

# Appendix F

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Consideration of clause 228(2) factors  
and matters of national environmental  
significance

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## Clause 228(2) Checklist

In addition to the requirements of the *Is an EIS required?* guideline as detailed in the REF, the following factors, listed in clause 228(2) of the *Environmental Planning and Assessment Regulation 2000*, have also been considered to assess the likely impacts of the proposal on the natural and built environment.

Factor	Impact
<p>a. Any environmental impact on a community?</p> <p>The proposal would have construction impacts through generation of noise, potential traffic impacts and potential reduction in air quality and visual amenity. These would be managed through safeguards listed in chapter 7.</p> <p>Potential adverse impacts during operation would be associated with social impacts such as property acquisition, noise and amenity.</p> <p>The proposal would be likely to improve traffic conditions, safety and access in the region. The proposal would improve access for pedestrians and cyclists by the provision of an off-road shared pathway.</p>	<p>Short-term negative</p> <p>Long-term negative</p> <p>Long-term positive</p>
<p>b. Any transformation of a locality?</p> <p>The proposal would result in changes to the locality through the provision of a wider road with a wide central median creating a larger road corridor. Changes to intersections designs and property access would also result from the proposal. A number of mitigation measures are provided to minimise any negative impacts (chapter 7).</p> <p>Some changes to the locality would be positive such as greater pedestrian and cyclist provisions and improved access potential in the south west region. Urban design principles would be implemented and include consideration to the landscape character and visual amenity of the area.</p>	<p>Long-term negative</p> <p>Long-term positive</p>

Factor	Impact
<p>c. Any environmental impact on the ecosystems of the locality?</p> <p>About 59 hectares of vegetation would be removed as part of the proposal, including 58.4 hectares in certified areas and 0.1 hectares in non-certified areas within the boundaries of the South West Growth Centre. The remaining 0.7 hectares of vegetation to be removed is located outside the South West Growth Centre boundary. Of this 0.7 hectares, 0.4 hectares of vegetation was considered to be Threatened Ecological Communities (TECs) and includes the Cumberland Plain Woodland community. Assessments of significance were undertaken for the TECs impacted by the proposal in these areas. The assessments found that the impacts from the proposal would not be considered significant.</p> <p>About 0.1 hectares River-flat Eucalypt Forest would be removed from non-certified areas of the South West Growth Centre and require offsetting. Offsets would be in accordance with relevant biodiversity measure 11 of the Biodiversity Certification. Offsets would be developed in consultation with both DP&amp;I and OEH (refer to section 6.2).</p>	<p>Long-term negative</p>
<p>d. Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?</p> <p>There would be a minor reduction in the aesthetic quality of the locality due to the removal of vegetation, increase in road width and changes to intersections, waterways and property boundaries.</p> <p>Mitigation measures would be implemented to reduce visual impacts and detailed design would be undertaken in accordance with the urban design objectives of the proposal. These include revegetation and landscaping of the road corridor and retention of vegetation where practical.</p>	<p>Long-term negative</p>
<p>e. Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations?</p> <p>The proposal has the potential to impact a number of Aboriginal and non-Aboriginal cultural heritage items (refer to section 6.3 and section 6.4). Where possible the road has been designed to avoid impacts to these items. Mitigation measures are included in chapter 7.</p>	<p>Long-term negative</p>

Factor	Impact
<p>f. Any impact on the habitat of protected fauna (within the meaning of the <i>National Parks and Wildlife Act 1974</i>)?</p> <p>Removal of native vegetation, hollow bearing trees, and dead trees would remove potential breeding, roosting and foraging habitat for threatened birds, fauna and micro bats. The proposal would result in the removal of 65 hollow-bearing trees.</p> <p>Habitat fragmentation would not be substantially increased as a result of clearing of native vegetation required for the proposal due to the already fragmented nature of the existing environment. The need to provide fauna movement passage along creeks was considered in the design to provide opportunity for fauna to cross under the road.</p> <p>Potential habitat impacted in non-certified areas of the South West Growth Centre and outside of the South West Growth Centre is not likely to support any threatened species. Therefore tests of significance were not undertaken.</p> <p>As no important habitat exists in the proposal for listed migratory species and no potential habitat exists within the non-certified areas of the South West Growth Centre or where the proposal occurs outside of the SEPP boundary, further assessment is not required.</p> <p>Ecosystem health of Thompsons Creek, Narellan Creek and Lowes Creek was poor as a result of poor land practices, agriculture and urban development. These creeks are unlikely to provide important fish habitat.</p> <p>The removal of 24 dams within certified areas would reduce the potential aquatic habitat for migratory species, frogs and other aquatic species. No important aquatic habitat for any listed migratory species and no threatened aquatic flora or fauna species were identified as occurring or potentially occurring within the non-certified areas. The assessment found that the proposal is unlikely to have a significant impact on any aquatic flora and fauna species as a result of dam removal.</p>	<p>Long-term negative</p>

Factor	Impact
<p>g. Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?</p> <p>The proposal would result in the removal of existing native vegetation (ENV) and threatened ecological communities. Impacts would also occur to the Cumberland Plain Land Snail and the Native Pear. It has been found that significant impacts to flora and fauna would be unlikely to result from the proposal, and the proposal would not result in the endangering of any species, with the implementation of the mitigation strategies in section 6.2 and Appendix D.</p>	<p>Nil</p>
<p>h. Any long-term effects on the environment?</p> <p>The proposal, being the widening of The Northern Road would increase the number of traffic lanes, incorporate a wide median, signalise intersections and provide a shared cyclist and pedestrian path would improve traffic conditions, including road user safety and traffic flow. The proposal would also improve access in the South West Growth Centre.</p> <p>The proposal would require the removal of vegetation. Refer to point c above for the area of vegetation to be removed.</p> <p>The proposal has the potential to impact a number of Aboriginal and non-Aboriginal cultural heritage items (refer to section 6.3 and section 6.4). Where possible the road has been designed to avoid impacts to these items. Mitigation measures are included in chapter 7.</p> <p>The proposal would also result in visual impacts due to an increased width of the road. Urban design principles would be incorporated in the detailed design to minimise impacts.</p>	<p>Long-term positive</p> <p>Long-term negative</p> <p>Long-term negative</p> <p>Long-term negative</p>
<p>i. Any degradation of the quality of the environment?</p> <p>Landscape and urban design has been considered as part of the development of the design, which would minimise visual degradation of the environment.</p> <p>The proposal has the potential to degrade the quality of the environment through accidental spills and erosion and sedimentation during construction. The construction site would be rehabilitated as work progresses to minimise impacts.</p>	<p>Long-term negative</p> <p>Short-term negative</p>

Factor	Impact
<p>j. Any risk to the safety of the environment?</p> <p>Operation of the proposal would not pose any risk to the safety of the environment. All chemicals and fuels used during construction and maintenance activities would be stored within bunded areas to ensure that spills are not released to the environment.</p>	<p>Nil</p>
<p>k. Any reduction in the range of beneficial uses of the environment?</p> <p>The proposal would improve public transport, pedestrian and cycling facilities and access within the Sydney South West Growth Centre.</p>	<p>Long-term positive</p>
<p>l. Any pollution of the environment?</p> <p>There is the potential for accidental spills of chemicals during the construction period which could affect surrounding land including waterways. Air quality would be reduced during construction activities.</p> <p>The proposal would have a greater capacity for more vehicles. Additional vehicle emissions were anticipated, and hence air quality would decrease. There is also a risk of increased accidental fuel spillage from increase vehicles during operation which would be managed by permanent spill basins.</p>	<p>Short-term negative</p> <p>Long-term negative</p>
<p>m. Any environmental problems associated with the disposal of waste?</p> <p>Waste would be managed in accordance with the <i>Waste Avoidance and Resource Recovery Act 2001</i> and recycled where possible. It is not anticipated that there would be issues encountered with the disposal of waste.</p>	<p>Nil</p>
<p>n. Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply?</p> <p>All resources required would not in short supply and would be readily available.</p>	<p>Nil</p>
<p>o. Any cumulative environmental effect with other existing or likely future activities?</p> <p>The proposal would be likely to occur concurrently with the development of the Sydney South West Growth Centre, and other road upgrades. Cumulative noise and traffic construction impacts may result.</p> <p>Vegetation would be removed for the proposal and as part of other developments in the region. However, this would have the additional benefit of enhancing the development of the South West Growth Centre.</p>	<p>Short-term negative</p> <p>Long-term positive</p>

Factor	Impact
<p data-bbox="252 264 944 360">p. Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?</p> <p data-bbox="252 398 916 495">The proposal has been located in Western Sydney outside the coastal zone and therefore would not impact coastal processes or coastal hazards.</p>	<p data-bbox="1008 365 1046 394">Nil</p>



## Matters of National Environmental Significance

Under the environmental assessment provisions of the *Environment Protection and Biodiversity Conservation Act 1999*, the following matters of national environmental significance and impacts on Commonwealth land are required to be considered to assist in determining whether the proposal should be referred to the Australian Government Department of Sustainability, Environment, Water, Population and Communities.

Factor	Impact
<p>a. Any impact on a World Heritage property?</p> <p>There would be no World Heritage properties impacted by the proposal.</p>	Nil
<p>b. Any impact on a National Heritage place?</p> <p>There would be no impact to National Heritage Places by the proposal.</p>	Nil
<p>c. Any impact on a wetland of international importance?</p> <p>There would be no impact to wetlands of international importance by the proposal.</p>	Nil
<p>d. Any impact on a listed threatened species or communities?</p> <p>About 59 hectares of vegetation would be removed as part of the proposal, including 58.4 hectares in certified areas and 0.1 hectares in non-certified areas within the boundaries of the South West Growth Centre. The remaining 0.7 hectares of vegetation to be removed is located outside the South West Growth Centre boundary. Of this 0.7 hectares, 0.4 hectares of vegetation was considered to be Threatened Ecological Communities (TECs) and includes the Cumberland Plain Woodland community. Assessments of significance were undertaken for the TECs impacted by the proposal in these areas. The assessments found that the impacts from the proposal would not be considered significant. Therefore referral is not required.</p> <p>About 0.1 hectares River-flat Eucalypt Forest would be removed from non-certified areas of the South West Growth Centre and require offsetting. Offsets would be in accordance with relevant biodiversity measure 11 of the Biodiversity Certification. Offsets would be developed in consultation with both DP&amp;I and OEH (refer to section 6.2).</p>	Negative
<p>e. Any impacts on listed migratory species?</p> <p>A total of 13 migratory fauna species were identified in the EPBC Act Protected Matters Report (June 2011), as potentially occurring. No migratory species would be significantly impacted by the proposal.</p>	Nil

Factor	Impact
<p>d. Any impact on a Commonwealth marine area?</p> <p>There would be no impact to Commonwealth marine areas by the proposal.</p>	<p>Nil</p>
<p>g. Does the proposal involve a nuclear action (including uranium mining)?</p> <p>The proposal does not involve a nuclear action (including uranium mining).</p>	<p>Nil</p>
<p>Additionally, any impact (direct or indirect) on Commonwealth land?</p> <p>The proposal would not impact Commonwealth land.</p>	<p>Nil</p>