

**ASSESSMENT OF THE
ENVIRONMENTAL IMPACTS OF THE
PROPOSED EASTLINK POWERLINE
ON THE LOCKYER VALLEY,
SOUTH EAST QUEENSLAND**

**PREPARED FOR
LOCKYER AGAINST EASTLINK GROUP INC.
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INTRODUCTION

It is proposed to locate the Eastlink powerline easement within the "Eastlink Preferred Corridor", announced by the Queensland and New South Wales Governments in February 1995 (refer *Meeting Queensland's Electricity Supply Needs*, Queensland Government Energy Policy Statement, April 1995).

This study examines:

Section 1

The environmental significance of the Lockyer Valley section of the Eastlink Preferred Corridor and adjacent areas.

Section 2

The potential impacts of the Eastlink easement on areas of environmental significance within the Lockyer Valley (as identified in Section 1).

Section 3

The Eastlink easement Environmental Impact Assessment (EIA) process, and other relevant issues.

EXECUTIVE SUMMARY

CONCLUSION 1: The Lockyer Valley section of the Eastlink Preferred Corridor traverses, or has within its boundaries, areas of high conservation significance.

CONCLUSION 2: The areas of high conservation significance are: remnant bushland in the Helidon Hills, remnant bushland in the Paradise Creek/Dry Creek/Silky Oak Creek/Paradise Creek area, remnant bushland in the vicinity of Mt. Ma Ma, remnant bushland along the Great Dividing Range, and remnant riparian vegetation along the major creek systems.

CONCLUSION 3: The areas of high conservation significance include the habitats of rare and endangered flora and fauna species, and vegetation types which are poorly conserved in south-east Queensland.

CONCLUSION 4: The areas of high conservation significance are categorised as "critical conservation areas" (Helidon Hills, Great Dividing Range), "broad conservation areas" (Helidon Hills, Paradise Creek/Dry Creek/Silky Oak Creek/Paradise Mountain, major creeks), or as potential critical conservation/broad conservation areas (vicinity of Mt. Ma Ma) in the WESROC report *Subregional Structure Planning in the Western Subregion of South East Queensland*.

CONCLUSION 5: The Lockyer Valley section of the Eastlink Preferred Corridor traverses an area of high conservation significance recommended for declaration as a National Park (Helidon Hills).

CONCLUSION 6: The Lockyer Valley section of the Eastlink Preferred Corridor crosses creek systems that function as wildlife habitat and/or wildlife corridor, and where the fringing vegetation acts to prevent erosion.

CONCLUSION 7: It is likely that the majority of the vegetation would need to be cleared from the Eastlink easement.

CONCLUSION 8: The clearance of an Eastlink easement (from within the Eastlink Preferred Corridor) would have a deleterious impact on the environmentally significant areas within the Lockyer Valley that are traversed by, or contained within, the Eastlink Preferred Corridor (Helidon Hills area, Paradise Creek/Dry Creek/Silky Oak Creek/Paradise Mountain area, Mt. Ma Ma area, Great Dividing Range area, Major Creek Systems).

CONCLUSION 9: It is inappropriate to site the Eastlink easement in the areas of either "critical conservation" or "broad conservation" significance that are traversed by, or contained within, the Lockyer Valley section of the Eastlink Preferred Corridor. It is also inappropriate to site the Eastlink easement in any other area of "critical conservation" significance, and it is likely to be inappropriate to site the Eastlink easement in any other area of "broad conservation significance".

CONCLUSION 10: Clearance of vegetation for the Eastlink easement in the Helidon Hills is incompatible with National Park values.

CONCLUSION 11: Any further vegetation clearance in the Subcoastal Lowlands or Subcoastal Ranges provinces (after Young and Cotterell 1993), such as for the Eastlink easement, is inappropriate until proper protection measures are in place.

CONCLUSION 12: Clearance of riparian vegetation for the Eastlink easement would exacerbate gully erosion problems.

CONCLUSION 13: Clearance of further vegetation from the Heifer Creek Sandstone landform for the Eastlink easement would be likely to cause further landslips.

CONCLUSION 14: The construction of the Eastlink powerline towers on the unstable Heifer Creek Sandstone landform is undesirable.

CONCLUSION 15: The decision to proceed with Eastlink before the completion of an Environmental Impact Assessment for Eastlink is inconsistent with a truly open and competitive energy market.

CONCLUSION 16: An Eastlink easement should not be selected before the preparation of an accurate and complete Environmental Impact Assessment. The Environmental Impact Assessment should not be considered accurate or complete if it was prepared before or without the compilation of detailed conservation information.

CONCLUSION 17: Because of the complex nature of natural systems, the Environmental Impact Assessment should not be carried out within just the Eastlink Preferred Corridor area. The Environmental Impact Assessment should not be considered accurate or complete unless relationships with adjacent or neighbouring areas, determined by full assessments, are also included.

CONCLUSION 18: Legislation under the Queensland State Government Nature Conservation Act, protecting rare and threatened species, has implications for the rare and threatened species in the Eastlink Preferred Corridor.

SECTION 1

THE ENVIRONMENTAL SIGNIFICANCE OF THE LOCKYER VALLEY SECTION OF THE EASTLINK PREFERRED CORRIDOR AND ADJACENT AREAS.

1.1 Areas of significance

The Eastlink Preferred Corridor traverses or has within its boundaries the following significant areas, identified from *Subregional Structure Planning in the Western Subregion of South East Queensland* (Report of the WESROC Steering Committee, April 1995), *Land Degradation in the Lockyer Catchment* (J.H. Shaw, Qld. Department of Primary Industries, 1979), and an examination of colour air photography:

1. The Helidon Hills, a large area of continuous remnant bushland.
2. Remnant bushland in the Paradise Creek/Dry Creek/Silky Oak Creek/Paradise Mountain area.
3. Remnant bushland in the vicinity of Mt. Ma Ma.
4. Remnant bushland along the Great Dividing Range.
5. Remnant riparian vegetation along major creek systems.

In the following subsections, each of the above areas is examined in detail.

1.2 The Helidon Hills

The recently released report, *Subregional Structure Planning in the Western Subregion of South East Queensland*, Report of the WESROC Steering Committee, April 1995, identifies the Helidon Hills, located to the north of Gatton, Grantham and Helidon, as having a large core "critical conservation area" surrounded by "broad conservation areas". Critical conservation areas are defined as being poorly conserved in the region, and of regional significance for nature conservation. Critical conservation areas have very high conservation priorities, and broad conservation areas have high to medium conservation priorities.

The Eastlink Preferred Corridor passes through both the critical conservation and broad conservation areas of the Helidon Hills.

The WESROC report states that the "Helidon Hills Includes State Forests and Timber Reserves - contains regionally significant open forest communities (mixed *Eucalyptus* spp. e.g. *E. planchoniana*, *E. baileyana*, *E. pilularis*) on Helidon Hills sandstones in Subcoastal lowlands which are not conserved elsewhere; location for threatened plant species (*Phelabium obtusifolium*, *Sarchochilus weinthalii*); high diversity of fauna".

Highly significant fauna species have been recorded from the Eastlink Preferred Corridor area within the Helidon Hills. Naturesearch, Queensland Department of Environment and Heritage records (Appendix A) list the following rare and threatened species:

- (a) Red Goshawk
- (b) Squatter Pigeon
- (c) Glossy Black-Cockatoo
- (d) Brush-tailed Rock-wallaby

(e) Collared Delma

A number of other significant species, which are uncommon or have a restricted occurrence in south-east Queensland, have also been recorded from the Eastlink Preferred Corridor area (refer Appendix A).

The WESROC report recommends "That the Department of Environment and Heritage declare a National Park in the Helidon Hills as a high priority".

1.3 The Paradise Creek/Dry Creek/Silky Oak Creek/Paradise Mountain Area

The WESROC report, *Subregional Structure Planning in the Western Subregion of South East Queensland*, identifies the Paradise Creek/Dry Creek/Silky Oak Creek/Paradise Mountain area as having "broad conservation significance". The area includes remnant vegetation tracts of significant size, and features ironbark (*E. crebra*) woodlands on basalt and Heifer Creek sandstones, and closed forest (brigalow/vine thicket communities).

Ironbark woodlands and vine thickets are described in the WESROC report as being "poorly conserved" in south-east Queensland.

Flora lists have been compiled for some of the vine scrub (also described as vine thicket or vineforest) remnants and adjacent open forest areas. Vine scrub lists compiled prior to 1991 have been summarised in the *Vineforest Plant Atlas for South-East Queensland with Assessment of Conservation Status*, P.I. Forster, P.D. Bostock, L.H. Bird, and A.R. Bean, Queensland Government Herbarium, 1991.

Site 181, *Paradise Creek*, from the Vineforest Atlas is within the Eastlink Preferred Corridor. This site features the following significant flora species:

- (a) Rare, poorly conserved: *Casuarina cristata*, *Senna coronilloides*.
- (b) Rare, well conserved: *Cyathea cooperi*, *Ficus superba* var. *henniana*, *Sarcochilus ceciliae*.

An examination of air photography reveals that additional unsurveyed vineforest remnants exist in the area, including remnants within the Eastlink Proposed Corridor. One such remnant, adjacent to Dry Creek, is being considered for acquisition under the Queensland Government Regional Open Space System (ROSS).

A rare and threatened species, *Callistemon formosus*, has been recorded from vine forest margins around Paradise Mountain (refer Appendix B). The species has conservation status code 3VC (refer *Rare and Threatened Plants Species of Queensland*, Queensland Government Department of Primary Industries Herbarium):

- 3 Species with a range of greater than 100km in Australia but occurring in small populations which are mainly restricted to highly specific habitats.
- V Vulnerable species not presently endangered but at risk over a longer period through continued depletion, or which largely occur on sites likely to experience changes in land use which would threaten the survival of the species in the wild.
- C Species known to be represented within a National park or other proclaimed reserve.

Callistemon formosus is likely to be present in other (unsurveyed) parts of the area.

A rare fauna species, the Black-breasted Button-quail, inhabits the vine scrubs of this area, and has been recorded from vine scrub near Paradise Mountain (refer Appendix A). This highly significant fauna species is likely to be present in other (unsurveyed) parts of the area.

1.4 The vicinity of Mt. Ma Ma

Areas of remnant vine scrub within the Eastlink Preferred Corridor are also present on the eastern slopes of Mt. Ma Ma, and in areas to the north of Mt. Ma Ma. Some flora and fauna survey work has been conducted in these areas by L. Pahl and others (pers. comm. landholders) but was not available for inclusion in this report.

Because of their small size, these areas have not been assessed as either critical conservation or broad conservation in the WESROC report *Subregional Structure Planning in the Western Subregion of South East Queensland*. However, the report states that further assessment of these areas may indicate regional or subregional significance and thus critical or broad conservation status (refer to WESROC report, Section B3.1).

The long-term survival of these small areas is likely to depend on the revegetation of linkages to other larger areas (refer Section 2.3).

1.5 The Great Dividing Range

The WESROC report, *Subregional Structure Planning in the Western Subregion of South East Queensland*, identifies the areas of the Great Dividing Range traversed by the Eastlink Preferred Corridor as "critical conservation areas". The report states that these areas contain "significant vegetation communities, particularly *E. albens/Callitris baileyi* and low closed forests (vine thickets/brigalow communities) in Subcoastal Ranges."

Detailed flora and fauna information for the Great Dividing Range was not available for inclusion in this report.

1.6 The Major Creek Systems

In addition to creeks within the above areas, the Eastlink Preferred Corridor crosses a number of major creeks. These creeks include Lockyer Creek, Flagstone Creek, Ma Ma Creek, Dry Creek and Lagoon Creek.

Creek systems are a critical part of the natural environment, even in areas where the rest of the surrounding vegetation has been cleared. Creeks provide an essential source of water for wildlife, and with their fringing vegetation, often function as corridors for the movement of wildlife between larger areas of bushland (refer to *Survey of Remnant Bushland in the City of Ipswich*, D. Hanger, L.H. Bird & B. Boyes, July 1993, Part A Section 3.3). A number of bushland areas are interconnected by the abovementioned creeks.

The fringing vegetation of creeks is also important for stabilising creek banks, and preventing erosion.

The WESROC report, *Subregional Structure Planning in the Western Subregion of South East Queensland*, states "In recognition of the existing or potential conservation values of rivers, creeks, and their associated ecological communities in the WESROC subregion, a broad

conservation area has been placed over the major streams. In the situation where the fringing vegetation has been removed or substantially modified, priority should be given to rehabilitation or revegetation measures."

1.7 Conclusions

CONCLUSION 1: The Lockyer Valley section of the Eastlink Preferred Corridor traverses, or has within its boundaries, areas of high conservation significance.

CONCLUSION 2: The areas of high conservation significance are: remnant bushland in the Helidon Hills, remnant bushland in the Paradise Creek/Dry Creek/Silky Oak Creek/Paradise Creek area, remnant bushland in the vicinity of Mt. Ma Ma, remnant bushland along the Great Dividing Range, and remnant riparian vegetation along the major creek systems.

CONCLUSION 3: The areas of high conservation significance include the habitats of rare and endangered flora and fauna species, and vegetation types which are poorly conserved in south-east Queensland.

CONCLUSION 4: The areas of high conservation significance are categorised as "critical conservation areas" (Helidon Hills, Great Dividing Range), "broad conservation areas" (Helidon Hills, Paradise Creek/Dry Creek/Silky Oak Creek/Paradise Mountain, major creeks), or as potential critical conservation/broad conservation areas (vicinity of Mt. Ma Ma) in the WESROC report *Subregional Structure Planning in the Western Subregion of South East Queensland*.

CONCLUSION 5: The Lockyer Valley section of the Eastlink Preferred Corridor traverses an area of high conservation significance recommended for declaration as a National Park (Helidon Hills).

CONCLUSION 6: The Lockyer Valley section of the Eastlink Preferred Corridor crosses creek systems that function as wildlife habitat and/or wildlife corridor, and where the fringing vegetation acts to prevent erosion.

SECTION 2

THE POTENTIAL IMPACTS OF THE EASTLINK EASEMENT ON AREAS OF ENVIRONMENTAL SIGNIFICANCE WITHIN THE LOCKYER VALLEY.

2.1 The Eastlink Easement

Section 1 above identified areas of significance that are traversed by, or contained within, the Eastlink Preferred Corridor. The final Eastlink easement, 60 to 110 metres in width, will be located somewhere within the Eastlink Preferred Corridor.

This section examines the potential impacts of the Eastlink easement on the identified areas of significance.

2.2 Easement Vegetation Clearance

The Eastlink powerline would consist of a series of towers carrying high-voltage wires, constructed along the Eastlink easement. The high-voltage wires droop down between the towers, meaning that the easement vegetation must typically be cleared to prevent fouling with the wires. Additionally, maintenance access is usually required to the base of the towers, necessitating further vegetation clearance.

It is possible in certain locations to construct powerlines with the towers built on ridgetops so that the lines droop above the intervening valleys. This minimises the amount of vegetation clearance required. An examination of the Eastlink Preferred Corridor reveals that this system of construction would not be feasible for most of the Lockyer Valley section.

Altitude variations along the Eastlink Preferred Corridor in the Helidon Hills are typically small. In the Paradise Creek/Dry Creek area and areas south to the Great Dividing Range, the Eastlink Preferred Corridor typically runs along, or parallel to, mountain ranges, ridgelines or creek valleys.

It is likely that the majority of the vegetation would thus need to be cleared from the Eastlink easement.

2.3 The Impact of Easement Clearance on Natural Communities

The WESROC report, *Subregional Structure Planning in the Western Subregion of South East Queensland*, states that the creation of power easements "in integral bushland areas threatens conservation values and could destroy links to surrounding areas of integral bushland".

Many species will not cross an unvegetated area to move from one bushland area to another bushland area. A major reason for this is increased exposure to predators. Thus, clearance of vegetation for an easement will effectively split an area of bushland, dividing habitats and ecosystems.

The number of species in any classificatory group of plants or animals increases with the size of an area, and the preservation of a fraction (even half) of that area cannot preserve all the species originally present in the larger area. If areas of forest become divided by clearance, there will be an inevitable sequence of species extinctions from the area, over the following years. It is therefore important to retain large continuous habitat areas in total, if natural areas are to be sustainable in the long term.

The Red Goshawk, a rare and threatened species present in the Helidon Hills, is described in the WESROC report *Subregional Structure Planning in the Western Subregion of South East Queensland* as one of the "species that require large areas of undisturbed habitat".

Long term sustainability is also dependent on the movement of species between large continuous habitat areas, via continuous corridors of appropriate natural habitat. In south-east Queensland the major remaining and potential wildlife corridors are often those found along creeks and rivers. The clearance of a section of creekline vegetation, such as for the crossing of a powerline easement, will limit the function of the creek as a wildlife corridor.

As well as dividing habitats, ecosystems and corridors, easement clearance can divide habitat and easement complexes. Important ecological linkages can occur between areas containing different ecosystems. Linkages between different types of biological community occur when animals frequently move between them, and the conservation of such animals depends on the conservation of the different biological communities and also the intervening connections.

Areas in which several different types of natural habitat occur in close proximity are often especially rich in wildlife species, since they contain species typical of each habitat type as well as an additional set of species which need to use more than one habitat type. Species which rely on such combinations are particularly vulnerable to local extinction as a result of partial clearing, such as the clearing of an easement.

The make-up of the environmentally significant areas within the Lockyer Valley that are traversed by, or contained within, the Eastlink Preferred Corridor, is as follows:

- (a) Helidon Hills - large core area of continuous natural bushland.
- (b) Paradise Creek/Dry Creek/Silky Oak Creek/Paradise Mountain - large areas of remnant natural bushland interconnected by corridors of natural bushland.
- (c) Vicinity of Mt. Ma Ma - small areas of remnant natural bushland (the long-term survival these small areas is likely to depend on the revegetation of linkages to other larger areas).
- (d) Great Dividing Range - large areas of remnant natural bushland interconnected by corridors of natural bushland.
- (e) Major Creek Systems - areas of mostly continuous riparian vegetation (re-vegetation needed in some areas to assist corridor function, refer Section 1.6)

The clearance of an Eastlink easement in these environmentally significant areas would have a deleterious impact on these areas.

(Note - reference information on the conservation of species and ecosystems was obtained from *A Strategy for the Conservation of Flora, Fauna and Natural Communities Within Moreton Shire, South-East Queensland*, C.P. Catterall, M. Kingston, and G. Kordas, Faculty of Environmental Sciences, Griffith University, January 1993).

2.4 The Impact of Easement Clearance on Critical and Broad Conservation Areas

The WESROC report *Subregional Structure Planning in the Western Subregion of South East Queensland* recommends: "That planning for transport corridors and power easements avoid areas of critical conservation value, and directly address issues of potential impact on areas of broad conservation value (including linkages between areas)" (Recommendation 12).

Critical conservation areas in the Helidon Hills and on the Great Dividing Range are traversed by the Eastlink Preferred Corridor. The WESROC report states that these critical conservation areas should be avoided, meaning that in the Helidon Hills and on the Great Dividing Range, the Eastlink Preferred Corridor is an inappropriate location for the Eastlink easement. Any other location within a critical conservation area would also be inappropriate.

Additionally, clearance for a powerline easement in the Helidon Hills is incompatible with National Park values.

The WESROC report states that issues of potential impact of power easements on broad conservation areas should be directly addressed. Broad conservation areas in the Helidon Hills, along the major creek systems, and in the Paradise Creek/Dry Creek/Silky Oak Creek/Paradise Mountain area are traversed by the Eastlink Preferred Corridor. Clearance of an easement in these areas will have a deleterious impact on the environmental significance of these areas (refer Section 2.3 above). It is thus inappropriate to locate the Eastlink easement within these areas. It is also likely to be inappropriate to locate the Eastlink easement within any other areas of broad conservation significance.

2.5 The Impact of Easement Clearance on Poorly Conserved Areas

The WESROC report *Subregional Structure Planning in the Western Subregion of South East Queensland* identifies six conservation provinces in south east Queensland (after Young and Cotterall 1993). All of the areas of high conservation significance within the Lockyer Valley section of the Eastlink Preferred Corridor fall within two of these provinces, the "Subcoastal Ranges" and the "Subcoastal Lowlands".

These provinces are the most poorly conserved in the region, being the least represented in the reserve system in south east Queensland. Only 0.7% of the Subcoastal Ranges is conserved, and only 0.1% of the Subcoastal lowlands is conserved. To date, neither the Queensland State Government nor the responsible local authority, Gatton Shire Council, has acted to properly protect these areas. This is despite approvals that will see further vegetation clearance, such as for the Paradise Creek Quarry, apparently proceeding.

Any further vegetation clearance in the Subcoastal Lowlands or Subcoastal Ranges provinces, such as for the Eastlink easement, is inappropriate until proper protection measures are in place.

2.6 The Impact of Easement Clearance on Land Degradation and Water Quality

As detailed in Section 1.6, the vegetation fringing watercourses is important not only for wildlife, but also for preventing erosion and stabilising creek banks. The report *Land Degradation in the Lockyer Catchment* details extensive gully erosion in areas within the Eastlink Preferred Corridor. This problem would be further exacerbated by the clearance of riparian vegetation for an easement.

Another major problem highlighted in *Land Degradation in the Lockyer Catchment* is that of landslips. The majority of these landslips occur within the Heifer Creek Sandstones landform. The geology of this landform predisposes it to instability. The report states that: "This instability has been seriously aggravated by extensive clearing of the natural vegetation." The Land Degradation map accompanying the report shows numerous landslips in the Dry Creek/Paradise Creek area, several within the Eastlink Preferred Corridor.

Clearance of further vegetation from the Heifer Creek Sandstone landform for the Eastlink

easement would be likely to cause further landslips. Additionally, the construction of powerline towers on such an unstable landform is undesirable.

2.7 Conclusions

CONCLUSION 7: It is likely that the majority of the vegetation would need to be cleared from the Eastlink easement.

CONCLUSION 8: The clearance of an Eastlink easement (from within the Eastlink Preferred Corridor) would have a deleterious impact on the environmentally significant areas within the Lockyer Valley that are traversed by, or contained within, the Eastlink Preferred Corridor (Helidon Hills area, Paradise Creek/Dry Creek/Silky Oak Creek/Paradise Mountain area, Mt. Ma Ma area, Great Dividing Range area, Major Creek Systems).

CONCLUSION 9: It is inappropriate to site the Eastlink easement in the areas of either "critical conservation" or "broad conservation" significance that are traversed by, or contained within, the Lockyer Valley section of the Eastlink Preferred Corridor. It is also inappropriate to site the Eastlink easement in any other area of "critical conservation" significance, and it is likely to be inappropriate to site the Eastlink easement in any other area of "broad conservation significance".

CONCLUSION 10: Clearance of vegetation for the Eastlink easement in the Helidon Hills is incompatible with National Park values.

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CONCLUSION 12: Clearance of riparian vegetation for the Eastlink easement would exacerbate gully erosion problems.

CONCLUSION 13: Clearance of further vegetation from the Heifer Creek Sandstone landform for the Eastlink easement would be likely to cause further landslips.

CONCLUSION 14: The construction of the Eastlink powerline towers on the unstable Heifer Creek Sandstone landform is undesirable.

SECTION 3

THE EASTLINK EASEMENT ENVIRONMENTAL IMPACT ASSESSMENT (EIA) PROCESS, AND OTHER RELEVANT ISSUES.

3.1 The Environmental Impact Assessment Process in Relation to the Selection of Options in a Truly Open and Competitive Market

The decision to proceed with Eastlink was made before the completion of an Environmental Impact Assessment for the Eastlink project. Thus, the comparison between Eastlink and other possible options did not include a comparison of environmental impacts or environmental costs.

In a truly competitive situation, potential suppliers should be able to openly tender to supply the lowest cost energy to the end user. If the system is truly open, then suppliers should bear all costs involved. This includes transmission costs, and any social and environmental costs. If these costs are not included in the first place, they will be passed on later in other ways, or will be borne by another sector of the community. The consumer that saves in their electricity bill will pay in the long run through increased taxes, charges or costs.

The decision to select the Eastlink option, where Queensland will source power from New South Wales via the Eastlink powerline (which is the first role of Eastlink) appears to have been made solely on the basis of the electricity price offered to Queensland consumers. This will mean cheap electricity bills for Queensland consumers.

The cheap bill will not, however, equate to cheap electricity. Because of the massive infrastructure costs associated with the New South Wales oversupply situation, New South Wales consumers would be subsidising Queensland consumers, either directly through increased electricity bills, or indirectly through increases in taxes or other charges. The costs of Eastlink, which include construction, transmission, social and environmental costs, are not included in the electricity price to Queensland consumers. These costs will have to be borne by someone in some form, either at that time, or at some time in the future.

The costs of Eastlink are not one-off, either. There are ongoing maintenance costs, and the transmission, social and environmental costs are either continuous or cumulative. These costs will be present for the life of Eastlink, and should be included in any cost-benefit analysis of a supplier that seeks to use Eastlink as a means for delivering energy to the end user.

The decision to proceed with Eastlink before the completion of an Environmental Impact Assessment for Eastlink is inconsistent with a truly open and competitive energy market.

3.2 The Eastlink Environmental Impact Assessment Process in Relation to Inadequate Environmental Information

Four years ago, the Queensland State Government initiated a comprehensive regional planning process for south-east Queensland, called SEQ2001. To assist with the process, south-east Queensland has been divided into geographic sub-regions. The Lockyer Valley section of the Eastlink Preferred Corridor falls within the Western Subregion. The Western Subregion of Councils (WESROC) has just completed a major advisory document, *Subregional Structure Planning in the Western Subregion of South East Queensland*, which has been quoted extensively in this report.

Under the Title "Nature Conservation Issues Still to be Addressed", the WESROC report highlights the current lack of detailed conservation information.

The extent of the lack of detailed conservation information can be seen from the Queensland Department of Environment and Heritage Naturesearch records at Appendix A. For about half of the grid-cells within the Eastlink Preferred Corridor, there are no fauna records. For the fauna in these areas to be accurately assessed, detailed ground surveys would need to be carried out over all four seasons, and preferably over a number of years to compensate for the effects of drought and fire.

There is also no flora information for sections of the Eastlink Preferred Corridor. As with fauna, flora should be assessed over a number of years to compensate for seasonal variations, climatic variations (such as drought) and other variations (such as fire).

An Eastlink easement should not be selected before the preparation of an accurate and complete Environmental Impact Assessment. The Environmental Impact Assessment should not be considered accurate or complete if it was prepared before or without the compilation of detailed conservation information.

Because of the complex nature of natural systems (refer to Section 2.3), the Environmental Impact Assessment should not be carried out within just the Eastlink Preferred Corridor area. The Environmental Impact Assessment should not be considered accurate or complete unless relationships with adjacent or neighbouring areas, determined by full assessments, are also included.

3.3 Other Issues

The Queensland State Government has passed legislation protecting rare and threatened species and their habitats, as part of the Nature Conservation Act. This legislation has implications for the rare and threatened species in the Eastlink Preferred Corridor.

3.4 Conclusions

CONCLUSION 15: The decision to proceed with Eastlink before the completion of an Environmental Impact Assessment for Eastlink is inconsistent with a truly open and competitive energy market.

CONCLUSION 16: An Eastlink easement should not be selected before the preparation of an accurate and complete Environmental Impact Assessment. The Environmental Impact Assessment should not be considered accurate or complete if it was prepared before or without the compilation of detailed conservation information.

CONCLUSION 17: Because of the complex nature of natural systems, the Environmental Impact Assessment should not be carried out within just the Eastlink Preferred Corridor area. The Environmental Impact Assessment should not be considered accurate or complete unless relationships with adjacent or neighbouring areas, determined by full assessments, are also included.

CONCLUSION 18: Legislation under the Queensland State Government Nature Conservation Act, protecting rare and threatened species, has implications for the rare and threatened species in the Eastlink Preferred Corridor.

APPENDICES

Appendix A: Naturesearch Fauna Data for Proposed Eastlink Powerline Route.

Appendix B: Flora Checklist for Paradise Mountain.

REFERENCES

Subregional Structure Planning in the Western Subregion of South East Queensland, Report of WESROC Steering Committee, April 1995.

Land Degradation in the Lockyer Catchment, J.H. Shaw, Queensland Government Department of Primary Industries, 1979.

Vineforest Plant Atlas of South-East Queensland with Assessment of Conservation Status, P.I. Forster, P.D. Bostock, L.H. Bird & A.R. Bean, Queensland Government Department of Primary Industries Herbarium, 1991.

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A Strategy for the Conservation of Flora, Fauna and Natural Communities Within Moreton Shire, South-East Queensland, C.P. Catterall, M. Kingston, and G. Kordas, Faculty of Environmental Sciences, Griffith University, January 1993.