

Geoff Hood

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Gunnedah
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4/05/2019

IPCN Public Meeting- Gunnedah

Orange Grove Solar farm

Dear Sirs

My comments today are in relation to the Department of Industry, Land and Water assessment report, the information that has been used as part of the Environmental Impact Assessment report and Review, this a project of State Significance, the facts need to be correct

My Comments are in relation to flooding, which was most concerns of public submissions

Formerly I was one of several Landholder Representatives, that oversaw the completion of the Carroll to Boggabri Floodplain Management Plan (CBFMP), local landholders, together with local and state government officials, completed the floodplain plan in 2006

This CBFMP Planning Document has been extensively referred to in this project determination, as well as in two other Recent Substantial Projects of State Significance in Gunnedah Shire, the planning document also has been well used in Gunnedah Shire deliberations on the floodplain from Carroll to Boggabri

The integrity of this planning document and its subsequent modifications must be upheld by NSW Government

With the Orange Grove Solar Farm

There were inaccurate floodplain statements by the consultants(HEC) in the initial Environmental Assessment for the Solar Farm, They stated that the proposed development was above historical flood heights of the Namoi Valley, and that an first order stream (SWALE) did not exist, despite contrary information shown on maps and in the CBFMP

Subsequently as part of response to submissions, a partial reassessment of the floodplain was conducted by another consultant "GHD", GHD quantified that the Swale is actually a breakout channel of the Namoi River. Note that this breakout channel originates east of the proposed solar farm site, which is above the height of the solar farm, GHD showed that there would be breakout flow in a 1984 size flood event

The CBFMP compendium of data estimated that in a 1984 size flood event, that approximately 211 meters/second of breakout flow would occur from the Namoi River above Carroll, towards the proposed solar farm/swale, this breakout has been now confirmed by GHD

Note- that in a 1955 1% AEP type of flood event, the estimated volume (CBFMP) would increase 425% to 897 meters /second, which I would suggest would probably overtop the first order stream and cause the proposed solar farm site to flood

GHD should have modelled and presented floodplain flooding 1% AEP and 3 x 1% AEP extreme event in this vicinity, for this project to be consistent with other Gunnedah Shire state significant developments

These breakout 1984 and 1955 flood flows leave the Namoi river several meters higher than the proposed Solar farm site, the height of the Namoi river in flood is 281 +, AHD above Carroll, Solar Farm site 272.5 AHD, so it is grossly incorrect for HEC consultants to say that the solar farm site is above Namoi River Flood heights.

To compare a developments flood impacts to a measured river height downstream, is effectively like- “ looking in the rear vision mirror to see if there is any oncoming traffic”

The Department of Industry Land and Water/ Gunnedah Council, should have picked up on this misrepresentation of the floodplain facts,

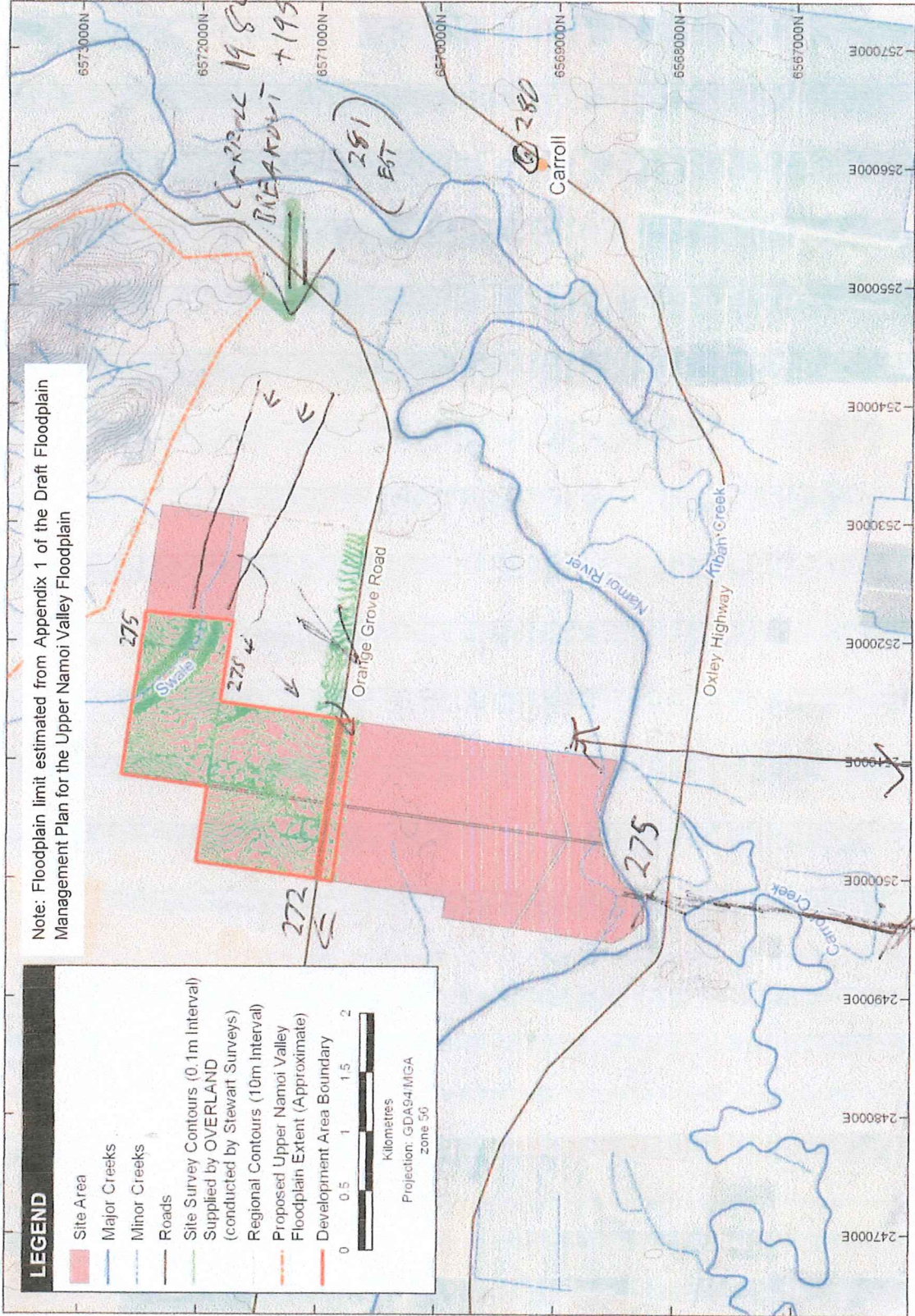
Can this development be approved with these inaccuracies? The inaccuracies first need to be acknowledged and measured. If there is flooding of the site in a 1% AEP event, floodwater will flow up to the perimeter security fence, it may cause afflux onto adjoining properties, which I understand are partners in this development, redirected floodwater may cause increase flow in the first order stream, as well as down the Orange Grove Road

These may be acceptable impacts

I note the projects development footprint has been amended to accommodate the first order stream(confirmed by GHD) that partially carries Namoi River breakout flows, I will withdraw my initial project objection as of insufficient information, once flooding aspects of a 1% AEP flood are known, at present they are not

Yours faithfully

Geoff Hood



211 m/s
897 m/s

Figure 2 Site Layout, Locality and Drainage Features

OVERLAND/STEWART
SURVEY LOCATION?

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HYDRO ENGINEERS & CONSULTANTS