

Sarah Ng

From: Anthony Tavella on behalf of DPE PS ePlanning Exhibitions Mailbox
Sent: Thursday, 8 October 2020 10:04 AM
To: DPE PS Biodiversity Mailbox
Subject: FW: Webform submission from: Draft Cumberland Plain Conservation Plan
Attachments: ae20-2188-let-6oct20.pdf

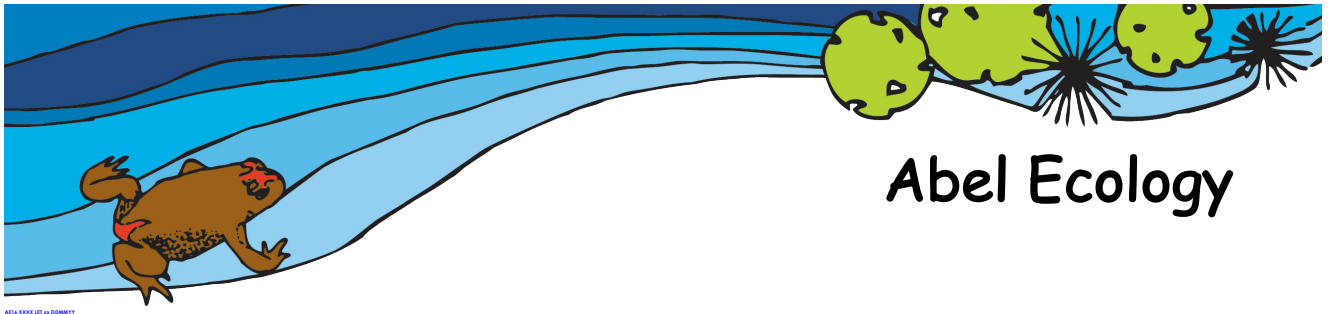
From: noreply@feedback.planningportal.nsw.gov.au <noreply@feedback.planningportal.nsw.gov.au>
Sent: Wednesday, 7 October 2020 5:14 PM
To: DPE PS ePlanning Exhibitions Mailbox <eplanning.exhibitions@planning.nsw.gov.au>
Subject: Webform submission from: Draft Cumberland Plain Conservation Plan

Submitted on Wed, 07/10/2020 - 16:44
Submitted by: Anonymous
Submitted values are:
Submission Type: I am making a personal submission
First Name: [REDACTED]
Last Name: [REDACTED]
Name Withheld: Yes
[REDACTED]

Suburb/Town & Postcode: ORCHARD HILLS
Submission file:
[ae20-2188-let-6oct20.pdf](#)

Submission: Dear Sirs/Madam, I am concerned that the proposed zoning changes to my property being lot [REDACTED] in DP [REDACTED] appear to create an isolated patch of vegetation unconnected to any other area of vegetation. Further my neighbours share the same specie of trees as I do and yet their land is not treated in the same fashion. Nor is there the prospect of joining this patch of vegetation to create any linked community of vegetation. The attached riparian assessment report from a Able ecology suggests that the aerial assessment does not reflect what actually exists on the ground. The report suggests that the area has little value in terms of biodiversity given the extensive earthworks and previous intensive use. The area is covered in various exotic plants (the ecologist calls them weeds) as detailed in the report and there certainly is no creek but a mown overland drain which is evident on the ground. The past uses of the area as a market garden/orchard, the use of the land to graze livestock and the use as a dirt bike track has certainly changed the environment especially the mechanical earthworks undertaken years ago to move substantial amounts of soil to create the mounds for the track have significantly altered the environment. In light of the attached report I respectfully suggest that the aerial assessment has not correctly classified the land. For these reasons I do not believe that the site selected meets the required criteria of having ecological value as is or value that could be created. I would submit that the land as assessed by Able Ecology would not support the rezoning of the area proposed in the draft plan as E2 and that it would not add any ecological value to do so. I would ask that before any decision is undertaken that contact be made with Wilma and I to discuss the views and the reasons for any decision that is made. Regards [REDACTED]

URL: <https://pp.planningportal.nsw.gov.au/draftplans/exhibition/draft-cumberland-plain-conservation-plan>



Abel Ecology

Document No: 2188-LET-01
6 October 2020

Subject: Riparian zone assessment

██████████ Orchard Hills
Lot ██████████

History of the site

The name of the area dates from 17th October 1910, when a public meeting of residents decided on the name Orchard Hills. That was based on land use as fruit orchards and vineyards growing grapes. The area has been in recent years, used as rural residential occupation with mown lawns and horse paddocks. Lot ██████████ (Figure 1, Figure 2) has until recently been a market garden, irrigated by water from the dam on site.

Market gardens

Market gardens typically require fertiliser inputs, soil tilling and irrigation. All that goes to alter the structure, nutrient status and hydrology of the soil such that a native vegetation community would not likely return to the site, even with a native tree canopy and intensive restoration effort (Wilkins *et al.* 2003).

Earth wall dam

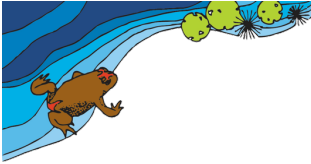
The dam on site is a typical earth wall farm dam used for irrigation of market gardens. The wall is excavated fill with a piped spillway. A spillway is usually a side diversion but in this case the land is very flat so the relief does not permit a spillway. The dam is filled by overland flow and overflow leaves the site as overland flow. All the dams along the water flow path between Cross Road and The Northern Road are of similar structure.

Adjacent road works

Recent reconstruction of Cross Road included a culvert and drain under Cross Road to direct water to ██████████ at the eastern boundary. Recent heavy rain in 2020 has not created any channelisation at that point or west of that point. The construction of the drain on the east side of Cross Road indicates that there is no drainage channel from Lot ██████████ supported by air photos both 2002 and current.

Nature and extent of the vegetation

The trees are regrowth grey box *Eucalyptus moluccana*, forest red gum *Eucalyptus tereticornis* and narrow-leaved ironbark *Eucalyptus crebra* of the Cumberland Plain Woodland Critically Endangered Ecological Community.



It would appear that the canopy tree regrowth is perhaps 30 to 40 years old.

The soil around the dam on [REDACTED] has been extensively worked to build the dam so there is no original soil profile. The rest of the Lot has historically been cultivated as market gardens, as was much of that surrounding area. Thus the original soil profile and native seed soil store is no longer present. Herbs and shrubs are predominantly weeds including box thorn, both small-leaved and large-leaved privets, lantana, African olive (Figure 6), blackberry, Rhodes Grass, carpet grass, kikuyu, couch, oat grass, panic veldt grass *Ehrharta erecta*, fire weed *Senecio madagascarensis*, common dock weed, balloon vine, and purple top *Verbena* sp. A number of wild fruit trees (Family Rosaceae, e.g. peach, apple) grow around the dam. Those are possibly wild root stock from the previous orchard on the site. There are some weeds such as juncus and hydrocotyle along the overland flow path where there is damp soil.

There are very few native plant species present (Figure 7). Those that do occur in the dam are likely to be introduced by birds (*Philydrum lanuginosum* Frogsmouth) or wind blown seed (*Typha orientalis* Bullrush).

In western Sydney riparian corridors are typically defined by Cabbage Gum *Eucalyptus amplifolia*, none of which occur on the site or downstream. Furthermore, grey box *Eucalyptus moluccana*, and narrow-leaved ironbarks *E. crebra* do not like wet feet and are only found in higher drier parts of the landscape (Benson & McDougall 1998).

Narrow-leaved ironbark *Eucalyptus crebra*

"Habitat: Upper hill slopes.

Substrate: Water table permanently low, moisture supply intermittent, fresh."

Benson, D. & McDougall, L. (1998) Ecology of Sydney plant species 6. *Cunninghamia* 5(4): 879.

Grey box *Eucalyptus moluccana*

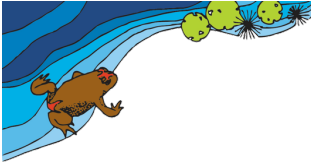
"Habitat: Grassy woodland.

Substrate: Water table permanently low, moisture supply intermittent, fresh."

Benson, D. & McDougall, L. (1998) Ecology of Sydney plant species 6. *Cunninghamia* 5(4): 903.

Nature and extent of the watercourse

The blue line on the topographic map extends from Cross Road to The Northern Road, as two first order streams converging to a second order stream above the dam on [REDACTED]. My observation during my on site inspection was that there is no stream discernable as structural bed and banks, nor aquatic vegetation (Figure 8, Figure 9, Figure 10). The area mapped as a stream, both east and west of the dam on [REDACTED] has been mown as lawns in parts since at least July 2002 (Google Earth) and October 2009 (NearMap 2009). The distance downstream is more than 300 metres (Figure 5) of trees and mown lawn or pasture. The stream becomes both channelized and vegetated with riparian species for about 50 metres between the driveway and western boundary of Lot [REDACTED], adjacent to The Northern Road.



Stormwater drains as overland flow and some is captured by farm dams on Lots along the flow path. There are some patches of trees along the flow path. The tree species along the flow path include ironbarks and grey box, which do not tolerate wet feet.

The indicators all show that there is no watercourse until approximately 50 metres from the road reserve of The Northern Road.

Neither recent heavy rain nor heavy rain in January and February 2020 has created any channelization across the property at 35 Cross Road. The land has been cultivated for decades and no previous rain event has created any channelization. My recollection of local flooding across western Sydney in April 1988 is of wide areas of overland flow. Such flows can create eroded stream channels but no such events have created channels between Cross Road and The Northern Road.

West of The Northern Road the water flow is piped, with no riparian value or connectivity.

Soil structure and disturbance

The soil profile around the dam is disturbed B Horizon clay, with no A horizon topsoil. Working the soil for cultivated agriculture and earthworks for a dam destroys the soil profile. As such the formal definition of native vegetation cannot be met. Rabbit warrens and fox dens are common around the dam, indicating further soil disturbance.

Comment on the Cumberland Plain Conservation Plan

https://webmap.environment.nsw.gov.au/Html5Viewer291/index.html?viewer=CPCP_Exhibition_Viewer

The Plan includes a number of inconsistencies and ecologically inappropriate elements (Figure 3).

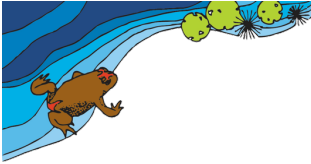
The vegetation map (Figure 3) shows river flat forest upstream of Cumberland Plain Woodland (CPW) with ironbarks so is clearly an incorrect ecological interpretation of the air photos of the area. In addition, blue lines meant to indicate watercourses are not representative of the fluvial landform.

A riparian corridor has the function of maintaining ecological processes along a stream and of providing connectivity.

In the case of the land between Cross Road and The Northern Road neither of those objectives can be met, since there is no functioning stream present, no genuine riparian corridor, no intact vegetation community and no area of viable ecological value in the headwater of that drainage line (**Figure 4**, Figure 5).

Trees occur as discontinuous patches along the line mapped as a watercourse (Figure 3) but only one patch of very poor quality is identified as being proposed to retain. Trees on the adjacent Lot are not included in the mapping, diminishing the credibility of the proposal to retain part of the patch as riparian function. That patch would be isolated unless extensive planting was done along the water flow path. The ecological return on the effort would be very low and better spent elsewhere.

There is no apparent ecological value demonstrated or to be created as proposed (Figure 3).



Alternate recommendation

A basic principle in landscape scale ecosystem management is to provide connectivity with viable corridors.

Connectivity proposes that A is joined to B, where both A and B have intrinsic value and can thus bolster the values of the other. A functional ecological corridor is generally 80-100 metres wide, which is achievable for a third order stream with 40 metres of vegetation either side of top of bank.

Such opportunity occurs from Penrith Golf Course, south along a watercourse and east to the water treatment plant south of Wentworth Road Orchard Hills. That point of crossing enables connection to the extensive bushland area to the east drained by Blaxland Creek.

The draft proposal for a riparian corridor from The Northern Road to [REDACTED] has none of those values.

Conclusion

The draft mapping of a riparian corridor east west from The Northern Road to Lot [REDACTED] has no basis in either structure or function. The vegetation present does not support the analysis of the site as riparian, nor is the landform of riparian structure with defined bed or banks.

Loss of the trees between The Northern Road and Lot [REDACTED] is inconsistent with an attempt to achieve a riparian strip with ecological function.

The stand of trees between Cross Road and The Northern Road is young regrowth with a weedy understorey so is not an intact ecological community.

The whole area between Cross Road and The Northern Road is now and always has been drained as overland flow.

There is no impediment to developing the area for housing.

Dr Danny Wotherspoon



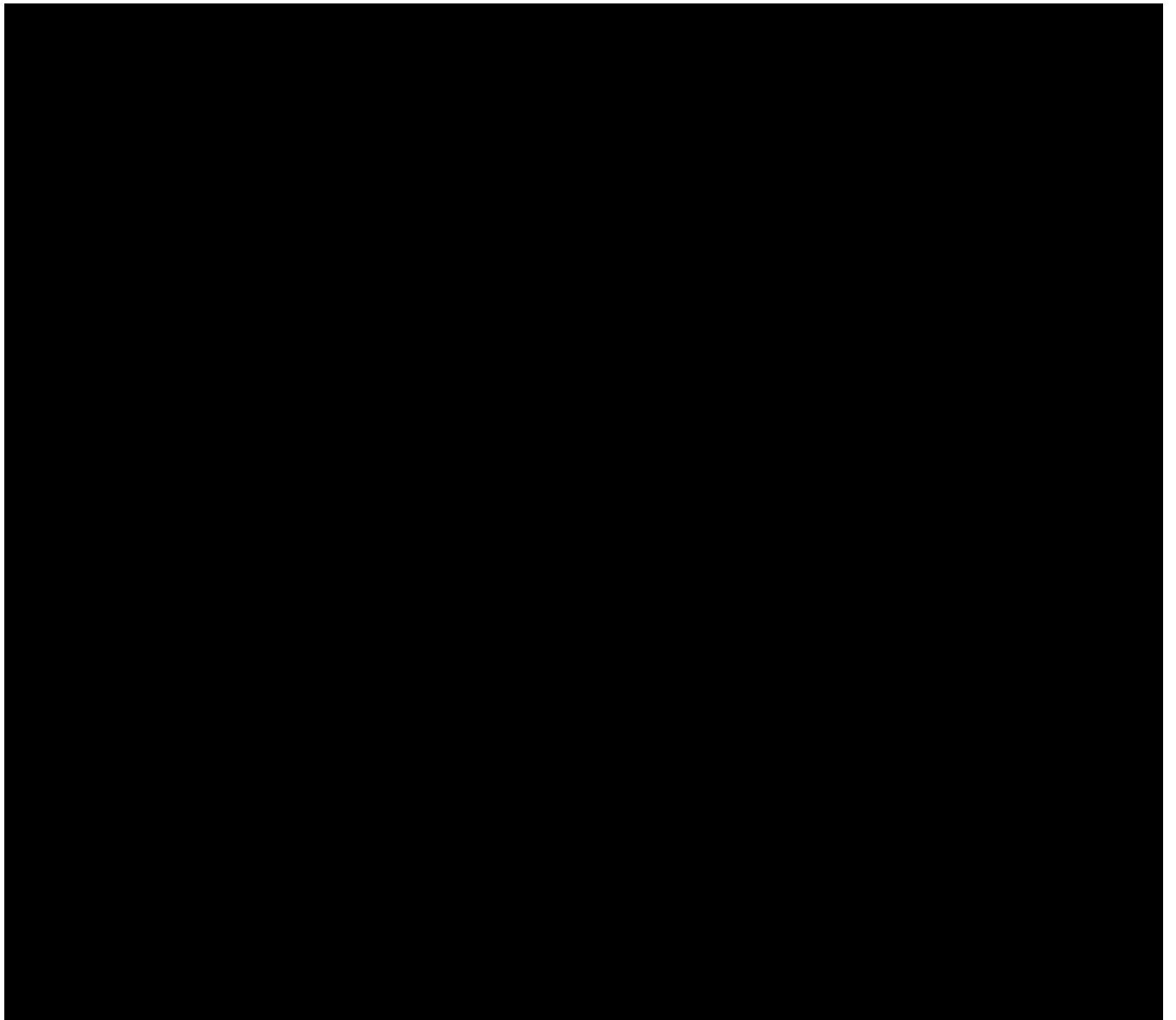
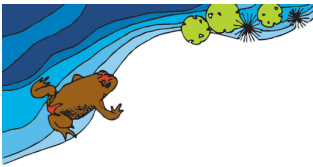
Certified Practicing Ecological Consultant (ECANSW Registered number 1)
Abel Ecology



References

Benson, D. & McDougall, L. (1998) Ecology of Sydney plant species 6. *Cunninghamia* 5(4): 879.

Wilkins, S., Keith, D.A. and Adam, P. (2003), Measuring Success: Evaluating the Restoration of a Grassy Eucalypt Woodland on the Cumberland Plain, Sydney, Australia. *Restoration Ecology*, 11: 489-503.
[doi:10.1046/j.1526-100X.2003.rec0244.x](https://doi.org/10.1046/j.1526-100X.2003.rec0244.x)





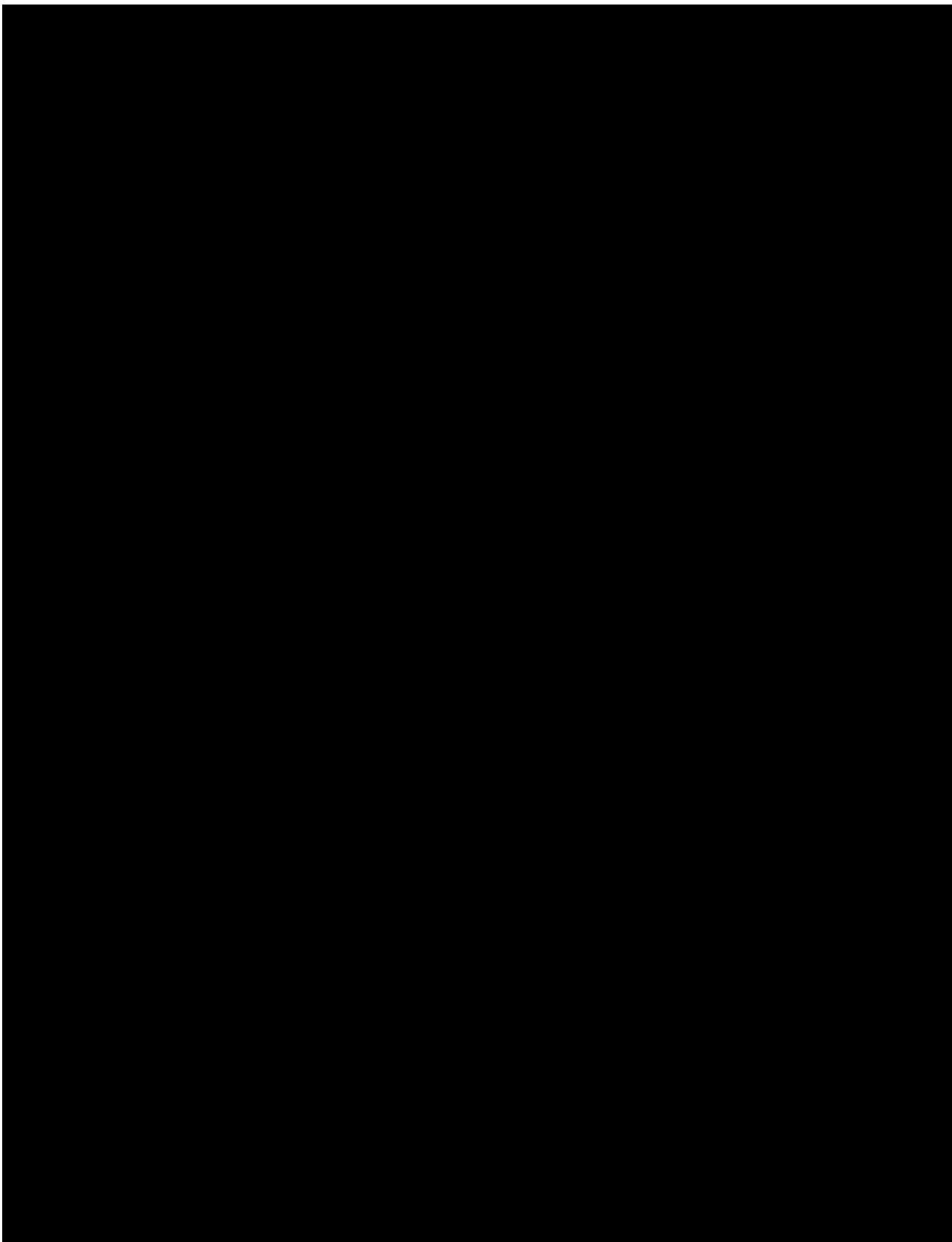


Figure 3: Draft capability maps.

https://webmap.environment.nsw.gov.au/Html5Viewer291/index.html?viewer=CPCP_Exhibition_Viewer

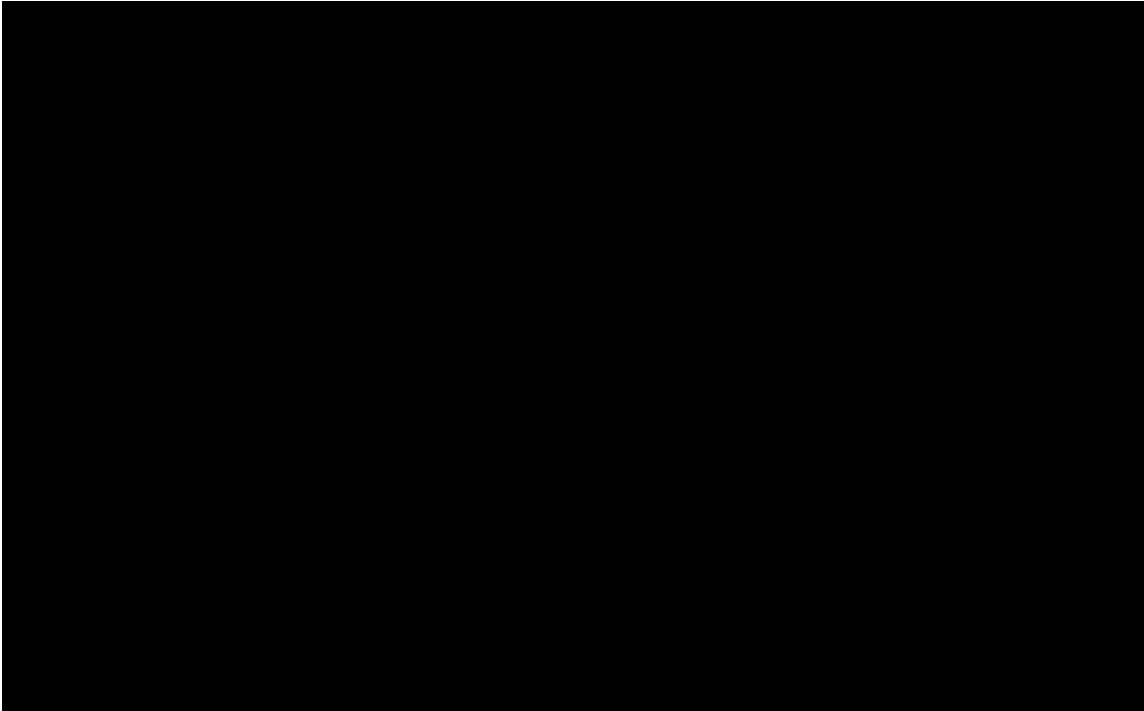
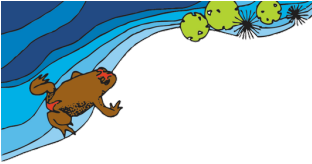


Figure 4: Air photo July 2002 Google Earth.

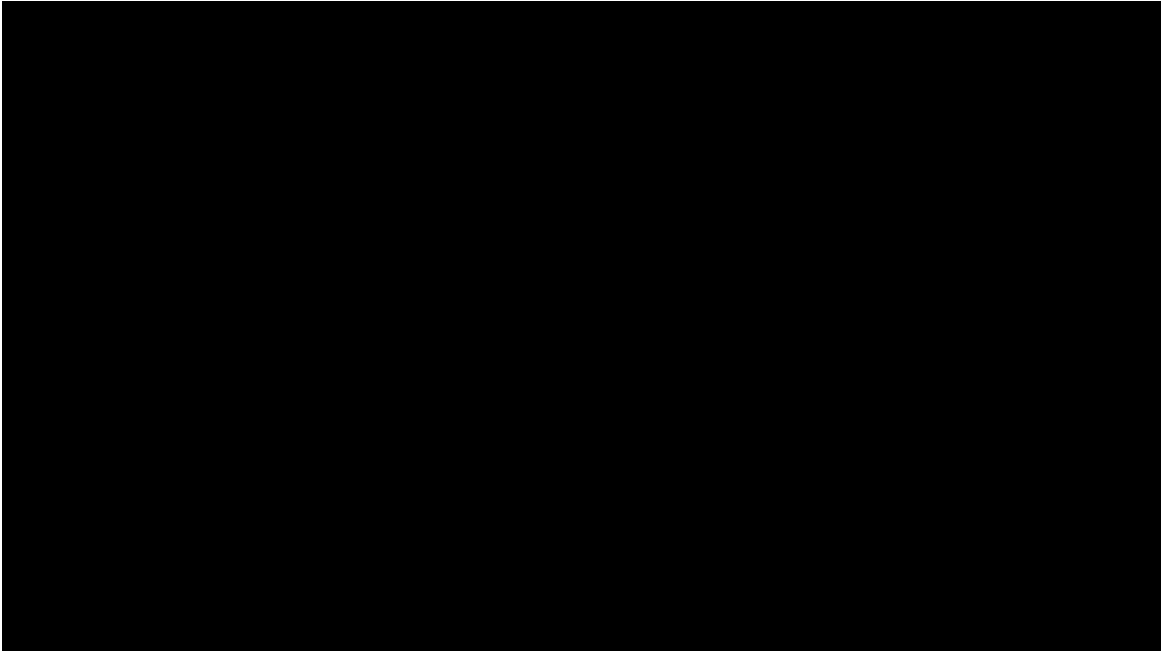


Figure 5: Air photo October 2009 NearMap.

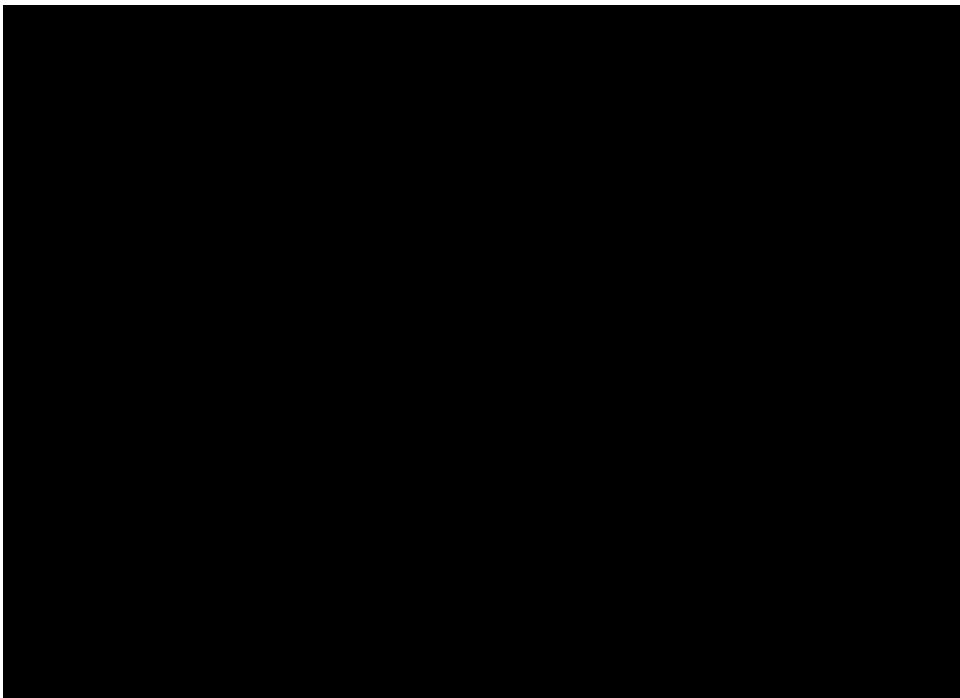
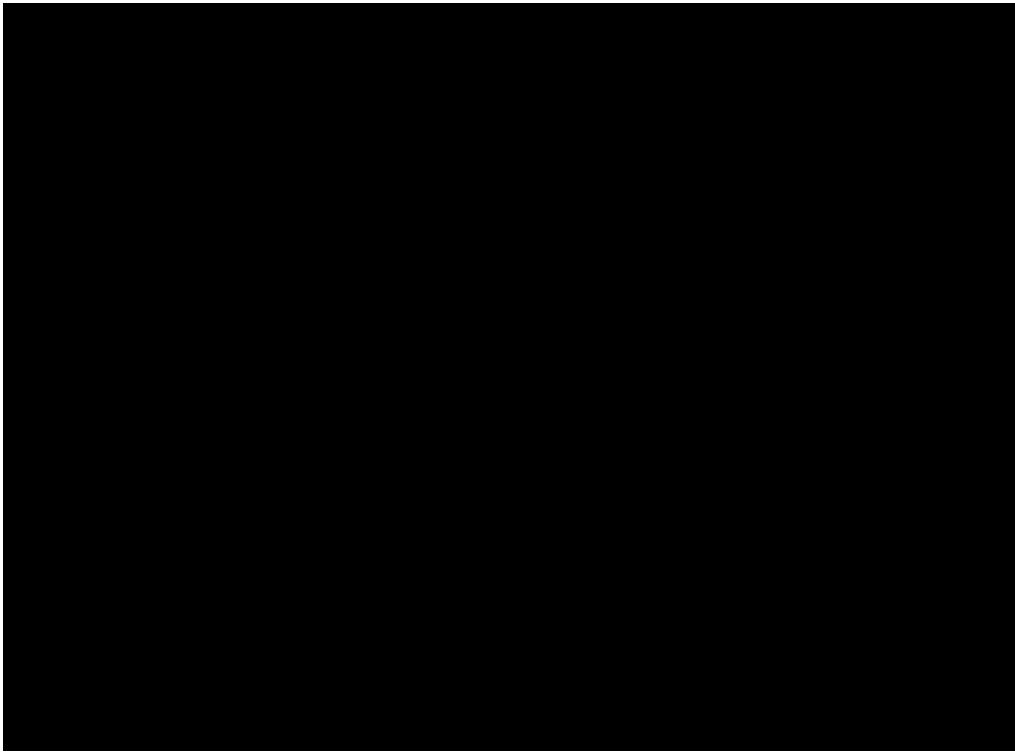
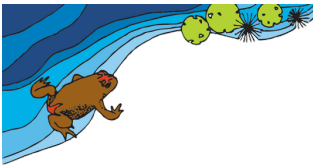


Figure 7: The area upstream of the dam showing mown pasture and ironbark trees.

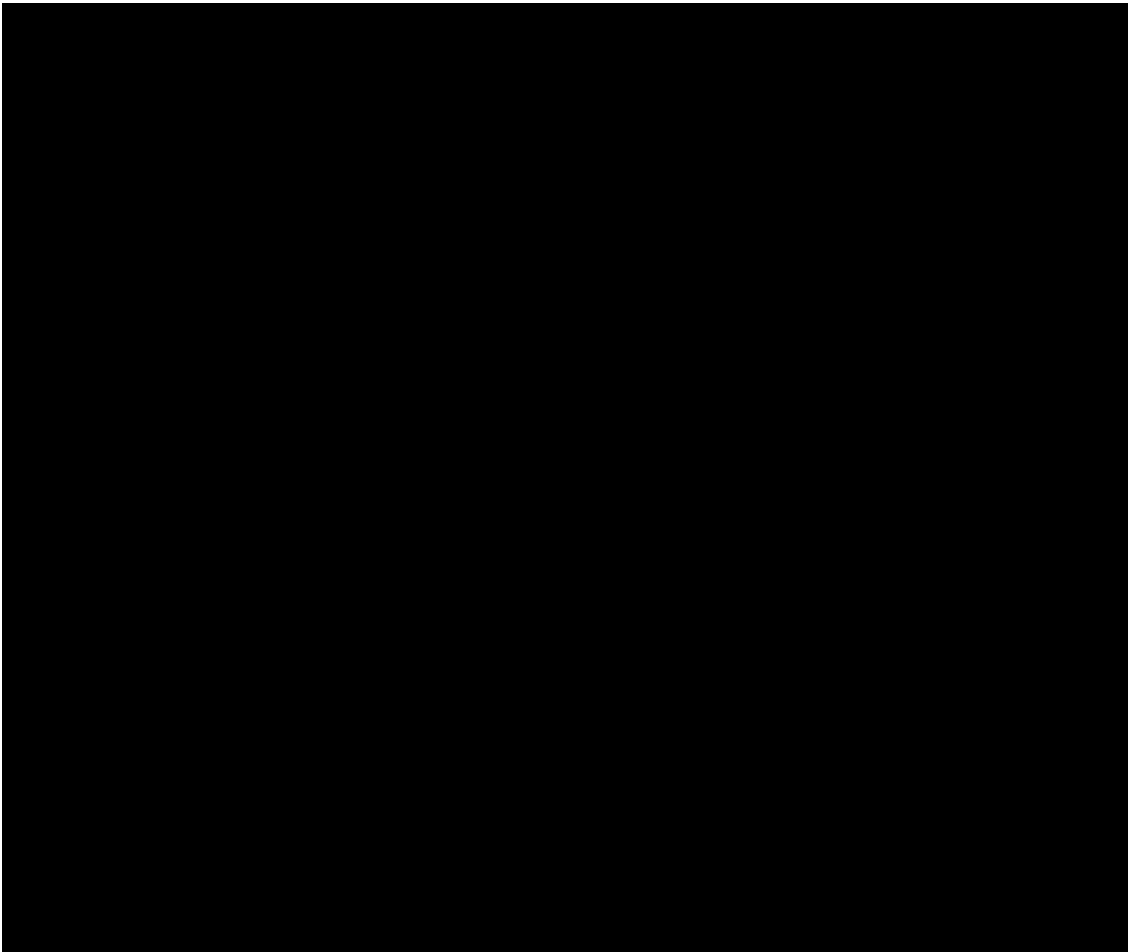
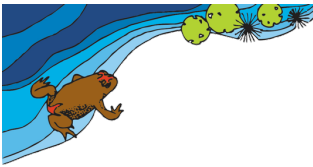
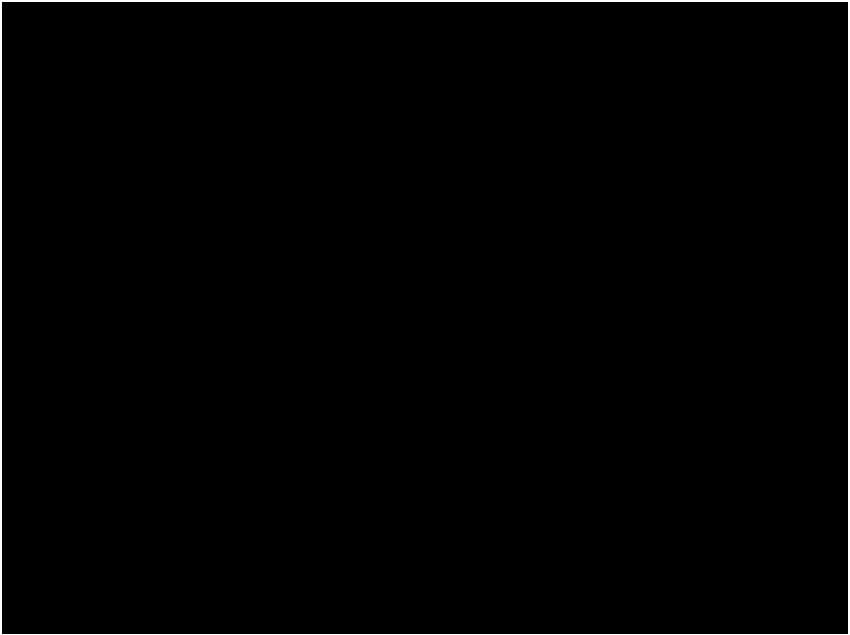
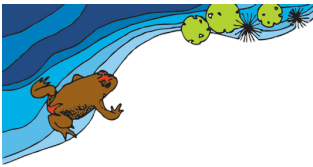


Figure 8: Upstream of the dam mapped as a first order stream.



any watercourse.



r stream.