

PCU038788

12 Thomas Street,
North Rothbury NSW 2335

09/10/2012

Dear Sir/ Madam,

Huntlee New Town Stage 1 Subdivision and Works (MP
10_0137)

I object to the proposal .

There are no plans in the future for any increases in passenger trains
whether the development goes ahead or not .

*There are no plans to increase Police or Ambulance service in the area and
they are already stretched -the nearest are 25 kms away and traffic is heavy.*

There are no plans for sewerage or curb and guttering in the North Rothbury
area and in times of heavy rain water run off is already a problem and will
impact on the proposed development .

Yours sincerely,

Helen Partridge.



Natalie Mitchell - huntlee

From: "steve knobel" <steveknobel@ozemail.com.au>
To: <plan_comment@planning.nsw.gov.au>
Date: 16/10/2012 8:51 PM
Subject: huntlee

From: "steve knobel" <steveknobel@ozemail.com.au>
To: <plan_comment@planning.nsw.gov.au>
Date: 16/10/2012 8:51 PM
Subject: huntlee

I would like to add my support to the Huntlee Development
It looks amazing and would be a great opportunity for the area
This would also compliment the New F3.....

Thankyou

Steve Knobel
864 Old North Rd
Rothbury 2320

Natalie Mitchell - Huntlee Stage 1

From: Tony Chandler <tonychandler@live.com.au>
To: <plan_comment@planning.nsw.gov.au>
Date: 25/10/2012 2:54 PM
Subject: Huntlee Stage 1

Huntlee Stage 1 Subdivision and Works (MP 10_0137) - Preferred Project Report

Director -Strategic Assessment
Dep of Planning and Infrastructure
GPO Box 39
Sydney NSW 2001

I feel the Huntlee Stage 1 subdivision (as above) should be refused . My reasons are listed below.

A subdivision with approximately 1400 lots which only has a single access road is bad planning as in the event of fire or other emergency residents will be trapped .

It does not identify the contaminants present which will affect future stages and therefore impact on the viability of stage one.

Does not protect or provide any substantial offsets for either the critically endangered PERSOONIA PAUCIFLORA, or the endangered bushland existing on the site.

Has not taken into consideration the impact it will have on the historic village of North Rothbury, which having been home to the infamous Rothbury Riot needs to be protected in the interests of Australian history and as a legacy for our future generations.

Has not made it clear that if land is donated for a primary school it will be up to the government to build such and that land will not be donated for all the planned schools for this development, therefore they cannot promise the education facilities they are intimating will be there.

Yours Sincerely
Anthony Chandler

1 Reid Street
North Rothbuty NSW 2335
25/10/12

Natalie Mitchell - Huntlee Stage 1 Subdivision and Works(MP_0137)

From: karen chandler <ktsu@live.com>
To: "plan_comment@planning.nsw.gov.au" <plan_comment@planning.nsw.gov.au>
Date: 25/10/2012 1:55 PM
Subject: Huntlee Stage 1 Subdivision and Works(MP_0137)

Director-Strategic Assessment
Department of Planning and Infrastructure
GPO Box 39
Sidney NSW 2001

Huntlee Stage 1 Subdivision and Works (MP_0137)-Preferred Project Report;

The Huntlee Stage 1 subdivision for approximately 1500 lots should be refused for the following reasons.

- *The said site is not appropriate for development on a large scale.
- *The placement of up to 20,000 people in the middle of the Hunter Valley is not good planning.
- *The developer no longer controls the land they claimed previously. The subdivision is substantially different from that presented earlier and is no longer continuous.
- *A new school is not to be built until after 800 lots are sold, that is if the government of the day has the funds, this will put a huge strain on local schools and also on high schools at Singleton, which is desperate for a new school itself, Rutherford and Mt View at Cessnock.
- *This development will destroy the shopping precinct in Branxton .
- *The developers claims that the " quiet village feel "will remain in the surrounding community are ludicrous .

Yours Sincerely
Karen Chandler

1 Reid Street
North Rothbury
NSW 2335 25/10/2012

13 Nords Wharf Road
NORDS WHARF NSW 2281



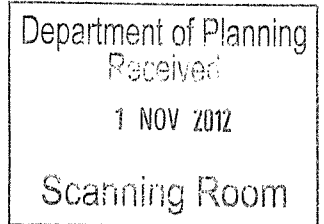
31 October 2012

DOPI

Director - Strategic Assessment
GPO Box 39, SYDNEY NSW 2001

Submission re Huntlee Stage1 Subdivision & Works
MP 10_0137 - PPR

I object to the draft plan.



Reasons include:

- ① negative environmental impacts.
- ② human health & wellbeing reasons including failure to adequately address Soil contamination & air quality monitoring not made public.
- ③ concern about management of asbestos contamination being inadequate.
- ④ AECOM Site Investigation Report (31.7.2012): Headings do not have meaning in English. Document cannot be relied upon.
- ⑤ Failure of proponent to ensure due diligence regarding Aboriginal heritage and its conservation.
- ⑥ Scale proposed does not correspond with the definition of village — the term residential village is misleading about massive scale & impacts.

Signed: *Joy Llewellyn-Smith*

JOY LLEWELLYN-SMITH

Natalie Mitchell - Huntlee

From: Margaret Brough <margfrances@bigpond.com>
To: <natalie.mitchell@planning.nsw.gov.au>
Date: 5/11/2012 8:03 AM
Subject: Huntlee

Margaret Brough
 42 Lindsay Road,
 North Rothbury NSW 2335

Objection to the Huntlee Development.

* Local residents of North Rothbury Lifestyle destroyed -
 developers wealth vs residents riches i.e our environment

* **Over 300 signatures on petitions from people who don't want the
 development - sent to the Department 2005/6**

* Over 64 submissions from people qualified in their field advising of the losses to
 the environment the development will cause.

* Current residents needs are ignored

Why are the local residents and their needs not important?

* Loss of environment and habitat of flora and fauna

* Properties devalued

HOW CAN developers needs be more important than residents. ? Those of us living
 here **now**.

**Half a dozen wealthy developers who bought the site and should have known the
 site was not included in the part3A Hunter Regional Strategy.**

The original deal - illegal proven in court of law

Inappropriate site - State & local planning departments Gvts own MCA declares 91
 out of 92

Lack of infrastructure .

Figures for future are **Guestimates**

Creating a setting for future social disaster

SWEET WATER ACTION GROUP INC.

SUBMISSION

RE:

**Huntlee New Town Stage 1 Subdivision
and Infrastructure Works.**

Preferred project Report

November 2012

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 the subdivision proposal should be based on planning merit.

Thus far there has been no merit based assessment of development at the Huntlee site.

The assessing authority must keep in mind that the Huntlee site was included in the Lower Hunter Regional Strategy in an unmeritorious way following intense lobbying by developers and without public exhibition.

The State significant Site listing was made on the basis of its inclusion in the Lower Hunter Regional Strategy

Therefore it is imperative that the Minister for Planning (or their delgate) be aware of the need to conduct a full merits assessment of the this development proposal.

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

SWAG makes the following submissions;

- 1) That the Department of Planning must step aside from conducting an assessment of the proposal on the basis that its relationship with the development proposal is compromised and it can no longer be seen to be objective.**
- 2) The supporting material for the proposal is old and not able to support the conclusion it reaches, particularly in relation to *Persoonia Pauciflora*.**
- 3) That the proposal is substantially different from that which went on exhibition originally. Many of the supporting documents and studies have not been adjusted for the different footprint of the development and therefore there adequate information has not been provided for assessing the proposal.**
- 4) the proposal should be refused as has not been able to demonstrate how the site will be affected by contamination.**
- 5) The proposal should be rejected as it is likely to be detrimental to the social cohesiveness of the business centre of Cessnock and Singleton.**
- 6) The Stage 1 Project should not be approved before the Huntlee Development Control Plan has been approved and the public are able to view the final copy of the DCP and make final submissions on the Stage 1 Proposal.**

1) That the Department of Planning must step aside from conducting an assessment of the proposal on the basis that its relationship with the development proposal is compromised and it has not demonstrated an ability to produce an objective assessment of the proposal.

SWAG requests the Director General to engage a suitably qualified organisation independent of the Department of Planning to assess the Huntlee proposal. SWAG makes this request not because an internal assessment by the Department would lead to a finding of bias by the courts, but because the Director General should, in SWAG's opinion, recognise that the Department have failed to provide a reasonable and objective assessment of the proposal to date and have lost the confidence of the public.

While some may argue the Planning Assessment Commission may provide an objective decision they can only do that if provided with sufficiently robust information and summary materials, and those do not exist to date with regard to Huntlee.

Long standing involvement of Department and Staff

SWAG requests to the Director General of the Department of Planning appoint suitably qualified independent planning consultants (preferably from another State) to assess the Huntlee Stage 1 proposal. SWAG believe that current Department Staff as well as the Department as an organisation have a close association with the proposal and a long history of supporting the development.

Importantly that involvement and support has occurred at times which the Court has found were marred by apprehended bias, and more latterly when it can not be reasonably argued that sufficiently rigorous or independent material existed on which to base a merits assessment.

Consequently SWAG believe the Department should disqualify itself from carrying out the substantive assessment, engage independent assessors from interstate and allocate a sufficient budget for those assessors to engage alternate professional review of the documents provided by the proponent.

Rationale

DoP staff members Michael File, Simon Bennett and Natalie Mitchell have all had extensive involvement in the Huntlee site.

In particular Michael File was present (and represented the the Department) at the home of SWAG members Bob and Margaret Brough in 2007. SWAG members believe that Mr File treated the issues raised by the local community at that meeting with derision.

It is also noteworthy that Ms Stephanie Bellango also attended the 2007 meeting (also on behalf of the Department of Planning) then wrote the Preferred Project Report for Huntlee on behalf of JBA Urban Planning.

SWAG notes that JBA Urban Planning appear to conduct approximately half of all Part 3A Environmental Assessments on behalf of proponents.

Mr File was also present when SWAG met with Minister Hazzard in early 2012. At that meeting SWAG believes the Minister made a commitment to place the Stage 1 proposal back on full exhibition. When Minister Hazzard asked Mr File why the residential lots could not be reduced in close proximity to the Persoonia Park and Mr Paul Darr's tourist accommodation business Mr File was heard to object saying it would reduce the yield of the development.

Subsequent to that meeting the full Stage 1 proposal has not been placed on exhibition and there has been no reduction in housing yield in on the land adjoining Mr Darr's property.

SWAG understands from comment by Departmental Staff at the so called community consultation meeting of 22 October 2012 that Mr File has recently been given a promotion in the Department and is in a position senior to assessing staff and is able to influence the assessment.

History of inappropriate recommendations

To place the ongoing involvement of staff and the Department in context we draw your attention to the following chronology:

October 2006 Minister Sartor agrees to include Huntlee (substantially the current proposal) in Lower Hunter Regional Strategy after signing an Memorandum of Understanding (later a Deed of Agreement).

August 2007 Huntlee lodges a State Significant Site application and Concept plan, the justification for which contains references to the pre-determined agreement between the State Government and the proponent¹.

February 2009 SSS and Concept Plan approved.

October 2009 - By consent the approval for both the SSS listing and Concept plans was overturned by the Land & Environment Court on the basis of apprehended bias and taking into account the Deed of Agreement as an irrelevant consideration.

July 2010 Huntlee declared a Potential State Significant Site again by Minister Kelly.

September 2010 - substantially the same SSS application placed on public exhibition.

December 2010 - substantially the same SSS application approved by Minister Kelly.

March 2011 - Hardie Holdings initiate legal action against the NSW Government for negligent misrepresentation and implied breach of Contract with respect to the Deed of Agreement.

July 2011 - the SSS was overturned by the Land & Environment Court on the grounds of failure to take into account SEPP 55 and irrelevantly considering an invalid Voluntary Planning Agreement.

¹ Harper Somers O'Sullivan, *Ecological Constraints Masterplan for Huntlee (ECMPH)*, August 2007 p. I & III

December 2011 - The Court of Appeal reinstated the SSS listing on basis that making a SEPP was not reviewable by the Courts whether or not SEPP 55 had not been taken on to account or any other mistake made. The Court also found the VPA was sufficiently made.

June 2012 - NSW Department of Planning & Infrastructure publish a Fact Sheet on the Huntlee Development Control Plan which incorrectly claims the SEPP SSS listing was for '*up to 7500 homes, and accommodating 20,000 new residents:*' The SEPP Amendment does not specify any number of lots, or any number of residents.

No change in assessment

Based on the chronology above it could reasonably be expected that the Court having found a reasonable apprehension of bias in the approval of the 2007 application there would have been a fresh approach in the 2010 proposal to really justify the proposal accompanied by a rigorous assessment to demonstrate objectivity. However that was not the case.

As an example of the lack of assessment by the Department of Planning it is convenient to focus on the *persoonia pauciflora*.

The First application unequivocally relied on the unlawful pre-determined agreement with the NSW Government. As an example the following is typical²

The concept of Persoonia Park has been endorsed within the DoA with the NSW Government in association with other outcomes determined under the finalisation of the Lower Hunter Regional Strategy.

The discussion of the impacts of the proposal on the *persoonia pauciflora* contained between pages 46 - 48 of the Ecological Constraints Masterplan for Huntlee 2007 is notable for what is not discussed. There is no discussion of the extent to which the plant will be impacted, there is simply an acceptance that an agreement had already been reached.

There is no discussion of the impact of the Huntlee development taking into account the *Persoonia Pauciflora Environment Impact Guidelines* - PH Weston, NPWS, 2000. In particular there is no discussion of the issues raised in that guideline such as connectivity between sub populations, disturbance of the seedbank, the potentially devastating effect of too frequent fire in the Persoonia Park especially as it will be immediately adjacent to a suburban population which is known to increase weed infestation and fire occurrence.

The *Persoonia Pauciflora Environmental Assessment Guidelines* are included as **Attachment D** to this submission.

Further the 'Response to Submission' on the 2007 proposal contained no further justification and only a minor tinkering along the edges of the conservation land just north of Hanwood Rural

² Harper Somers O'Sullivan, *ECMPH 2007*, p.47

Residential estate.

The involvement of Department of Planning has to be put into context that the Department gave approval for:

- ³⁵₁₇ a clearly biased application which took into account irrelevant considerations to be placed on public exhibition;
- ³⁵₁₇ a substandard ecological assessment to be placed on public exhibition, one that effectively provided no assessment at all.

One would have thought that given we are dealing with a species listed as critically endangered, found no-where else in the world, and a development which would destroy 50% of its range, that the Department would have commissioned an independent expert to provide a critique of the proponents so called ecological assessment.

If there were any formal assessment by the Office of Environment and Heritage it has not been seen in any GIPA requests, Call for Papers or mentioned in any documents produced to the courts.

It is a legitimate question why, with respect to a development which;

- ³⁵₁₇ ecological professionals in the employ of the NSW Government said could potentially lead to extinction,
- ³⁵₁₇ the only qualified ecologist (Gordon Patrick) to make comment who is not paid for by the proponent, or working for the NSW Government, concluded the proposal would lead toward extinction

the Department required neither a credible assessment not an independent review.

the 2010 application

The 2010 application uses the same words (with the exception of removing obvious references to the Deed of Agreement) to describe the impact on *persoonia pauciflora* as the did the 2007 application.

For convenience the substantive statements from each application are included in this submission as Attachments A & B, so the identical passages, and near identical passages can be easily compared.

SWAG wish to draw to the Director Generals attention the following:

1) The 2007 application relied on an unlawful pre-agreement. It provided no credible assessment of the impact of the development on *persoonia pauciflora*.

- ³⁵₁₇ The Department of Planning allowed the ecological assessment to go on public exhibition and requested no independent assessment.

2) The 2010 application used substantially the same words as the 2007 application omitting references to the Deed of Agreement.

³⁵₁₇ the 2010 application conducted no new survey work.

³⁵₁₇ the 2010 application conducted no new assessment work

³⁵₁₇ the 2010 application did not provide a credible assessment of the impact on *persoonia pauciflora*

³⁵₁₇ The Department of Planning allowed the ecological assessment to go on public exhibition.

In these circumstances we strongly believe that the Director General should appoint an independent assessment team for the Huntlee Stage 1 Proposal.

In doing so SWAG request the Director General be mindful that despite the obvious and understandable attempts by the proponent to make their proposal look acceptable, the assessment needs to be aware (and by taking professional independent advice they will become aware) that:

³⁵₁₇ There has never been any professional assessment of the *persoonia* (apart from that paid for by the proponent) which claims the Huntlee development footprint is acceptable with regard to *persoonias*.

³⁵₁₇ *persoonia pauciflora* grown from cuttings are simply clones and provide no genetic diversity.

³⁵₁₇ no *persoonia puaciflora* grown from seed have lived

The above is a very good argument for requiring a completely new, arms length and professional assessment of the projects impact on the *persoonia*, however it is most importantly a good demonstration that the Department of Planning have failed to require a proper assessment of the *persoonia pauciflora*.

It is therefore reasonable the Department of Panning & Infrastructure's are unable to conduct an objective assessment of the Huntlee Proposal.

Further we draw the Director General attention to the "Development Control Plan for Huntlee" Fact Sheet published by the Department in June 2012.

The Fact Sheet incorrectly claims the SEPP SSS listing was for '*up to 7500 homes, and accommodating 20,000 new residents:*' The Fact Sheet then goes on to say it was prepared in conjunction with the proponent (and Cessnock and Singleton Councils).

The SEPP Amendment does not specify any number of lots, or any number of residents. The SEPP only rezones land into certain types of zones in specific geographic locations. It does not determine how many lots can be subdivided or place a cap on lots.

The SEPP simply provides a a zoning framework from which a merits assessment must take place.

It is a serious concern that the Department has misrepresented the status of the SEPP amendment and done so using language which simply repeats the proponents application.

It is a further example that the Department has too long and too close an association with the proposal and the Director General should appoint another qualified planning organisation to conduct the assessment.

Figure 10: Indicative Layout Plan



Both of these maps show Town Centre land on Lot 34 and to the north of Lot 34.

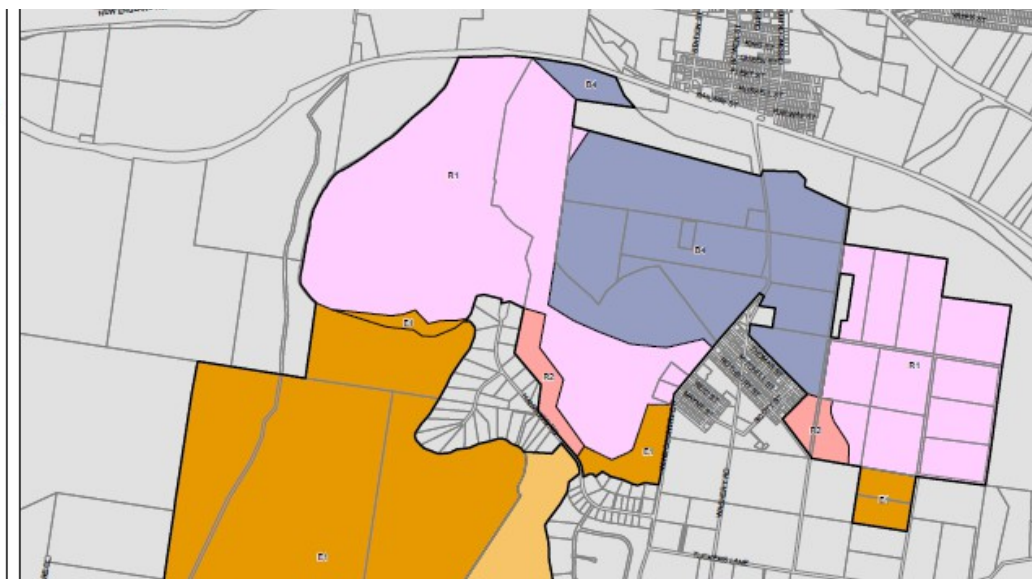
However the SEPP (Major Projects) Map gazetted on 21 December 2010 do not show any 'employment land' on Lot 34 (see below). It is not clear to SWAG why the DCP and preferred Project Report are displaying maps which do not accord with the SEPP amendment.

NSW Planning

State Environmental Planning Policy (Major Development) 2005
Huntlee New Town Site Land Zoning Map

sheet LZN 001

- Subject Land
- Zone
- Mixed Use
- National Parks and Nature Reserves
- Environmental Management
- General Residential
- Low Density Residential
- Large Lot Residential
- Cadastre
- Cadastre 20/11/2010 © LPLMA



It is troubling that the Department of Planning and Infrastructure have placed on exhibition in a

Draft Development Control Plan a map of land use zones which do not accord with the Huntlee SEPP Amendment, but does however accord with the proponents map.

SWAG can only appeal to the Director General that an urgent review of the Huntlee Proposal by a completely independent organisation which is capable of delivering an objective assessment is desperately needed.

2) The supporting material for the proposal is old and not able to support the conclusion it reaches, particularly in relation to *Persoonia Pauciflora*.

The Environmental Assessment Report is misleading (at least as far as *Persoonia Pauciflora* is concerned) in claiming that it meets the *Flora and Fauna Survey Guidelines Lower Hunter Central Coast Region 2002*. It does not provide evidence of surveys claimed to be undertaken, nor does it provide scientific based conclusions.

The current Stage 1 development proposal must be assessed on its merits.

The SEPP amendment regarding the State Significant Site and associated Voluntary Planning Agreement were separate planning proposals and can't be relied on (other than to zone the land) to provide any basis for approving the current subdivision.

SWAG submits that the Stage 1 Proposal does not provide an adequate resolution of the impact on *persoonia pauciflora*. The proposal is being built entirely on the habitat of a critically endangered species and yet no measures are being proposed to conserve any habitat for the species.

In the nearly 5000ha of offsets provided by the SSS listing the only *persoonia* habitat is the 17ha *Persoonia* Park despite hundreds of hectares of *persoonia* habitat being destroyed.

Even if it were to be argued (as it is) that the so called *Persoonia* Park is a sufficient conservation measure the preceding passages of the SWAG submission show that it has never credibly been demonstrated that the Park is adequate to prevent the plant from becoming extinct.

The Director General should also have regard to the following problems with the information provided with regard to *persoonia pauciflora*:

The ecological survey data regarding the *persoonia* was collected in 2005³.

The 2010 RPS *Ecological Assessment Huntlee* claims data was collected between 2005 and 2010. However it should be noted that so called 'surveys' in 2007, 2009 and 2010 were really only revisiting the plants identified in 2005.

This information is provided in the proponents own ***Individual Profiles of Persoonia pauciflora (North Rothbury Persoonia) Occurring within the Huntlee New Town Study Area⁴ ("Persoonia Profile")*** provided with the 2010 application.

The *Persoonia* Profile also claims that despite 'reconnaissance surveys throughout 2010' no

³ Harper Somers O'Sullivan, *Ecological Constraints Masterplan for Huntlee (ECMPH)*, August 2007 p.I

⁴ RPS, 2010

further specimens were found.

SWAG find it hard to believe that surveys were conducted throughout 2010 by professional ecologists and note that no evidence of the dates the surveying occurred is provided. No information is provided on who conducted the surveys or their qualifications.

If information relating to these surveys is available it should be provided to the Department for public exhibition and SWAG request a copy so we can verify the bona fides of the material.

We note that despite the Ecological Assessment report claiming to comply with the Cessnock City Council's Development Control Plan No. 56 "Flora and Fauna Survey Guidelines Lower Hunter Central Coast Region 2002" it in fact does not comply.

The quoted guidelines require⁵:

The information provided is to be sufficient to enable an independent consultant to replicate the survey and achieve similar results.

The guidelines also require scientific conclusions:

In addition to providing ecological data, the purpose of a flora and fauna survey is to present scientifically-based conclusions that will aid in the determination of planning, land management and development proposals.

In SWAG's opinion the Ecological Assessment Report is misleading in claiming that it satisfies the requirements of the *Flora and Fauna Survey Guidelines Lower Hunter Central Coast Region 2002* in either:

- ³⁵₁₇ providing evidence of survey work done, or
- ³⁵₁₇ in providing scientific conclusions about the impact on the persoonia.

P.22 of Appendix H- Persoonia Report Part 2 contains a letter authored by Craig Anderson of RPS claiming that in addition to a survey of the known existing persoonia plants;

The targeted searches in other areas of the property failed to identify any further plants. Not all areas of the site were able to be surveyed during these targeted searches with areas of higher quality habitat being given preference over disturbed and highly degraded areas.

The letter does not say where these apparent targeted searches were or what techniques were involved.

The same observations regarding the shortcomings of the Persoonia Profile were made by ecologist Gordon Patrick in his submission on the State Significant Site application (submission is Attachment C). Essentially Mr Patrick asked the question, Why have no further individuals been found in the Huntlee development site since 2005 when new individuals have been found in other areas of habitat? And this despite Huntlee claiming they are protecting the habitat?

One conclusion which may be drawn is that Huntlee have not engaged subsequent surveys of any

⁵ Murray, M., Bell, S., Hoyer, G. (2002). *Flora and fauna survey Guidelines: Lower Hunter Central Coast Region 2002*. Lower Hunter & Central Coast Regional Environmental Management Strategy, NSW. p.42

rigour and that in reality the number of *persoonia pauciflora* specimens growing on the development footprint of Huntlee is currently unknown.

Another conclusion could be that the cattle Huntlee Pty Ltd are running on the property⁶ are having a negative impact on the *Persoonia Pauciflora*. The proponent had given an undertaking not to engage in⁷ these activities. Disturbance and cattle grazing is known to have a negative impact on the *persoonia pauciflora*⁸.

As far as SWAG are aware no development consent has been issued to the company to allow grazing of cattle on the residentially zoned land as would be required by Cl.15 of the Huntlee New Town Site SEPP amendment.

SWAG are currently requesting the Office of Environment and Heritage to conduct an investigation into the actions of Huntlee Pty Ltd to assess whether a breach of s.118 of the NSW National Parks and Wildlife Act has occurred.

It is of great concern to SWAG that ongoing destruction and disturbance of *persoonia pauciflora* habitat may be occurring in contradiction of the commitments given by the proponent that no grazing would occur on the land.

Neither SWAG, the community nor the Department of Planning can have confidence in the proponents so called undertakings when they are not being upheld.

The Environmental Assessment produced by the proponent is also misleading and disingenuous by claiming:

From the above, it is apparent that Huntlee has the potential to significantly assist in achieving the specific recovery objectives of the Draft National Recovery Plan⁹.

In response to the primary objective of the Recovery Plan of *Minimise the loss and fragmentation of P. pauciflora habitat*, the proponent displays breath taking audacity and Orwellian language by responding with:

Comment: All known specimens of P. pauciflora will be protected and buffered within the proposal. Key areas will be dedicated as conservation land. Such areas will remain linked via riparian and habitat corridor retention within the design.

How an ecological assessment can fail to acknowledge that the clearing and destruction of 50% of the range of a critically endangered species is a direct opposite to minimising habitat loss is something SWAG believes is a serious flaw in the Ecological Assessment.

Further it serves to underscore just how lacking in credibility and rigour to assessment is.

6 Huntlee Pty Ltd representative Ian Wilks informed a community consultation meeting on Monday 22 October that Huntlee Pty Ltd was running 93 head of cattle on the Stage 1 area. The declaration was witnessed by members of SWAG as well as Department of Planning staff Simon Bennett, Natalie Mitchell and

7 See SSS Study Response to Submissions 2010 p.13 & Preferred Project Report 2012 p.12

8 NSW Scientific Committee, *North Rothbury Persoonia - Critically Endangered Listing 2007*

9 RPS, *Ecological Assessment Report, September 2010, p.58*

The Ecological Assessment Report 2010 cannot be given serious consideration.

It is now 7 years after the only substantive surveys were conducted. It is estimated that *persoonia pauciflora* plants have a 7 -12 year lifespan¹⁰.

The **North Rothbury Persoonia -Critically Endangered Species (2007)** listing says:

The standing plants of P. pauciflora appear to have a relatively short lifespan of around 7-12 years (G. Patrick pers. obs.). Macropods have been observed grazing on new growth and may also disperse the succulent fruits. Seeds may also be dispersed by birds and ants (G. Patrick pers. obs.). P. pauciflora appears to be sensitive to disturbance such as grazing and slashing (Patrick 2006). Specimens are rarely present in disturbed areas where introduced species are dominant, particularly grasses on roadside verges (Patrick 2006).

The reasonable conclusion to be drawn is that the misguided emphasis by the proponents on producing reports identifying known locations of plants is just that, misguided, as these plants will inevitably die.

Ecologist Gordon Patrick rightly questions in his submission (Attachment C) the value of claiming to protect the northern most individuals of *persoonia pauciflora* by having a 30m buffer around them for as long as they are alive. While this commitment may sound good to an uninformed person, when these relatively short lived plants inevitably die the lack of commitment to conserve their habitat for future seedlings will drive the species towards extinction.

The key to the species ongoing survival involves providing a suitable amount of habitat for new plants to regenerate.

Further to the conservation of the *Persoonia Pauciflora* the Preferred Project Report claims the following:

OEH and the DoPI have suggested that consideration be given to widening the riparian corridor in Anvil Creek to the north to ensure the reserve is not isolated. Stage 1 of Huntlee provides for a core riparian area and associated buffer along Anvil Creek in accordance with relevant guidelines. This corridor currently directly connects to Persoonia Park and ensures that the reserve is not isolated. The proposed reserve is also bounded on three sides by rural zoned bushland that is not owned by Huntlee Pty Ltd. Should future development occur in these landholdings, it would also be required to provide core riparian buffers in accordance with relevant guidelines.

A first reading of this passage give the impression that Huntlee Pty Ltd are proposing to place some value on the riparian corridor in retaining connectedness between the Persoonia Park and the Northern part of Huntlee.

However at the same time the Huntlee Development Control Plan is proposing to completely sever

¹⁰ NSW Scientific Committee, *North Rothbury Persoonia -Critically Endangered Species Listing (2007)*

the Riparian corridor with 2 childrens playgrounds and a sporting fields complex¹¹.

It can't seriously be suggested that a corridor claimed to be for the connectedness of threatened species and for the dispersal of genetic material can exist through a children's playground and directly through sporting fields. The playgrounds are apparently in addition to the 2.5m wide shared cycleway which will concrete its' way through a supposed wildlife corridor.

The proponent cannot at once claim to be using the riparian zones to assist in genetic dispersal while at the same time intending the cut the corridor with playgrounds, sporting fields and cycleways as one activity cancels out the other. No doubt with the types of activity planned the proponent (or Council) would soon be called on to mow the riparian zone.

The Director General needs to understand the seriousness of the claims surrounding this issue. Either the riparian zones are wild, un mown corridors to allow wildlife and genetic material to persist on the site, OR they a park like places with mown lawns, playgrounds, playing fields etc. which can serve no ecological function. Whichever use the Director General determines is appropriate the assessment should then proceed on the basis that the corridors can't serve a contradictory function.

The fact that the Department of Planning and Infrastructure placed the Draft DCP on display with this proposal suggests the Department has not had thorough and independent professional ecological appraisal of the proposal.

It should also be noted that the the proponent plans to use riparian zones across the whole Huntlee area for playing fields and not just in relation to the riparian zones connecting Persoonia Park. Whatever the fine words the proponent uses about protecting biodiversity and wildlife corridors they cannot be believed while the same corridors are designated for another purpose.

The Director General must commission an independent and credible assessment of the current extent of persoonia pauciflora which will be affected and insist on a report which provides a scientific basis on which to base planning decisions.

3) That the proposal is substantially different from that which went on exhibition originally. Many of the supporting documents and studies have not been adjusted for the different footprint of the development and therefore there adequate information has not been provided for assessing the proposal.

The preferred Project Report placed on Exhibition makes clear that Lot 34 DP 755211 ("Lot 34") is no longer part of the project.

SWAG understands that Huntlee Pty Ltd no longer have consent to include Lot 34 in their proposal. That being the case the application must be refused as it does not comply with 8F of the Environment Planning and Assessment Regulation 2000.

¹¹ and Draft Huntlee Development Control Plan Fig. 11 p.22

If the development was approved the proponent could not carry it out in accordance with the material displayed.

For example Figure 13 on page 42 of the Preferred project report shows a major part of the bicycle route proceeding through Lot 34. The provision of bicycle paths is essential to any modern development and the continued portrayal of the bicycle path through land which is no longer part is an indicator that the proponent has failed to adjust the proposal and there is likely to be further problems with the layout.

Likewise the proposed bus routes are shown as proceeding through Lot 34.

Another example is the proponents claims regarding the connectedness of the Persoonia Park to the north are now completely in error.

The proponent says in the Preferred Project Report:

OEH and the DoPI have suggested that consideration be given to widening the riparian corridor in Anvil Creek to the north to ensure the reserve is not isolated. Stage 1 of Huntlee provides for a core riparian area and associated buffer along Anvil Creek in accordance with relevant guidelines. This corridor currently directly connects to Persoonia Park and ensures that the reserve is not isolated. The proposed reserve is also bounded on three sides by rural zoned bushland that is not owned by Huntlee Pty Ltd. Should future development occur in these landholdings, it would also be required to provide core riparian buffers in accordance with relevant guidelines.

The claim that the riparian corridor ensures the Park is not isolated is incorrect and misleading.

The removal of Lot 34 severs the riparian corridor which would connect Lot 34 with riparian corridors further north. The owners of Lot 34 retain their existing use rights of a rural property and can continue to graze cattle and slash the property as they please. As the Preferred Project Report notes itself, as the Persoonia Park is surrounded on three sides by other property holders there can be no guarantees that all bushland surrounding the Park will no be cleared in future (leaving a pocket sized isolated Park). As a result of the withdrawal of Lot 34 the proponent can no longer claim the Persoonia Park will be connected in any direction.

This is a serious alteration in the status of the Park, underscoring its vulnerability, and amounting to a change in the status of the conservation measures proposed.

The proposal is either assuming that Lot 34 will become available in the future and therefore the application has been made without the owners consent, OR the application is substantially different in traffic flows, infrastructure provision and conservation measures.

The application must be rejected.

Further to this point the Huntlee Stage 1 proposal now has two rural properties which proposes to surround with residential development. Has the Department required an assessment on the impact on the families living in those properties? Has the Department considered the impact on the surrounding residential dwellings of the continuation of rural activities such as cattle grazing, use of fertilisers and spraying insecticides?

The consideration of a development of this scale which encloses rural properties who are not part

of the development is unusual. At the very least it could be expected to lead to land use conflict.

4) the proposal should be refused as has not been able to demonstrate how the site will be affected by contamination.

The Preferred Project Report claims that the Stage 1 Project is unaffected by contamination.

This claim misses the point. The Stage 1 application has to be considered within the context of the whole Huntlee site and the proponents overall vision.

The SEPP (Major Projects) Huntlee Amendment as made requires that development *must* not be approved until a Development Control Plan (DCP) is approved. Further the SEPP specifies that the DCP *must* provide for a staging plan, and

an overall transport movement hierarchy showing the major circulation routes and connections to achieve a simple and safe movement system for private vehicles, public transport, pedestrians and cyclists¹²,

The SEPP contains the following:

(f) amelioration of natural and environmental hazards, including bushfire, flooding and site contamination and, in relation to natural hazards, the safe occupation of, and the evacuation from, any land so affected,

Thus the context in which the current application must be assessed is an approved DCP. SWAG have submitted previously in this submission that it is unfair to ask for public comment on the Stage 1 Project when the DCP has not been approved as we are unable to know what is in the finalised DCP.

It also allows the Department to be perceived as possibly changing the DCP to suit the Stage 1 Project Application and thereby claiming that the application was in accordance with the DCP. This would be an inappropriate course for the Department to take.

SWAG requests confirmation in writing from the Department that the DCP is being assessed by separate individuals from those considering the Stage 1 Application and that there is no possibility that the DCP will be altered to suit the Stage 1 Project.

The broader context is that a whole of site plan has to have been adopted by the DCP before it can meet the requirements of the SEPP for staged release and provision of infrastructure.

Thus there must be a relatively good degree of knowledge regarding the contamination present on the site. If there is not a sufficient degree of knowledge and it turns out that the contaminated areas are larger or present a health hazard, it follows that the planned release and provision of open space etc cannot occur.

¹² SEPP (Major Projects) Huntlee Amendment cl. 28

SWAG is concerned that at present there is inadequate knowledge of the contamination affecting the site.

Whilst the majority of the contamination does not occur on the Stage 1 Project Application area, if subsequent stages are not possible, or not possible as currently envisaged, then those changes may impact on the planning of Stage 1.

For example major bus routes and the provision of open space could well be affected by the inability to develop later stages as a result of contamination.

SWAG contends that the first problem for the Huntlee proposal is knowing what contamination is present and how much.

SWAG understands the following studies have been conducted:

³⁵₁₇ GE Holt & Associates – Mine Subsidence Investigation, Sweetwater Area, near Branxton NSW October 2005

³⁵₁₇ David Lane Associates – Review of Existing Environmental Conditions and Chitter Emplacement Remediation Ayrfield No. 3 Colliery North Rothbury NSW. June 2007. This report adds to and supersedes an earlier study undertaken by David Lane Associates in October 2005.

³⁵₁₇ Douglas Partners – Report on Preliminary Assessment of Mine Spoil Stockpiles, Former Ayrfield No. 3 Colliery Main Road, North Rothbury April 2006

³⁵₁₇ ERM – Environmental Audit and Phase 1 Contamination Assessment – Ayrfield Colliery, NSW September 2003

³⁵₁₇ AECOM, Remediation and Rehabilitation Plan Lot 1 DP 1042140 Main Road 220 North Rothbury, 2009

In summary what can be said is that each of these studies identifies contamination however none attempt to (or were asked to) define the the extent of contamination on site.

SWAG is deeply concerned that the illegal landfill cells are proposed to become a public site exposing children to contamination. These landfill cells were operated in contravention of their planning approval and only one cell has been tested (by ERM in 2003).

It is irresponsible to have a significant part of the open space provisions for the Huntlee site resting on an untested assumption that the site is fit for use.

Secondly the amount of chitter left on site is unknown. AECOM estimate 300,000 tonnes¹³ while David Lane and Associates estimate 500,000 tonnes¹⁴ and Douglas Partners report an estimate fo 500,000 tonnes¹⁵.

¹³ AECOM, Remediation and Rehabilitation Plan Lot 1 DP 1042140 North Rothbury, 2009

¹⁴ David Lane & Associates, 2007, p.13

¹⁵ Douglas Partners, *Preliminary Assessment of Mine Spoil Stockpiles*, North Rothbury April 2006.

SWAG is not aware of AECOM conducting any quantity surveying work and believe the 300,000 tonnes figure is without foundation.

The proponents want to build housing on a significant part of the area now covered with up to 4 metres of coal chitter. These chitter emplacements have been identified as being combustible and indeed are often on fire.

It would be irresponsible to simply allow these emplacements to be 'capped' and housing built on the top of combustible material. At present each subsequent piece of documentation produced by the proponent simply says an actual plan will be developed later.

The Director General has an obligation to act in the public interest and should not allow a major development to proceed while there is no commitment to cleaning up the contaminated site. At the very least the Director General should require a bond or bank guarantee equivalent to a professional estimate of the removal costs of the contaminated material if it is contemplating giving any approval to the Stage 1 Application.

The bond would allow the regional sporting complex to be completed on a rehabilitated site should the current proponents become bankrupt or refuse to clean up the site.

5) The proposal should be rejected as it is likely to be detrimental to the social cohesiveness of the business centre of Cessnock and Singleton.

The Preferred Project Report claims to have commissioned a report from MacroPlanDimasi which shows that the Huntlee Town Centre will not detract from other centres in the Hunter Valley.

SWAG contests that the "Memorandum: Town Centre Economic Impacts" dated 12 July 2012 demonstrates nothing of the kind.

The 12 page report, which utilises lots of spaces between paragraphs, bases its claims on population size and ignores competitive commercial reality. It says the Huntlee population it will not support a regional shopping centre or a department store, and therefore will not detract from centres such as Cessnock and Singleton.

The 'Memo' is incorrect for two reasons.

Firstly it bases its assumptions on an eventual Huntlee population of 20,000 people, whereas the real population will be 20,000 + the existing and future population of Branxton, plus the existing population of Greta, + the future population of the Hardie Holdings subdivision at Greta + the future population of the Greta Migrant Camp/Anvil Creek 1300 lot development.

The final population of the Huntlee area will be in excess of 30,000 people.

Secondly the competitors of Huntlee are restricted by available space. Huntlee has been gifted with approx 200ha of mixed use zoning, all of which can be utilised for retail activity.

Huntlee has a huge competitive advantage in having the largest area zoned for commercial use anywhere in NSW. The ability to attract large scale commercial development by offering virtually unlimited greenfield space is something no other centre can offer (and it is something never envisioned in the Lower Hunter Regional Strategy).

Being 10 minutes drive from both Cessnock and Singleton Huntlee is perfectly situated to capture escape spending from both of those centres.

Neither Cessnock or Singleton can offer the size to support a regional shopping centre, Huntlee on the other hand, can capture the population of Cessnock and Singleton and support a regional shopping centre and Department store.

While this is no doubt attractive to commercial operators it is not in accordance with the centres hierarchy in the Lower Hunter Regional Strategy. It would have a negative impact on the identity of Cessnock and Singleton and contribute to a weakening of social cohesiveness.

6) The Stage 1 Project should not be approved before the Huntlee Development Control Plan has been approved and the public are able to view the final copy of the DCP and make final submissions on the Stage 1 Proposal.

As the Stage 1 Application must not be approved until a Development Control Plan is in place, and that DCP is obviously a very relevant document in considering the development application, procedural fairness demands that the public have access to the final DCP in order to compare the development against the DCP's requirements.

SWAG request the final DCP be approved and the Stage 1 Application re-exhibited.

ATTACHMENT A

Persoonia pauciflora

In response to the status of *P. pauciflora* in the North Rothbury locality, in October 2005 HH commissioned HSO to undertake a detailed inventory of individual plants occurring within or immediately adjacent to lands under the control of HH. At this time an estimated maximum population of approximately 550 individual plants (Patrick 2006) existed within the North Rothbury population. Updated survey results in 2006 reported some 631 extant plants (Patrick 2006). Since that time some 277 plants have been lost from the population, via illegal removal, which is under investigation by the DECC. It is therefore estimated that approximately 354 individual plants, often isolated in context to other members of the population, remain extant, of which the entirety occurs within private land holdings.

The July 2007 *P. pauciflora* survey, of all known plants within the Huntlee lands at North Rothbury, found that out of the existing 28 plants, 11 had increased in size or foliage cover, 11 had decreased in size or foliage cover or exhibit no improvement and five additional plants (one plant found dead in October 2005 survey) were found to be dead (of these two show evidence of disturbance). Investigation of those plants not increasing in condition or dying suggests that the main cause for loss of condition is likely grazing pressures by macropods or to a lesser degree grazing by domestic stock. Thus 23 plants remain alive within the HH holdings and of these the majority will be retained either within Persoonia Park or within the open space area to the north of Tuckers Lane. It is recommended to restrict access (via fencing or some other barrier) to the open space area to provide protection for the plants that are located therein. This area will also provide extra habitat retention for *Persoonia pauciflora*. The plants that are earmarked for removal as part of the development proposal will be used in a translocation programme to be funded by HH, as per the DoA.

As a result of these surveys it has become clear that conservation initiatives will be critical to maintaining viable habitat for this species. Key to the conservation strategy, envisioned by HH was the establishment of a 'Persoonia Park' reserve, which would be maintained to guarantee a secure and viable future for this species.

Persoonia Park will reserve 17ha of *Persoonia pauciflora* habitat and retain insitu specimens of *Persoonia pauciflora*. The ecology of this species is largely unknown and the idea of Persoonia Park is to reserve habitat and provide an area in which further research could be performed. Such research could cover all facets of the life cycle, and the species response to fire. Other species within this genus are obligate seeders; this is where the adult plants are killed by fire with resprouting occurring after fire from the soil stored seed bank. Further research into the longevity of the soil seed bank and fire ecology of *Persoonia pauciflora* to ensure proper fire management techniques are employed is vital to the survival of this species in the future. This is just one of the many areas of research which could be performed within Persoonia Park.

The concept of Persoonia Park has been endorsed within the DoA with the NSW Government in association with other outcomes determined under the finalisation of the Lower Hunter Regional Strategy.

ATTACHMENT B

5.2.1 *Persoonia pauciflora*

In response to the status of *P. pauciflora* in the North Rothbury locality, in October 2005 the proponent commissioned RPS to undertake a detailed inventory of individual plants occurring within or immediately adjacent to lands under their control. At this time an estimated maximum population of approximately 550 individual plants (Patrick 2006) existed within the North Rothbury population. Updated survey results in 2006 reported some 631 extant plants (Patrick 2006). Since that time some 277 plants have been lost from the population as a result of actions of an unrelated third party on land outside Huntlee land holdings. It is therefore estimated that approximately 354 individual plants, often isolated in context to other members of the population, remain extant, of which the entirety occurs within private land holdings.

The July 2007 *P. pauciflora* survey, of all known plants within the Huntlee lands at North Rothbury, found that out of the existing 28 plants, 11 had increased in size or foliage cover, 11 had decreased in size or foliage cover or exhibit no improvement and five additional plants (one plant found dead in October 2005 survey) were found to be dead (of these two show evidence of disturbance). Investigation of those plants not increasing in condition or dying suggests that the main cause for loss of condition is likely grazing pressures by macropods or to a lesser degree grazing by domestic stock. Follow up surveys have also been undertaken in 2009 and 2010. Both of these surveys found that out of the existing 28 plants, 21 had increased in size or foliage cover, one had decreased in size and foliage cover and six plants had been found dead (the same 6 deceased plants as in July 2007 surveys). Thus 22 plants remain alive within the Huntlee lands and of these the majority will be retained either within Persoonia Park or within the proposed

conservation area to the north of Tuckers Lane or will remain in situ. This area will also provide extra habitat retention for *Persoonia pauciflora*.

As a result of these surveys it has become clear that conservation initiatives will be critical to maintaining viable habitat for this species. Key to the conservation strategy, envisioned by Huntlee Pty Ltd was the establishment of a 'Persoonia Park' reserve, which would be maintained to guarantee a secure and viable future for this species. This will now be augmented by addition of other areas containing specimens that have been identified as important by DECCW, such as to the north of Tuckers Lane.

Persoonia Park will reserve 17ha of *Persoonia pauciflora* habitat and retain insitu specimens of *Persoonia pauciflora*. The ecology of this species is largely unknown and the idea of Persoonia Park is to reserve habitat and provide an area in which further research could be performed. Such research could cover all facets of the life cycle, and the species response to fire. Other species within this genus are obligate seeders; this is where the adult plants are killed by fire with resprouting occurring after fire from the soil stored seed bank. Further research into the longevity of the soil seed bank and fire ecology of *Persoonia pauciflora* to ensure proper fire management techniques are employed is vital to the survival of this species in the future. This is just one of the many areas of research which could be performed within Persoonia Park.

ATTACHMENT C

Comments provided by Gordon Patrick in regard to the following Proposal

Job Title: State Significant Site – Huntlee Exhibition

Gordon Patrick contact details:

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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 utilised 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 finalised 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.

³⁵₁₇ *Persoonia pauciflora* is listed as **Critically Endangered** under both State (TSC Act 1995) and Federal legislation (EPBC Act 1999).

³⁵₁₇ 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.**

³⁵₁₇ **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%).

³⁵₁₇ The Draft National Recovery Plan (DECC 2009) has estimated that “**less than 350 mature individuals remain**”.

³⁵₁₇ 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*.

³⁵₁₇ 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 recognise 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**:

*“¹ 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 no where 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 categorised 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



Persoonia pauciflora

P.H. Weston

Common name: North Rothbury Persoonia

Persoonia pauciflora was previously known as *Persoonia* sp “North Rothbury”.

The following information is provided to assist authors of Species Impact Statements, development and activity proponents, and determining and consent authorities, who are required to prepare or review assessments of likely impacts on threatened species pursuant to the provisions of the *Environmental Planning and Assessment Act 1979*. These guidelines should be read in conjunction with the NPWS *Information Circular No. 2: Threatened Species Assessment under the EP&A Act: The ‘8 Part Test’ of Significance* (November 1996) and with the accompanying “Threatened Species Information” sheet.

Survey

There are no seasonal survey constraints for this plant as the mature plant is easily identifiable during both flowering and non-flowering periods of its lifecycle. Seedlings, however, may not be easily identifiable until they are 0.3-0.5m high. Care should be taken to distinguish *Persoonia pauciflora* from *P. isophylla*, which is a morphologically similar species.

If suitable habitat is or likely to be present (see attached profile for details), a targeted survey for the plant should be conducted. Targeted survey should be conducted over several days (2-3) depending on the floristics and size of the particular site, and should involve both quadrat and transect sampling strategies. Targeted survey for *P. pauciflora* should not be limited to areas within the existing distributional limits. Plant heights and approximate age of individuals should be inferred from previous fire and other disturbance histories. If a new sub-population is being surveyed, the surveyor should make an accurate population count, map the locations of the plants in a site sketch, and complete an Atlas of NSW Wildlife Flora Record Card with the NPWS. A voucher

specimen should also be lodged with National Herbarium of NSW, Sydney. More detailed mapping of the sub-population may be required depending on the nature and scale of the development.

Viable but dormant *P. pauciflora* seeds may be present in the soil seedbank, particularly where there are mature individuals within 1km. If *P. pauciflora* individuals occur within 1km, an investigation into the disturbance history (particularly fire history) of the site should be conducted to determine the likelihood of the existence of a soil seedbank for the species.

Life cycle of the species

The biology of *P. pauciflora* is poorly known, however, there is a range of previous and current research into the *Persoonia* genus from which various information may be inferred.

P. pauciflora is not likely to reproduce vegetatively; therefore the plant's persistence will depend on the production and germination of viable seeds that are stored in the seedbank. *Persoonia* seeds possess a dormancy mechanism that is poorly understood (see Wasley 1997). *P. pauciflora* seeds may germinate as a consequence of disturbance and/or the removal of threats such as grazing and frequent slashing. *Persoonias* have not generally been successfully grown from cuttings or seed, therefore, propagation and replanting is not a suitable ameliorative strategy.

The significance of a particular action which physically destroys individual plants will require (i) an examination of the number of plants to be destroyed in relation to the proportion of the relevant sub-population sizes¹; (ii) whether the removal of those plants potentially compromises the long term viability of the remaining sub-

¹ Details on the size and locations of sub-populations are presented in Patrick (1999).

populations (eg opportunities for external recruitment, fragmentation, cumulative impact); and (iii) a discussion of whether and how the potential seedbank will be affected. That is, whether the seedbank will also be destroyed permanently or whether seeds are likely to germinate following disturbance.

Fire disrupts obligate seeding plant species at the juvenile and adult plant stages of their lifecycle by killing individual plants and thereby halting the process of seed production and seedbank replenishment. Patrick (1999) notes that *P. pauciflora* appears to be absent from areas where there is evidence of recent or severe fires. Several smooth-barked *Persoonias* are obligate seeders, which do not survive fire, and therefore their persistence relies on seed germination from the seedbank. A minimum fire-free interval is required for obligate seeders to mature and produce sufficient viable seed to replace the seedbank. The age to reproductive maturity in *P. pauciflora* and therefore a specific recommendation in relation to an appropriate fire interval is unknown. Current estimates in one obligate seeding *Persoonia* (*P. mollis ssp maxima*) are that reproductive maturity is not reached until approximately eight years following germination, however, peak maturity is not likely to be reached until 12-15 years (NSW NPWS 1999). Caution should be exercised in transferring these estimates to a different species occupying a different habitat, however, a fire free interval of at least 10-12 years should be implemented for *Persoonia pauciflora* until there is more detailed information on the lifecycle of the species.

In relation to fire management of *Persoonias*, Wasley (1997) further notes the importance of maintaining for long periods of time unburnt "refuge" areas in *Persoonia* habitat which act as seed sources and facilitate re-invasion of seed by wallabies and birds.

Seedbank disturbance as a result of removal of leaf litter layer of the soil profile, may disrupt the lifecycle of *P. pauciflora* as *Persoonia* seeds are predominantly stored in the upper layers of the soil profile (Wasley 1997). An example of this kind of disturbance may include fuel reduction activities such as turbo-mowing, slashing, and the removal of understorey vegetation. Impacts of this type of disturbance on the *P. pauciflora* seedbank may be minimised by retaining a

proportion of the leaf litter occurring at a site.

Habitat modification affects the lifecycle of *P. pauciflora* by altering the ecological processes within suitable habitat. Habitat modification may include: weed invasion, reduced water quality, urban and agricultural runoff, and increased sedimentation. Since *Persoonia* species are pollinated by a relatively few genera of native bees, an activity which resulted in the loss or inhibited movement of native bees within *P. pauciflora* habitat has the potential to significantly affect the lifecycle of this plant.

Threatening processes

"High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition" is listed in the TSC Act as a key threatening process which may affect *P. pauciflora*. Other identified threats to *P. pauciflora* include: fire, inappropriate hazard reduction burning & associated activities (eg trail construction, turbo-mowing, slashing), habitat degradation (eg weed invasion & reduced water quality), and grazing (see Patrick 1999).

Viable local population

As the size of a viable local population is unknown, it should be assumed that a particular sub-population is viable regardless of its size, until further assessment indicates otherwise.

Significant area of habitat

Given the extremely restricted distribution of this species, all areas of habitat are considered to be significant.

Isolation/fragmentation

Three main sub-populations contain 90% of all *P. pauciflora* individuals (Patrick 1999), while the remaining 10% occurs as isolated individuals. Management of *P. pauciflora* habitat should aim to maintain the continuity of habitat between individuals within sub-populations, and avoid artificially creating new sub-populations.

Persoonia seeds are vertebrate dispersed (eg wallabies, currawongs) thereby allowing for relatively large dispersal distances provided there are opportunities for vertebrate movement (eg vegetation corridors). Fragmentation /isolation of *P. pauciflora* individuals is likely to result in

disruption to the plant's lifecycle by producing fewer opportunities for outbreeding and thereby reducing the likely reproductive success of the species.

Regional distribution of habitat

P. pauciflora habitat occurs in the Sydney Basin Bioregion. Patrick (1999) suggests that the species appears to be restricted to a single geology known as the "Farley Formation". This geology has a restricted occurrence in the North Rothbury - Branxton locality.

Limit of known distribution

P. pauciflora occurs over a restricted north-south range of approximately 4km. All sub-populations and individuals are located within 2.5km of the type locality

and the extent of occurrence is approximately 4.5km². The area of occupancy within this extent is much smaller at just approximately 0.4km². The loss of individuals from the limits of the plant's distribution may result in a range contraction, further isolation and potentially a loss of genetic diversity.

Adequacy of representation in conservation reserves

P. pauciflora has not been recorded from any conservation reserves. The species is therefore inadequately conserved.

Critical habitat

Critical habitat has not been declared for *P. pauciflora*.

For further information contact:

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