



HAWKESBURY ENVIRONMENT NETWORK INC
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SUBMISSION TO HAWKESBURY COUNCIL by Robin Woods for HAWKESBURY ENVIRONMENT NETWORK INC [HEN]

RE: DA 0280/13

INTENSIVE AGRICULTURE AND CONSTRUCTION OF IGLOOS AND SHED AT 69 BLACKTOWN RD, FREEMANS REACH.

Attention: The General Manager
Hawkesbury City Council
PO BOX 146
WINDSOR 2756
16th July 2013

Dear Mr Jackson,

Please consider the following submission by HEN in regard to the operation and expansion of the market garden (Chinese vegetables), including extra igloos, new shed and infrastructure on land at 69 Blacktown Rd and Brewers Lane on Bushells Lagoon shores.

Further contact with HEN about this matter should be made to HEN Secretary, Robin Woods, on robin@hen.org.au or phone 4572 1635 or mob. 0414 672 014.

Introduction:

Hawkesbury Environment Network is an umbrella group of organisations which advocate for the protection of the natural environment of the Hawkesbury region; promotion of sustainable natural resource management practices is a key aim of our organisation. HEN has been asked to comment on the above DA in respect to its environmental impacts and sustainable practices.

A review of the following documents has been made for this purpose:

- Statement of Environmental Effects [SEE]: May 2013 by Urban City Consulting
- Fauna and Flora Assessment : (10th May 2013) by T.J.Hawkeswood
- Vegetation Management Plan: (11th May) by T.J. Hawkeswood
- Waste Water Balance Report: (28th May 2013) by Envirotech
- Draft Farm Management Plan : (May 2013) By Urban City Consulting
- Hawkesbury Council LEP 2012 and associated maps.
- SREP20 (No. 2 -1997) Specifically Sections 6 and 11.
<http://www.legislation.nsw.gov.au/viewtop/inforce/epi+592+1997+cd+0+N>
Accessed 14th July 2013
- Lower Hawkesbury-Nepean River Nutrient Management Strategy: DECC 2010

- Preparing a development application for intensive agriculture in NSW: DPI NSW May 2006
- Managing waste water from intensive agriculture: a wetland system Agnote DPI-381 November 2002
- Assessing Intensive Plant Agriculture Developments: DPI Factsheet December 2011
- Guidelines for vegetation Management Plans on Waterfront Land :NSW DPI Office of Water July 2012
- Submission by Robert Montgomery of Montgomery Planning Solutions to the earlier application DA0619/11 (29TH November 2011).
- Significant Wetlands of Hawkesbury-Nepean River Valley by P&J Smith, Ecological Consultants for Dept of Urban Affairs and Planning (DUAP) (1996)
- Wetlands of the Hawkesbury-Nepean Catchment by J.S. Stricker and C.A. Wall, Sydney Water (1995)
- Other submissions as mentioned in this report.

Overview:

HEN is specifically concerned with the potential impacts of the development on the Bushells Lagoon wetland, listed as a SREP20 Wetland of the Hawkesbury-Nepean floodplain. This is one of the largest wetlands of its type (approx. 73ha) in the Richmond area, surrounded almost entirely by a range of agricultural landuses, mainly turf farming. Others include grazing, vegetable growing, feedlots, and small lots.

The lagoon has been affected by such developments for many decades and despite this still holds its status as an endangered wetland under the NSW Threatened Species Conservation Act 1995.

As pointed out in a letter from Joan Dawes, Conservation Officer from the Australasian Wader Studies Group, ten species of shorebirds and waterbirds listed as Marine and Migratory under the EPBC Act 1999 have been recorded there. Under the JAMBA-CAMBA agreements, Australia has obligations to protect their habitat. The list of 133 bird species recorded at Bushells Lagoon provided by Keith Brandwood of the Cumberland Bird Observers Club (CBOC) just heightens the issues of the need for greater protection.

Wetlands are unique, valuable and productive ecosystems occurring at the margins between terrestrial and aquatic ecosystems. The full range of wetland values is many and varied. Natural ecological values include biological diversity, fish nurseries, important bird habitats and role in the water cycle. Human-based values include recreation, education, and historical, cultural and scientific significance. HEN seeks to promote the principles of Ecologically Sustainable Development (ESD): “development that improves the total quality of life both now and in the future, in a way that maintains the ecological processes on which life depends”. To this end it is crucial that our community including government helps to protect, restore and maintain ecological processes of our wetlands.

Under a **Model DCP: Protecting Sydney’s Wetlands**, prepared by **Sydney Coastal Councils Group, Wetland Zones** which are mapped, are surrounded by a mapped **Wetland Protection Area** (‘buffer zone’) defined by a line 100m from the Wetland Zone. It is felt that this model could feasibly be applied to future management and assessment of impacts on wetlands in our area of the Hawkesbury.

The developments which have the potential to fragment, pollute, disturb or diminish wetland values include (but are not limited to) the following:

- Clearing of land
- Draining of land
- Dredging
- Market gardens
- Turf farms
- Storage, stockpiling and/or use of chemicals and other substances
- Waste disposal and management facilities
- Water extraction

All of these developments can be seen to apply in the instance of assessment of this DA, coming from its original use as a turf farm to its current use as a market garden.

Regardless of the other issues of loss of amenity due to noise, visual pollution and disturbances more likened to industrial agriculture, the above impacts pose greater risk to the ecosystem processes, to water quality for all life-forms, and to sustainability of agriculture in the longer term. *The end result could be a sterile landscape surrounding a poisoned and lifeless lake.*

For the purpose of better acquainting HEN about the development, on the 13th July, I, Robin Woods visited and examined the development site from neighbouring lands and Brewers Lane, between the hours of 12.30pm- 3.30pm from all sides for Lot 7, and from Brewers Lane for Lots 1-5, in the company of a neighbour of the site. I took photographs of vegetation, setbacks, drainage lines, lagoon views and water. I also noted the activities of workers travelling between the two sections and picking vegetables or driving and maintaining machinery. It is pertinent to note that this is an entirely Asian (possibly NESB) group of at least a dozen workers noted in those hours; and this also has a bearing on management of this type of agriculture in an environmentally sensitive area, because of the possible need to provide multi-lingual instruction about legal and safe management practices.

ASSESSMENT OF THIS DEVELOPMENT

ITEM	COMMENT
Provision of effective setbacks or buffers 1) To protect biodiversity and catchment values	<ul style="list-style-type: none">- 40m minimum not achieved for any drainage line, or wetland perimeter. The existing drainage line across Lot 7 which enters a pond on lot 7, then enters a neighbouring property (to the east) with potential to carry chemicals and pollute this land/harm livestock.-spraying of existing grassed slopes noted on the southern slope towards the lagoon on Lot7 and amongst perimeter screening vegetation on Brewers Lane. Slashing should be used instead.-weed growth on unproductive areas includes some invasive species which may affect future restoration.-lack of native (including local provenance) species in screenings on Brewers Lane. Trees used in past are Camphor Laurels which are classed as environmental weeds.

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	<ul style="list-style-type: none"> - Traffic movements across lagoon on Brewers Lane leading to damage to road surface, erosion of edges and possible flood impacts -Lot sizes possibly too small for sufficient buffering, protection of natural waterways and to still support economic returns.
2) To minimise amenity impacts on sensitive receptors	<ul style="list-style-type: none"> -no added plantings done by this owner. Eastern side has trees only, no shrub or planted grass layers. - Vegetation buffer not continuous, and not up to the 20m requirement. - no screening by earth mounds -no indication of any landscaping to ameliorate the view of shed, machinery and activities, or to reduce dust or noise impacts. - All activity associated with the land on lots 1-5 become concentrated at lot 7 close to neighbours. Transport options limited and creating conflict.
Water management: Protect water quality	<ul style="list-style-type: none"> -flood impacts on disturbed (ploughed) soil with no plant cover leading to erosion and nutrient movement -diversion of wash water, including chemicals and fertilisers into existing drainage system going into lagoon or creeks to Hawkesbury River -no details of water cycle in waste water study, no details of water quality, no tests conducted to evaluate water quality. -no details of water licence for use of lagoon - no indication of water quantity required or being used -chemical storage unprotected as required under EPA. No sealed store, or bunded areas -No details of Chemical Certification (date, compliance, person responsible) -chemical drums left lying in field and washed into lagoon. Breach of POEO Act - no details of chemicals or fertilisers provided -animal manure stockpiled unprotected and unbunded. -Sedimentation pond on Lot 7 below the shed shows algal scum indicative of high nutrient levels. -scattered litter including plastic sheeting noted in lagoon and lying in fallow fields.
Flora and Fauna Study by T.J. Hawkeswood	<ul style="list-style-type: none"> -Inadequate duration (one day only in one season) -no diagram of locations or distances traversed - Study surveys the Lots only and does not include Bushells Lagoon, yet records reptiles in the water. -plant list includes Casuarina littoralis which does not occur on the floodplain, whereas several mature stands of Casuarina

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	<p>cunninghamiana (River She-oak) were noted.</p> <ul style="list-style-type: none"> -study makes no reference to the wetland under Threatened Species Act or to records of birds known from surveys for migratory species. -inconsistency in descriptions of methodology and site description. - remarks in the final section of the report appear to dismiss the need for guidelines proposed by Hawkesbury Council
<p>Vegetation Management Plan by T.J. Hawkeswood</p>	<ul style="list-style-type: none"> -Hawkesbury Council commented on VMP being incomplete (See letter 14 June 2013), and stipulated the need for a concept vegetation plan. - Revegetation should be undertaken on all riparian zones on both lots 1-5, Brewers Lane access across (which is owned and managed by the Crown (see HCC letter 9th July 2013) and riparian zones on Lot 7 (which should include sediment ponds, swales, and existing drainage systems. -There is no indication of the type of wetland or ecological community to which the plan is to apply [P&J Smith have listed it as Open Herb Swamp] - The purpose of the Plan is not considered in ecological terms nor in restoration terms. - The author states that there is no existing habitat or corridor value, despite Hawkesbury LEP 2012 mapping of corridors and vegetation [Terrestrial Biodiversity Map Sheet BIO _008C which shows significant vegetation and connectivity.] -Weeds and litter constitute habitat when native species are lacking. -Choice of species contains some inappropriate species eg Casuarina littoralis (occurs in woodlands often on rocky ground), C.glauca on saline soils, E. moluccana (Cumberland plains) - There is no reference to any study off-site of existing wetland zones of vegetation or sources of propagation material suited to the site. -it appears both unlikely that the owner can undertake this revegetation or would have the incentive to do so as well as to maintain it for the required duration (as stated by TJ Hawkeswood on p3 Summary)
<p>Style of farming and social aspects.</p>	<p>Chinese vegetable market gardens can be regarded as more labour intensive, smaller lot productions than the much larger cropping being carried on in other nearby properties around the lagoon. Many of them are small-lot family-owned enterprises. However, this development is a much larger size. Who onsite is responsible for the site, its management and deployment of resources, its breaches of licence conditions or the work safety of the employees? Consideration of their own safety in handling chemicals such as pesticides or fungicides is important.</p> <p>Which Government agencies have been consulted by Council for this</p>

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	<p>purpose? Conflicts with neighbours in this instance can be resolved if there is some chance of educational programs to NESB workers and some social worker contact to assist them.</p> <p>Programs such as NutrientSmart Farms and WaterSmart Farms have been operating as part of NSW DPI and HNCMA Hawkesbury-Nepean River Recovery Project. These assisted landholders in capacity building /education. However, these may have now ceased.</p>
Risk Management	<p>Potential risks in this development include:</p> <ul style="list-style-type: none"> - Damage to the environment - Damage to human health - Conflict with adjoining land uses - Lack of financial commitment - Lack of physical commitment - Lack of sustainability <p>The earlier applications failed to demonstrate how these might be addressed and when this later application was made, it appeared that nothing had changed on the site, despite letters and contacts from Council.</p> <p>To reduce these risks in this instance it will be imperative to improve communication and consultation between the owner, consultants and consent authorities, including State and Federal Government agencies. Verification and inspections should be undertaken on an ongoing basis. Monitoring any changes such as water quality, revegetation, remedial construction works and building compliance is essential.</p>
VISUAL EVIDENCE	<p>See Attached photos taken 13th July 2013 by Robin Woods. Please note, there was no entry made onto the site at any stage. All photos were taken from Brewers Lane or neighbouring properties by permission.</p>

CONCLUSION: In our opinion, for all the reasons outlined above:

- This Development Application should be rejected.
- Any further DA should attach stringent conditions for revegetation and buffer zones.
- Consultation should be undertaken with State and Federal agencies.

Yours Sincerely



Robin Woods
HEN Secretary

PHOTOS



Fig 1. Above. Fallow area on lot 7 showing weed growth and support trestles for cucumbers.



Fig 2. Above: Grass slope on lot 7 down to lagoon edge has been sprayed with herbicide (observed to contrast with unsprayed grass on neighbouring property)

Fig 3 Right. View of dead grass on Lot 7 by contrast with neighbouring block



Fig 4. Below: Lagoon looking west, from Brewers Lane, showing general lack of vegetated buffers and dead willows (previous eradication program)





Fig 5 Above: Lagoon below Lot 7 showing non-native grass edge (sprayed), and dead black willows.

Fig 6 Below: Lagoon from Brewers Lane looking west towards neighbouring blocks . Native sedge in foreground (*Bolboschaenus sp.*)



Fig 7 Below: Looking north from Brewers Lane towards Lot 7 showing existing shed, igloos and grass slope to lagoon. Native tree in foreground (*Eucalyptus sp.*)



Fig 8. Below: Showing dam or settlement pond in existing natural drainage line which crosses Lot 7 from west to east. This pond appears to be catching runoff from garden and igloos, as well as from soil around chemical storage site on shed area above.



Fig 9. Below: Neighbouring block to east of Lot 7 showing natural drainage line which receives downstream flow from the pond in Figure 8

