

>>> "Chris Parker" <krus@southernphone.com.au> 02/05/2011 11:25 >>>
SWEET WATER ACTION GROUP INC.

SUBMISSION

RE:

Huntlee New Town Stage 1 Subdivision and Infrastructure Works.

April 2011

The Sweet Water Action Group (SWAG) is a residents group whose objective is to protect the environment in the area surrounding Branxton, North Rothbury and Greta.

SWAG believe any rezoning proposal should be based on planning merit and not land ownership as the current Huntlee State Significant Site application is.

SWAG office bearers are;
President: Chris Parker
Secretary: Helen Wilkinson
Treasurer: Paul Darr

Contact:
Post: 26 Rothbury St. North Rothbury, 2335
Phone: 0434 332217
Email: krus@southernphone.com.au

SUBMISSION

SWAG thank the NSW Department of Planning for the opportunity to make this submission.

We wish to make the following recommendations;

- 1) The application should be rejected as it has not undertaken any level of assessment of either Aboriginal or European heritage values whatsoever.
- 2) The application should be rejected as there is grossly inadequate assessment of the nationally significant biodiversity values present on the site.
- 3) The application should be rejected as it fails to provide in any sense development which could be considered as ecologically sustainable.
- 4) The application should be rejected as it completely fails to provide an assessment of the social and economic impacts on the surrounding community.

- 1) The application should be rejected as it has not undertaken any level of assessment of either Aboriginal or European heritage values whatsoever.

The map below is taken from the Environmental Assessment. It clearly shows the area proposed for development by Stage 1 of the Huntlee proposal.

It should be noted that none of this area has been surveyed for items of aboriginal heritage significance.

Vines 2003 (Biosis) and Hardy 2004 surveyed the following area:

Len Roberts 2003 surveyed only a small area adjacent to Old North Road.

Roberts 2005 and Roberts 2010 did not conduct any further survey work.

The Environmental Assessment Requirements issued for this project did not request either Aboriginal or European Heritage assessment. Despite that it is recognised that the principles of ecologically sustainable development (ESD) form part of the public interest which must be taken into account.

SWAG submits that the intergenerational equity principle, which is part of ESD, and which includes consideration of heritage values must be taken into account when considering development. This is particularly the case where the general area is known to have been used prolifically by Aboriginal people.

The absence of any assessment or material on Aboriginal heritage must raise the question of how this Project Application was ever deemed fit by the Department to be placed on public exhibition.

The Project Application should be rejected in its entirety because of this serious oversight. If the Department were to deem it adequate to request supplementary heritage studies then these studies should be thorough, conducted by well respected consultants and the whole Project placed on public exhibition again to allow full public scrutiny of the new material.

2) The application should be rejected as there is grossly inadequate assessment of the nationally significant biodiversity values present on the site.

The Stage 1 Project Application will destroy approximately 50% of the range of the critically endangered *persoonia pauciflora*.

Despite this no attempt has been made to provide a more detailed assessment of the impact on this species than that provided in the State Significant Site application. While the SSS application was approved by the Department of Planning (and is currently being challenged in the Land and Environment Court) the acceptability of the impacts on the *persoonia* by this project and the value of the environmental offsets generally have never been verified by any professional ecologist or botanist (other than those paid by the developer). The claims made by the proponent in the SSS Study have simply been repeated again in this Stage 1 Application.

In contrast well respected ecologist, Gordon Patrick has identified there will be a likely significant impact on the *persoonia* resulting from this development.

Given that this critically endangered species is only found in the Huntlee area AND the development will destroy 50% of its habitat it would seem logical that the Department of Planning should observe the precautionary principle and conclude that where there is expert opinion warning of serious impacts no approval should be given. Alternately if the Department were still thinking of approval then they should ask Office of Environment and Heritage to commission an truly independent professional opinion of the impacts on the *persoonia*, and biodiversity more generally.

Gordon Patrick (2010, attached below) observed that previous attempts to ameliorate the impact on *persoonia* specimens in the Hanwood development had failed and all but one plant had failed to survive. Given this it seems logical to ask for a more detailed and considered explanation of how the plants in a) the *persoonia* park, b) adjacent to the northern 'town centre' development, and c) those adjacent to the Large lot residential, will be protected from the more intense activity which killed previous plants in Hanwood Estate.

All specimens of this species are critical to its survival. Whilst the Department should be looking at creating 200m buffer zones which are strictly enforced around each individual, even that treatment underscores the increasing isolation and lack of connecting habitat corridors which make this development unacceptable.

The consideration of the impacts of Stage 1 on *persoonia* are seriously inadequate and leave the Department in no position to make an assessment against the principles of ESD.

3) The application should be rejected as it fails to provide in any sense development which could be considered as ecologically sustainable.

The Stage 1 proposal cannot be considered to be sustainable on any level. Despite the need to reduce green house gas emissions and car dependency Stage 1 is located at a distance from the railway station. Further there are no plans to increase passenger rail services to the area.

Clearly if the NSW Government were serious in wanting to reduce GHG emissions and provide more affordable housing (i.e. housing which did not require families to have several cars with associated running costs in an isolated location) then Stage 1 would either be built near a railway station or it would be refused in favour of development sites with better access to public transport.

4) The application should be rejected as it completely fails to provide an assessment of the social and economic impacts on the surrounding community.

At 50ha the 'mixed use' zone will be one of the largest (if not the largest) commercial area in the lower hunter. The capacity for a commercial centre of this size to become a dominant regional centre is very high. Large new greenfield sites located on the junction of a major new freeway extension will be very attractive to large scale retailers. Consequently the risk of the regional centres endorsed by the Lower Hunter regional Strategy such as Cessnock, Maitland and Singleton being adversely affected by a newer centre at Huntlee is high.

The consequences for the Branxton business district is even more alarming.

Despite this there has not been any attempt at all to make an assessment of the likely impact on the Branxton businesses or the regional centres of Cessnock and Singleton.

The NSW Government have a responsibility to look at alternatives and gauge the impact of any development on the surrounding environment. In this instance there has been no assessment of the social and economic impact and the application should be rejected.

Comments provided by Gordon Patrick in regard to the following Proposal

Job Title: State Significant Site ☐ Huntlee Exhibition

Gordon Patrick contact details:

72 Kahibah Road

Highfields

NSW 2289

Phone: (Mob.) 0428 691505

Email: gordiesgumnuts@yahoo.com.au

Date: 15th November 2010

Comment provided in this submission will provide evidence that the proposed resubmitted development of Huntlee as it currently stands is highly likely to have a significant long term impact on the Critically Endangered shrub species *Persoonia pauciflora*.

Author Background:

I have been involved in ecological studies and survey work for over 17 years and have been employed as an ecologist / botanist in the consulting industry for the majority of this period. I have a degree in Environmental Science (University of Newcastle) and am currently undertaking additional studies at the University of New England; I am currently undertaking a Graduate Diploma in Botany /

Ecology, which will include a thesis study of ecological aspects of *Persoonia pauciflora*. My experience is primarily in the areas of Plant Ecology / Botany and vegetation / habitat restoration.

As part of a survey team, in 1997, several individuals of an unknown *Persoonia* species were located in a naturally vegetated area just to the south of North Rothbury in the Lower Hunter Valley (the property known as Hanwood Stage 5). The specimens were subsequently confirmed by the National Herbarium (Royal Botanic Gardens, Sydney) as being a new species in 1998. The species was initially given the temporary name of *Persoonia* □North Rothbury□ and later, based on species morphological characteristics, was formally given the scientific name of *Persoonia pauciflora*. The species has been taxonomically described by Peter H. Weston of the National Herbarium (Royal Botanic Gardens Sydney), in the Journal □Telopea□ Vol. 8(2) in June 1999. I provided assistance to the Royal Botanic Gardens in regard to field surveys and data, which was utilized in the subsequent Journal article.

I have undertaken studies in regard to the species since 1997, both on a professional basis (as an ecological consultant) and on a personal basis (University studies and as a personal interest).

I have undertaken two specific studies for the then NPWS in 1999 and in 2000:

Patrick, G. (1999) Initial flora survey to sample potential habitat, abundance and distribution of the new plant species *Persoonia* □North Rothbury□. Unpublished report. NSW NPWS, Hurstville.
Patrick, G. (2000) Survey for the threatened plant species *Persoonia pauciflora* within the northern and central portions of Cessnock City Council area, 2000. Unpublished report. NSW NPWS, Hurstville.

Additional reports in regard to the species also include:

Patrick, G. (1998) The □Rare□ plant species *Persoonia pauciflora* □ North Rothbury. Unpublished report. Misthold Pty. Ltd
Patrick, G. (2001) Brief overview on the expansion of populations of the rare plant, *Persoonia pauciflora*, in the North Rothbury area. Unpublished report. NSW NPWS, Hurstville.
Patrick, G. (2003) *Persoonia pauciflora* Update 2003. Supplied to the NPWS in 2003.

I provided supporting information for the nomination for listing *Persoonia pauciflora* as Endangered on Schedule 1 of the Threatened Species Conservation Act (NSW) (TSC Act) 1995 in 1999. Additional information has been supplied to DECCW (formerly DECC) in regard to the proposed listing of *Persoonia pauciflora* as a Critically Endangered species on the TSC Act 1995 in 2006 / 7.

Patrick, G. (2006) Collation of information on the status of the Endangered Species *Persoonia pauciflora* in the Lower Hunter Valley of NSW. Report prepared for the Department of Environment and Conservation (NSW) by Trees In Newcastle, Newcastle, NSW.

I have also provided detailed information in regard to the Nomination for listing as Critically Endangered under the Environmental Protection and Biodiversity Conservation (EPBC) Act 1999. In addition to the above documents I have also produced several other reports into the status of the species for the Department Of Environment and Heritage in response to requests for more specific information prior to the listing of *Persoonia pauciflora* nationally as Critically Endangered.

Additionally, due to my extensive knowledge of the species, I was engaged by the DECCW to undertake the collation of Information on the status of *Persoonia pauciflora*, specifically for the production of a Species Recovery Plan. The report was finalized in September 2006. More recently, I have been involved in two public / community threatened species days in 2009 and 2010 to help increase the awareness of the species in the wider community and to also carry out searches for the species in the North Rothbury area. I am also a member of the Hunter Threatened Flora Recovery Team.

Initial Comments

Although the basis of the Huntlee proposal has been slightly modified from the previously submitted and rejected proposal, the issues in regard to the potential detrimental impacts to *Persoonia pauciflora* in the North Rothbury area still remain relatively unchanged.

□*Persoonia pauciflora* is listed as Critically Endangered under both State (TSC Act 1995) and Federal legislation (EPBC Act 1999).

□Initially, it must be considered that the vast majority of the proposed Huntlee site can be regarded as potential habitat for *Persoonia pauciflora*, not only the actual locations (and adjacent surrounds) where individuals of the species currently occur. The Huntlee proposal covers approximately 50% of the entire known distribution of habitat for the species, which is restricted to the North Rothbury area (within 2 □ 2.5km radius of the Tuckers Lane and Wine Country Drive junction). *Persoonia pauciflora* is located no-where else in Australia.

□No individuals of *Persoonia pauciflora* are located in any dedicated conservation area, with all known individuals present on either privately owned land (~75%) or managed road easements (~25%).

□The Draft National Recovery Plan (DECC 2009) has estimated that □less than 350 mature individuals remain□.

□The proposal has been designated as a □Controlled Action□ under the auspices of the EPBC Act 1999 late in 2007. The Controlled Action status was triggered by the potential impacts of the Huntlee development to the Critically Endangered Species, *Persoonia pauciflora*.

□The following was stated in the recommendations section (5.0) of the report (Vegetation survey of □Sweetwater□, North Rothbury, mid Hunter Valley, NSW) compiled by East Coast Flora Survey (Bell & Driscoll, 2005).

□All individuals of *Persoonia pauciflora* present within the study area be protected within a buffering conservation area, to recognize the ecological importance of this narrow endemic□.

This statement adds weight to the significance of the species and appears to only taken partially into consideration in the planning phase of the Huntlee proposal design. As follows is a statement from the current Huntlee Ecological Assessment Report, September 2010:

□? All *Persoonia pauciflora* individuals should be retained until such time that they senesce with a minimum 30m vegetated buffer per Bell (2005) report recommendations;□

This statement appears to be an □interpretation□ of the original account as provided by Bell & Driscoll (2005). An issue with this approach is what happens to the buffer area once the mature plant dies □ does the area cease to be regarded as potential habitat and as such, can the area be developed / modified? This is unclear and needs to be clarified.

As for the proposed □Persoonia Park□, these proposed areas of vegetated buffer surrounding *Persoonia pauciflora* individuals will be subject to numerous potentially habitat degrading processes. The potential impacts are presented in more detail in the section headed □Comments on the proposed Persoonia Park□. Briefly, there will likely be issues with potential loss of connecting vegetation corridors for both pollinators and seed distribution vectors; weed invasion from adjacent residential / development areas; dumping; the areas will effectively become small □islands□ with limited viability.

Is there recourse / consideration that in the event that new individuals of *Persoonia pauciflora* are located in the proposed development areas and buffer areas □ will these individuals also be given similar status afforded the original specimens?

Translocation / Mitigation Measures

In regard to proposed habitat conservation measures, particularly in relation to *Persoonia pauciflora*, there are no successful working examples of the possible restrictions that may be placed on the land title if an Environmental Conservation area was declared or on individual rural / residential lots containing the species outside of the proposed conservation area.

?To provide as an indication for an adjacent area, several specimens of *Persoonia pauciflora* were located in the land that is now subdivided into rural residential lots in the Hanwood Stage 4 development (1998). The plants in this area were provided with various covenants in the form of an 88b Instrument to allow for their retention on the rural residential blocks outside of the building envelopes. Covenants included fencing around the plants; provision of specific information relating to the species to the landholder; retention of native vegetation; no planting of non-indigenous vegetation; no grazing stock (particularly horses); monitoring by council officers, etc. With the exception of one individual in this area, all are now long gone, as is much of the remnant habitat that was to be retained, horses and other domestic animals are present and all but one of the fenced

off areas are no longer present. No monitoring of these areas (with the exception of my own observations) has been undertaken by any government body. This example provides an indication as to the potential devastating impacts such well meaning developments or management methods can have on this species.

Translocation (if being considered) of *Persoonia pauciflora* or any threatened species cannot be considered as an amelioration measure, as success cannot be even partially guaranteed. A previous attempt to translocate mature *Persoonia pauciflora* specimens on the property known as Hanwood Stage 5 was undertaken in 1998 prior to the species being listed as Endangered under the TSC Act. The process involved careful plant and suitable donor site selection, in addition to the use of large earth moving machinery, carrying as large a root-ball and soil as possible (as has been suggested in previous documents produced by HSO / RPS in regard to translocation of the species), also locating the translocated specimens in similar habitat e.g.: aspect, soil type, etc. Original topsoil and leaf litter was collected at the plant to be moved and re dispersed at the translocation site. I can attest that monitoring of the specimens was undertaken on a regular basis with all specimens dead and leafless within 1 to 2 months after translocation. On this result, which is directly relevant to this species in the locality, it would seem that translocation should not be considered as a method for impact amelioration as the specimens will likely not survive the translocation process.

Currently, the genetic make up of the species across its range is unknown. This is one aspect that will be investigated as part of future studies as recommended in the background document for the Recovery Plan (Patrick 2006) and the Draft *Persoonia pauciflora* Recovery Plan (2009). As such it would seem premature to consider the removal of any individuals of the species or their associated habitat until this and other studies are undertaken. The species grows in the North Rothbury area and nowhere else, and as such the significance of the area containing this nationally significant species should be acknowledged as being of imperative importance.

It is also proposed to collect and propagate the species from seed and cuttings. The use of cuttings for propagation may be viable in allowing other individuals of the species to grow, but as they are produced from cuttings there is no genetic diversity in these specimens, they are in effect clones and should not be considered as □new□ individuals. In regard to seed collection and propagation there is little evidence Australia wide that propagation of any *Persoonia* sp. from seed is a simple process. The vast majority of *Persoonia* sp. cannot be grown from seed at this stage.

An in-situ population of the species in a large area is preferable to any translocation or propagation program.

Comment on: - Appendix H □ □INDIVIDUALS OF *PERSOONIA PAUCIFLORA* (NORTH ROTHBURY *PERSOONIA*) OCCURRING WITHIN THE HUNTLEE NEW TOWN STUDY AREA□, prepared by RPS Australia East P/L, 2010.

This report describes some minor background information relating to individuals of the species within the Huntlee study area. The report provides very limited useful or detailed information in relation the ecology of the species, nor does it have any information to provide any support to a potential translocation program for the species. The report does provide detail in regard to the decrease in numbers of mature specimens over the monitoring period. The report also indicates that five (6) of the plants which were part of the monitoring program have died - there were losses to the *Persoonia pauciflora* population in the Huntlee study area over the monitoring period. The report (2010) also indicated that targeted surveys had also been undertaken for the species in some sections of the overall Huntlee site but none were located □ what survey effort was involved? It would appear that there is no natural recruitment (seedlings) over this period in the Huntlee site, although conversely there has been recruitment in other areas of known habitat in the North Rothbury area.

Comments in regard to the proposed *Persoonia* Park

In regard to *Persoonia pauciflora* the areas to be set aside, 859ha within Huntlee and the 4 988ha located in other areas, do not contain any known individuals of the species nor is the habitat

considered suitable. The 17ha section, named the Persoonia Park, is proposed to be dedicated to the conservation and research of *Persoonia pauciflora*. This "Park", as it is indicated in the Huntlee figures is located in the eastern limit of the species distribution and is known to have only a few individuals present (3). The Persoonia Park is also in a tenuous location as there is potential for it to become an isolated "island" well away from the main population areas of the species located to the west.

Although, a 17ha section of the site is proposed for conservation / research of *Persoonia pauciflora* and is considered as a positive objective, there are other points to consider. The portion of the overall site to be retained is not considered large enough to provide viable habitat for the *Persoonia pauciflora* population in the medium or long term. Several factors include:

- ?The reduction in size of naturally vegetated habitat areas may reduce the likelihood of species such as Kangaroos and Wallabies utilising the area. Both these species are thought to be vectors for the species seed dispersal (Patrick).
- ?The reduction in size of native vegetation may also reduce the available habitat for the species concerned with pollination (i.e. native bees) of *Persoonia pauciflora* in the locality, thereby, reducing the long-term viability of the species on the site. This could potentially be particularly exacerbated by the loss of the connection to the vegetated areas to the west, where the bulk of the known population of the species is present. Currently, although several species have been observed as potential pollinators (Patrick), details are as yet not fully researched.
- ?Due to the small size of the potential conservation area (17ha) there would be a high probability that a single fire could pass through the entire conservation area, destroying all individuals. A similar scenario is in regard to potential disease, where a relatively small area, such as that proposed, is infected.
- ?The area will be abutted in the north by land categorized as "General Residential" (R1). This will have a high potential for clearing issues relating to Asset Protection Zones as well as weed invasion and dumping - all are factors that relate to the reduction of habitat quality.
- ?A small conservation area, as that proposed, will also provide little in regard to future expansion of the current population and may reduce the species overall fitness through inbreeding depression.

One improvement to the previous Huntlee proposal is the addition of the ~18ha reserved section on the northern side of Hanwood Estate and the western side of Wine Country Drive. This area is known to have several individuals of *Persoonia pauciflora* present as well as sections of suitable habitat. Although situated to the west and in close proximity to the larger conservation area in the south west (across Black Creek) the site is subject to the same issues as the proposed "Persoonia Park".

Lack of ecological knowledge of species and Habitat Removal

There is likely to be a significant impact to the Critically Endangered species *Persoonia pauciflora*, as the proposal isolates (effectively removes) up to 15% of the known individuals of the species and removes or permanently modifies around 50% of known and potential habitat.

Additionally, there are many uncertainties and gaps in regard to the data gathered to date, including the limited amount of information known about the species ecology and genetic make up. Without good data a precautionary approach should be implemented.

In Conclusion

Based on the comments provided in this submission and the information previously forwarded, it is indicated that a significant impact to a number of individuals of the population of *Persoonia pauciflora* is likely. Additionally, for a species of such restricted range and low numbers, the likelihood of areas of known and potential habitat being lost / removed (up to 50%) as a result of the proposed Huntlee development must also indicate that a significant adverse impact is likely to this Critically Endangered species.

Gordon Patrick

15th November 2010