and growth rate. A method for assessment is described next.

Determining the number of plants per acre or hectare

Step 1: Determine the harvest area

Use a map to determine the total harvesting area.

Step 2: Establish at least four plots

OEH recommends choosing four 20 m × 20 m (400 m²) plots to represent the proposed harvest area. Mark each plot using tent pegs and tape or similar means.

Step 3: Establish the number of plants per hectare or acre

In each 20 m × 20 m plot (column 1 below), record the number of plants proposed for harvest (column 2).

To determine the number of plants per hectare (10,000 m²), multiply the number of plants in each plot by 25 (column 3), or to determine the number of plants per acre (one hectare is 2.47 acres), multiply the number of plants per plot by 10.1.

Table 2 Record of plants in the harvest area

Plot # (20 m × 20 m)	Plants per plot (N)	Plants per hectare (N × 25)	Comments
1	11	275	
2	14	350	
3	6	150	Mostly young plants
4	12	300	
Total	43	1,075 (in 4 ha)	268 plants per ha

NB: figures have been rounded to whole numbers.

In this example table, the applicant proposes to harvest from an area of 4.8 ha, giving a population available for harvest of 1,286 plants (268 plants per ha × 4.8 ha).

Conversions

Use the next table to calculate the number of plants per acre or hectare. For a 20 m × 20 m (400 m²) plot, multiply the number of plants by the number corresponding to the harvest area.

Table 3 Conversion values

Harvest area (acres)	Multiply the number of plants in 400 m ² plots by
1.0	10.1
0.5	5.1
0.25	2.5
0.125	1.3
Harvest area (hectares)	Multiply the number of plants in 400 m ² plots by
1.0	25.0
0.5	12.5
0.25	6.25
0.125	3.125

Rotational harvesting

Rotational harvesting is recommended to assist in minimising harvest impacts and improving ecological sustainability. By dividing the harvest area into smaller harvest blocks, a finer scale of population estimate can be achieved. Do this by repeating steps 1 to 5 above for each harvest area. This will help account for plant density across a property.

Also, incorporating rotational harvesting will allow areas surrounding harvest locations to recover and improve the long-term sustainability of harvest operations. Harvest rates will be set for each block based on the population estimate per block. Harvest will only be permitted from one block per year.

Dividing the harvest site into five defined areas, harvesting from only one of the five areas each year and rotating the harvested area annually ensures flowering and seed production can occur and reduces harvest impacts.

Table 4 Rotational harvesting: area divided into five management areas

Area 1	Area 2	Area 3	Area 4	Area 5
Area harvested in first harvest year	Area harvested in second harvest year	Area harvested in third harvest year	Area harvested in fourth harvest year	Area harvested in fifth harvest year

Appendix L: Plant size classes relevant to the whole-plant industry

Material produced under a grower licence must be tagged with a grower tag. Where this material may be confused with material sourced under an extractive licence, growers must also attach an NPWS tag to their products. Material produced under a grower licence will require both an NPWS tag and a grower tag when sold in sizes larger than those specified below.

Table 5 Grower-produced material that requires both an NPWS tag and a grower tag

Scientific name	Common name	Maximum size for grower-only tags
Arecaceae native to NSW	Palms	200 mm pot
<i>Asplenium australasicum</i>	Bird's-nest fern	200 mm pot
<i>Asplenium harmanii</i>	Fern	200 mm pot
<i>Asplenium polyodon</i>	Fern	200 mm pot
<i>Cyathea</i> species	Tree ferns	300 mm trunk
<i>Dicksonia</i> species	Tree ferns	300 mm trunk
<i>Livistona australis</i>	Cabbage tree palm	300 mm pot
<i>Platyserium</i> species native to NSW	Elkhorn and staghorn	300–400 mm shield/root ball
<i>Xanthorrhoea</i> species	Grass trees	140 mm pot – any material with an identifiable trunk
Zamiaceae native to NSW	Cycads	140 mm pot

Size classes for inclusion in population assessments

When an applicant for a wild harvester or approved harvester licence is undertaking a population assessment, the following size classes must be used to determine the population size and size distribution.

Dicksonia and Cyathea species

- plants with a trunk height or length less than 30 cm (class 1)
- plants with a trunk height or length 30–50 cm (class 2)
- plants with a trunk height or length 50–100 cm (class 3)
- plants with a trunk height or length 100–150 cm (class 4)
- plants with a trunk height or length greater than 150 cm (class 5).

Livistona australis

- non-trunked plant with less than 10 leaves (class 1)
- non-trunked plant with more than 10 leaves (class 2)
- plants with a trunk height or length less than 100 cm (class 3)
- plants with a trunk height or length 100–200 cm (class 4)
- plants with a trunk height or length greater than 200 cm (class 5).

Macrozamia species

- non-trunked plant with less than 10 leaves (class 1)
- non-trunked plant with more than 10 leaves (class 2)
- plants with a trunk height or length less than 30 cm (class 3)
- plants with a trunk height or length 30–50 cm (class 4)
- plants with a trunk height or length greater than 50 cm (class 5).

Xanthorrhoea species

- non-trunked plant with less than 40 leaves (class 1)
- plants with a trunk height or length less than 30 cm (class 2)
- plants with a trunk height or length 30–50 cm (class 3)
- plants with a trunk height or length 50–100 cm (class 4)
- plants with a trunk height or length greater than 100 cm (class 5).

Size classes and licence types

The following table sets out which size classes may be harvested under each of the identified harvest situations. All class sizes may be produced under a grower licence.

Table 6 Size classes applicable to wild and approved harvester licences

Plant genera	Licence type		
	Wild harvest	Sustainable harvest	Salvage
<i>Dicksonia/Cyathea</i>	Classes 2–3	Classes 2–3	Classes 4–5
<i>Livistona</i>	Nil	Nil	Classes 3–5
<i>Macrozamia</i>	Nil	Classes 2–4	Class 5
<i>Xanthorrhoea</i>	Nil	Classes 3–4	Classes 3–5

Appendix M: Fees

Licence fees vary depending on the costs incurred by OEH associated with inspecting and monitoring sites. The standard application fees outlined here are current at the time of publication and are subject to change without notice. Licence fees are summarised below (or see www.environment.nsw.gov.au/wildlifelicences/CommercialUseOfNativePlants.htm). The licence application fee is paid when lodging the application and is not refundable if the application is refused or withdrawn.

NPWS tags, where required, are an additional cost.

Licences

Wild harvester licence

For those harvesting from naturally occurring plants growing on property which they own, licence fees are:

- three-year licence – \$135 (including site inspections)

Approved harvester licence

For approved harvesters, two sets of fees apply: a three-year approved harvester licence fee and annual site approval fees.

Licence fees:

- for initial licence: 3 years – \$175

Site fees are payable prior to any site inspection and are non-refundable:

- one-year site approval – \$75 (per site application)

Seed harvester licence

This licence will be issued for a period of three years.

Licence fees:

- three-year licence – \$175 (including site inspections)

Grower licence

This applies to those growing and selling protected plants.

Fees for grower licences are:

- for 1 year – \$30
- for 3 years – \$75
- for 5 years – \$100

For established commercial growers, OEH may issue an extended-term licence.

Varying a licence

A period of time will be permitted after granting a licence for the licensee to nominate employees, particularly as many are itinerant, and this will not be considered a variation.

NPWS tag fees

NPWS tags for most products will be charged at cost-recovery rates only. The current fee is approximately 20 cents per tag.

NPWS tags for plants in Groups 2 and 3 of Schedule 13 harvested under an approved harvester licence may be subject to a tag premium of \$3 to \$5 per plant.

These costs are correct at the time of publication but may be subject to revision.

