

**IDENTIFICATION AND
ASSESSMENT OF PLACES OF
NATURAL HISTORY SIGNIFICANCE**

**SOUTH-EAST QUEENSLAND
COMPREHENSIVE REGIONAL
ASSESSMENT (PROJECT NE 5.1.6)**

**QUEENSLAND CRA/RFA STEERING
COMMITTEE**

**IDENTIFICATION AND
ASSESSMENT OF PLACES OF
NATURAL HISTORY SIGNIFICANCE
IN THE SOUTH-EAST
QUEENSLAND REGIONAL
ASSESSMENT AREA**

**SUZIE COULSTON
BRUNO GREIMEL**

QUEENSLAND CRA/RFA STEERING COMMITTEE

For more information contact:**Regional Forest Assessments, Department of Natural Resources**

Block C, 80 Meiers Road
INDOOROPILLY QLD 4068

phone: 07 3896 9836

fax: 07 3896 9858

Forests Taskforce, Department of Prime Minister and Cabinet

3-5 National Circuit
BARTON ACT 2600

phone: 02 6271 5181

fax: 02 6271 5511

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Forests Taskforce Department of Prime Minister and Cabinet

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Disclaimer

The views and opinions expressed in this report are those of the author and do not necessarily reflect the views of the Queensland and Commonwealth governments. The Queensland and Commonwealth governments do not accept responsibility for any advice or information in relation to this material.

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- University of Queensland;
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SUMMARY

This report has been prepared for the joint Commonwealth/State Steering Committee which oversees the Comprehensive Regional Assessment (CRA) of forests in the South East Queensland CRA region.

The Comprehensive Regional Assessment provides the scientific basis on which the State and Commonwealth governments will sign a Regional Forest Agreement (RFA) for the forests of the South East Queensland CRA region. This agreement will determine the future of the region's forests, providing a balance between conservation and ecologically sustainable use of forest resources.

This report was undertaken to identify and assess sites of National Estate significance in the South East Queensland (SEQ) Bioregion that have the potential to contribute to a wider understanding of Australian natural history and could potentially be listed to the Australian Heritage Commission (AHC) for listing on the Register of the National Estate (RNE). Sites were identified by application of the AHC' Criteria C1 for nomination of sites with natural values based on their use as research, teaching, reference or benchmark sites irrespective of tenure and current RNE status.

Within the forested areas of the south-east Queensland bioregion a total of 562 sites were identified. As a result of threshold meetings and consultation with expert panels a total of 163 sites were classified as above threshold. These sites had uses and characteristics that would have the potential to contribute to a wider understanding of Australia's natural History and included 102 areas within State Forests and 61 sites within Protected Areas and Freehold Land within the SEQ bioregion. To aid in the development of conservation strategies and management plans for areas with significant heritage value an outline of conservation and management issues relating to the nature of places and values were identified and included if the information was readily available. Management guidelines presented within this report are a summary of existing guidelines or management plans for protected area management compiled by the Department of Environment, Department of Natural Resources or Department of Primary Industries.

The short time period allocated to this project did not allow to further investigate the forest areas within State forests and on private land that could not be assessed due to a lack of available information. Due to the severe time frame under which this project was carried out it was impossible to visit individual sites for assessment. As a result it was not possible to ascertain if existing management plans for sites listed above threshold are effective or appropriate. Therefore, thorough investigation of these forest areas, especially freehold land is needed for a more comprehensive assessment and to fill potential gaps in the presented data files.

1.0 Introduction

The Commonwealth, State and Territory Governments, under the National Forest Policy Statement (NFPS), agreed to a framework and process to carry out comprehensive assessments of economic, social, environmental and heritage values of forest regions. This included the assessment of the national estate values of forest regions. A significant component of a comprehensive national estate assessment was to identify sites that have the potential to contribute to a wider understanding of Australian natural history. Work has begun on the development of a South East Queensland Regional Forest Agreement (RFA) on the future conservation, use and management of this regions forested areas. The RFA will be based on a scientific Comprehensive Regional Assessment (CRA) of all uses and values of the region's forests (DNR, 1997). More than thirty different projects aimed at documenting environment and heritage; social; resource and economic issues are currently in progress or have been completed. This process has precipitated increased conservation and industry interaction and facilitated the close examination of the types of conservation initiatives and the spatial dimensions of nature conservation and biodiversity throughout the SEQ area (Tarte, 1997 pers. comm.).

The aim of this project was to identify and assess sites of National Estate significance in the South East Queensland (SEQ) Bioregion that have the potential to contribute to a wider understanding of Australian natural history and could potentially be listed to the Australian Heritage Commission (AHC) for listing on the Register of the National Estate (RNE). Sites were identified and assessed based on their use as research, teaching, reference or benchmark sites irrespective of tenure and current RNE status. This forms part of the AHC's criterion C.1 for nomination of sites with natural values to the RNE taken into account the following considerations:

- **Research Sites:**
 1. Have the potential to increase the understanding of Australian natural history.
 2. Rarity of the site or the research produced.
 3. The quality and quantity of the research.
 4. The general significance o the research in the particular field of study.

- **Teaching sites:**
 1. Uniqueness of the site for particular teaching purposes.
 2. Duration and consistency of teaching.
 3. Number of people taught.
 4. Level of teaching.

- **Benchmark and Reference Sites:**
 1. The rarity of the site for the particular characteristic or process.
 2. Comprehensiveness of relevant information of the characteristic or process.
 3. The existence of a regular monitoring program.

This report further aimed to outline conservation and management issues relating to the nature of places and values identified. This information could be used to develop conservation management guidelines for such places.

2.0 Methods

2.1 Area Description

The area covered by this natural history site assessment project was the forested public and private lands in the South East Queensland CRA region, including the Blacktown Tablelands (Figure 1.1). The South East Queensland biogeographical region covers approximately 6.2 million hectares from the New South Wales-Queensland border north to Gladstone, and west to Toowoomba (DNR, 1997).

2.2 Consultant Workprogram

Work was conducted from the Department of Environment Head Office, located in 160 Ann Street, Brisbane. The Department of Environment provided office facilities, conference facilities, computers, phone and Fax access for the duration of the project. This project was allocated five working weeks, beginning November 24th, 1997. It was understood from the outset that it would be a difficult time to capture information from all sectors of the community and government departments given the proximity to Christmas and associated holidays. Given these constraints it was determined that the best use of time would be to conduct a comprehensive phone, letter and email survey with draft lists to be examined by academics and other expert persons following the Christmas break. As such, previously established databases within the DoE and other documented information was accessed. Identified documents were catalogued as a resource for future studies following this project report.

This project was undertaken by two consultants working part-time (18 hours/week). This approach was taken to provide for a more focused effort on the different aspects of the report and maximise efficiency in time management.. One consultant focused on obtaining existing information held in DoE, DNR and DPI databases, establish new databases to collate new information and handle email communications. The other consultant concentrated on the establishment of personal contacts with representatives of government departments and non-government organisations. This included handling of communication by correspondence, phone and fax communications. This division of work required weekly meetings between the consultants to deliver progress reports and prioritise tasks. This arrangement allowed efficient time management and worked very well for the duration of the project.

Figure 1.1 Map of the SEQ bioregion

2.3 information gathering and site selection

To obtain an overview of documented forest areas within the SEQ bioregion a map (Scale: 1:750 000) of the area was generated using existing departmental GIS databases. This map contained information on protected areas, state forests, timber reserves, local government boundaries, state boundaries as well as major towns and waterways in the SEQ bioregion. A preliminary data set of potential Research Sites, Teaching Sites and Reference or Benchmark Sites information was obtained by searching existing databases. This included:

- DoE protected area databases for Queensland that included National Parks, Conservation Parks, Nature Refuges and other protected areas.
- Databases of the DoE (GIS Unit) on protected areas in the SEQ bioregion.
- Databases of the DoE (GIS Unit) on State Forests and Timber Reserves in the SEQ bioregion.
- Databases of the NPWS of research permits issued by the department over the last 18 month for the State of Queensland.
- Databases of the NPWS of management plans and SIMI's of the SEQ bioregion.
- Databases on State Forests and Timber Reserves of the DNR on information of Scientific Areas, Feature Protection Areas, State Forest Parks and Forest Drives.
- Database of the Queensland Herbarium on research sites within the SEQ bioregion.

To begin with the GIS databases of protected areas and State Forests in Queensland were collated and forest areas outside the SEQ bioregion were eliminated. The remaining areas were searched for potential sites and these were listed in new, separate database in the form of tables.

The next step was to include detailed information on protected areas. This was achieved by searching the DoE's database of protected areas in Queensland and eliminate areas outside the SEQ bioregion. Subsequently NPWS databases were searched for protected area management plans (SIMI's) and the relevant information was summarised and incorporated in Table 1 and Table 2 (Appendix 8.4). In addition, the database of research permits issued by the NPWS for Queensland assessed for research permits issued in the SEQ forest areas and included in the database. This compilation of information allowed us to gain a better overview of the project and identified knowledge gaps.

To obtain additional information and close knowledge gaps we identified and contacted all Shire Councils, City Councils and non-government organisations within the SEQ bioregion. A Proforma datasheet., to be completed by respondents (Figure 2.1), was designed to streamline the response from individuals and organisations to allow easy incorporation of new data into databases. The proformas were sent to the Chief Executive Officers of 51 Local Governments, 27 Non-Government Organisations, listed by the Queensland Conservation Council and all known Environmental Education Centres, within the SEQ-Bioregion. Proformas were either returned by mail or information was obtained by personal interview over the phone in which case the proforma was completed by us.

Additional information was received from the Department of Environment Cultural Heritage Section (Dr. Margaret Kowald) which held thirteen public consultation

Figure 2.1 Site - Proforma Datasheet (scaled down version of the original)

C 1 Reported Sites: Natural Primary Class - for Regional Forest Assessment (RFA) within the SEQ Bioregion		
<p>Scribe: (Person, Organisation)</p>	<p>Date:</p>	
<p>Identification</p> <p>Place Name:</p> <p>.....</p> <p>Related Place:</p> <p>.....</p>	<p>C1 Value: (please tick)</p> <p>Research Site <input type="checkbox"/></p> <p>Teaching Site <input type="checkbox"/></p> <p>Reference/ Benchmark Site <input type="checkbox"/></p>	<p>Details:</p>
<p>Location</p> <p>Address/Locality</p> <p>.....</p> <p>Local Government Area:</p> <p>.....</p> <p>Tenure:</p> <p>Approx. Area (ha):</p> <p>Map Sheet:</p> <p>AMG Reference:</p> <p>(top right)</p>	<p>Other Value: (please circle)</p> <p>A1 Evolutionary Importance</p> <p>A2 Ecological Processes</p> <p>A3 Diversity</p> <p>B1 Rare/Threat. species</p> <p>E1 Value to Community</p> <p>General Description: (landform and vegetation)</p>	<p>Details:</p>
<p>References:</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>(please attach additional sheets if needed)</p>	<p>History of Place:</p> <p>.....</p> <p>.....</p> <p>.....</p>	
	<p>Condition and Management Issues:</p> <p>.....</p> <p>.....</p> <p>.....</p>	

workshops throughout the RFA area to assess sites of cultural heritage significance. These information was screened and databases were amended as applicable.

A large number of research licences (NPWS database) were issued by the Department of Environment to Universities, academics and other researchers. As a result, academics from Queensland University of Technology, University of Queensland, Griffith University, University of Central Queensland, James Cook University and the National University in Canberra were contacted regarding information on and location of sites that have been used for research and teaching purposes. University staff were either contacted by regular correspondence or e-mail.

Information on potential sites was also sought from the Queensland Museum, the Queensland Herbarium, the Department of Natural Resources and the Department of Primary Industries. Individuals from these departments were contacted either by e-mail, traditional correspondence or phone in an effort to gather information relating to areas they could identify for their use as teaching and research sites. We also liaised with consultants and DoE departmental staff that were involved in the SEQ RFA process to obtain additional information. Information gathered from these sources was collated and incorporated into the above described site lists. Sites not listed in the original DoE and DNR GIS database were added at the end of the document for possible incorporation into the GIS database. This data was then assessed by an expert panel during a Heritage workshop.

2.4 Thresholding (Step 2)

A Heritage workshop was scheduled to determine those sites of national estate significance identified in Step One by assigning a significance rating for each location. The significance rating was used to develop thresholds against which the identified sites could be assessed. Only those sites above threshold were considered of potential national estate significance. Guidelines for assessing the level of significance are provided in Appendix 2 (Figure 2.3.2).

For this workshop invitations were sent to 20 academics, researchers and officers of the DoE, and DNR. For this meeting we also prepared an information kit that contained:

- Information on the SEQ RFA process
- The selection criteria for sites
- The thresholding criteria for sites
- Draft lists of potential sites

Due to the low attendance of the heritage workshop (five out of an invited 20) it was decided to invite comments on potential sites form an 'out of office panel. As a result the draft lists were amended to include the outcomes of the heritage workshop and posted to a panel of 12 additional academics, experts and researchers for final comments.

2.5 Report Preparation (Step 4 & 5)

2.5.1 Draft Report (Step 4)

A draft report documenting all sites within forest areas in SEQ that are of potential national estate value was prepared. This report included a full description of site attributes relevant to site assessment as required to ensure a place was adequately documented for possible future listing on the Register of the National Estate. Due to the severe timeframe allocated to complete this project a provision of draft conservation and management guidelines of identified sites was not required. However, existing management guidelines and management plans compiled by the DoE, DNR and DPI for protected areas in the SEQ bioregion have been summarised and were outlined in the column 'Management Issues' in Table 1 and 2 (Appendix 8.4) of the report.

2.5.2 Final Report (Step 5)

The final report has been drafted in coherence with the guidelines set out in the 'Style Manual for Production of South East Queensland Reports'.

The final report was edited to only document the places which meet the thresholds to the required standard for listing in the Register of the National Estate. The identified places were incorporated within a GIS at 1:750 000 scale (Appendix 8.3) and basic site information have been prepared in form of a table (Appendix 8.4).

3.0 Results

After assessment of forest areas throughout the South-east Queensland bioregion a total of 562 sites were identified as potential sites of National Estate significance. These sites, identified for their use as research, teaching, reference or benchmark sites were assigned significance ratings by which sites were assessed and classified by two expert panels (Section 4.3). In consultation with members of both panels a total of 163 sites within the SEQ bioregions were classified above threshold and were considered of potential National Estate significance. The 562 sites presented to the expert panels were classified as shown below in Table 1.1. An outline of key principles and guidelines for the protection and management of places of national estate significance was listed in the column 'Management Issues' in Tables 1 and 2 (Appendix 8.4). These represent a summary of management plans and guidelines compiled by the DoE, DNR, DPI for the management of protected areas within the SEQ Bioregion.

Table 1.1 Table shows the Number of Sites identified and their classification by the National Estate Criteria C1.

Classification of Sites	Total
Above Threshold	163
Below Threshold	67
Not Enough Information	330

Outside Area	2
Total	562

3.1 State Forest areas

A total of 102 sites of 291 identified sites within State Forest areas in the SEQ bioregion were classified as sites of national estate significance for their use as research, teaching, reference or benchmark sites. These sites have the potential to contribute to a wider understanding of Australia's natural history and are listed according to their geographical location from North to South in Table 1, Appendix 8.4).

3.2 National Parks, Conservation Parks, other Protected Areas and Freehold Land

A total of 63 sites of 271 identified sites located in National Parks, Conservation Parks, Resource Reserves, Co-ordinated Conservation Areas and Private Land within the SEQ bioregion were classified as sites of national estate significance for their use as research, teaching, reference or benchmark sites. These sites have the potential to contribute to a wider understanding of Australia's natural history and are listed according to their geographical location from North to South in Table 2, Appendix 8.4)

4.0 Discussion

4.1 Consultant Workprogram

Work on the project commenced on November 24, 1997. Office facilities, provided by the Department of Environment were extremely limited for the first week (ie. no phone or computer access). Further delays were caused in obtaining the necessary software programs to complete the report (especially access to Arcview and e-mail). During the Christmas break our computer was exchanged for a new unit without provision and access to the software packages installed on the previous machine, causing additional delays. Due to the impending Christmas holidays (the DoE Offices were closed from December 24,1997 to January 4, 1998) the five weeks allocated to complete this project were amended to allow a three week break. The project deadline was set for January 31, 1998. However, due to the slow response from Universities, Local Governments and non-government organisations this deadline was extended to March 1998. This included the re-scheduling of the Heritage Workshop to a later date (see section 4.3).

4. 2 Information Gathering & Site Selection

Access to DoE databases was available within a week of the start of the project. This delay was caused mainly by the reasons discussed earlier in this report (Section 4.0). There were some problems causing a delay of up to three weeks to access DNR and DPI databases. These delays were the result of persons contacted being away on official business or holidays. Besides the availability of an GIS plantation overlay (DoE database) of State Forest areas we were unable to obtain detailed information of vegetation composition within State Forests. A large proportion of the State Forest Areas could not be assessed sufficiently to allow classification of natural heritage values of some areas. This was due to major gaps in data regarding vegetation types and forest composition.

The initial project proposal required to develop guidelines for the protection and management of places of national estate significance. Due to the short time period allocated for this project the 'Terms of Reference' were amended to provide an outline of key principles and guidelines for the protection and management of places of national estate significance. The management guidelines presented within this report represent a short summary of existing guidelines or management plans for protected area management compiled by the Department of Environment, Department of Natural Resources or Department of Primary Industries. Due to the severe time frame under which this project was carried out it was impossible to visit individual sites for assessment. As a result it was not possible to ascertain if existing management plans for sites listed above threshold are effective or appropriate. Therefore, thorough investigation of existing management plans and their effectiveness is needed for a more comprehensive assessment and to fill potential gaps in the presented data files.

As stated earlier in Section 3.2, the 51 Local Governments within the SEQ bioregion were invited to provide information regarding potential sites of natural heritage significance within their Local Government boundaries. Letters were posted on November 28, 1997 and contained an introductory letter and site proforma. Local Governments were asked to respond to this request by December 12, 1997. In summary we received 20 replies, none of these within the stipulated time frame, causing further delays in the assessment process. Several Chief Executive Officers (eg. Ipswich CC, Caloundra CC, Brisbane CC) stipulated that the required information was available but would have to be accessed by us in person as no Council staff were available to perform these searches. Due to the limited time period allocated to complete this project it was impossible to act on these invitations.

The same request, to provide information on potential sites of natural heritage significance was mailed to 27 non-government organisations for distribution to their members. A total of eight organisations responded in writing to our request with the majority of proformas returned to us following the Christmas break. Due to the limited success by correspondence individual members of the NGO's were rallied by phone to provide information on sites.

Another major source of information was thought to be academics, researchers and scientists connected with universities. However, due to the end of the academic year, exams, annual leave and study leave it was impossible to contact relevant staff and obtain information on sites used by these institutions for research and/or teaching. This

was perceived as a major cause of time delay as universities in their capacity as research institutions and formal teaching facilities are an essential and important provider of information.

Staff of the Queensland Museum, Queensland Herbarium, DNR, DoE and CSIRO were contacted and asked to provide information on sites. As before, key personnel that would have been essential in providing information were away on annual leave and could not be contacted until mid January, 1998.

To summarise, responses from contacts in both government and non-government organisations expressed concern about the limited time that was available to undertake this project. In addition these parties expressed concern that a project of this magnitude requires a regional perspective to thoroughly assess and identify areas for incorporation in the CRA/RFA process. It was the general opinion that the short period of time allocated to complete this project prohibited both government and non-government organisations from presenting more detailed submissions. As a result it was impossible to provide the information required within the time frame.

4.3 Thresholding

Invitations for the Heritage workshop to develop thresholds for site assessment were sent to a potential panel of 20 scientists, academics, researchers and DoE and DNR staff on December 16, 1997 for a proposed meeting on January 20, 1998. As no replies were received by January 14, 1998 it was decided to re-schedule the threshold workshop to February 3, 1998.

The Heritage Workshop Threshold meeting was held to assign above or below threshold values to identified sites. This meeting was attended by members of:

- the Southern Queensland Australian Heritage Commission Evaluation Panel;
- Griffith University (School of Environmental Sciences)
- Queensland University of Technology (School of Life Sciences)
- Department of Environment (Cultural Heritage) and
- Environment Australia (Project Coordinator).

The meeting commenced with an overview of the RFA process followed by a short seminar on the C.1 criterion, site selection and thresholding protocols. All potential sites were examined for their use as research, teaching or reference/benchmark sites and classified as either:

- Above threshold,
- Below threshold or
- Sites that could not be assessed and required further investigation

Sites that could not be assessed were those that required further information or alternative expertise in order to be classified above or below threshold. The significance rating for each site was set by the comparison of site attributes against the criteria listed below in Table 2.1. The sites that met one or more of the below stated criteria was then classified above threshold and identified as a potential site to be listed

on the Register of the national Estate. For example, reference sites of the Queensland Herbarium are sites that contain either rare or threatened plant species or were selected for their unique species composition. Continuous, long term monitoring programs developed for these sites resulted in a classification of above threshold as Reference/Benchmark sites.

Table 2.1 Criteria for identifying research, teaching, reference and benchmark sites

Research	Teaching	Benchmark/ Reference
<p>Sites of post graduate / departmental research (ie. PhD, Masters research).</p> <p>Increases or has the potential to increase understanding of Australian natural history (ie. biodiversity plots).</p> <p>Research source must be identifiable. Field of study, importance of site and value of information must be demonstrated.</p> <p>Sites of regional significance identified and those of national significance flagged. Areas of destructive research excluded.</p>	<p>Teaching is/ has occurred.</p> <p>Sites must have special attributes for teaching purposes. ie. area is utilised by universities to teach undergraduate students.</p> <p>Teaching through Ranger guided tours / Environmental Education Centers.</p>	<p>Area has detailed natural resource information and/or is the only example, one of a kind.</p> <p>Continuous monitoring of natural / biological processes in progression, ie. reference sites of the Qld Herbarium</p> <p>Must be undisturbed and be unlikely to be disturbed.</p>

Due to the low attendance of the workshop (five of an invited twenty) and thus a restricted audience it was decided to distribute the edited draft site lists for additional appraisal to a wider scientific audience. The additional expert panel included members from:

- Griffith University (School of Environmental Sciences),
- Private Consultant (Experts in Ornithology and Natural History),
- Department of Environment (Nature Conservation Planning)
- Department of Environment (Botany)
- University of Queensland (Botany Department);
- Rockhampton Naturalist;
- QLD Museum, and
- QLD Herbarium (eucalypt forests, vine thickets and rainforests).

This panel was invited to provide comments and additional information, and return the draft lists within ten days of receipt of the documents. Response time was delayed by one week and five of invited twelve persons returned the draft lists for further editing. The feedback regarding potential sites received from the two panels was pooled and incorporated in the databases. The sites classified above threshold were determined by following the guidelines of the C1 Criterion and the expert knowledge of the panel members consulted. As a result we, the consultants, do not claim the sites identified as above threshold to be exclusive.

4.4 Report Preparation

A draft site list was produced based on the Protected Area Listing and State Forest Databases held by Department of Environment, GIS Unit. These lists outlined, name, site details, size (hectares), management issues and GIS coordinates of all potential sites. Additional information regarding the natural history values of these areas was collated from a variety of sources including: Department of Environment; Department of Natural Resources; Department of Primary Industry Forest Services; University of Technology; Griffith University; University of Queensland; University of Central Queensland; Queensland Museum; Queensland Herbarium; Local Governments; Private Consultants and Non-Government Organisations. Sites not present on the two baseline databases but identified for their potential value as sites of natural significance were added to the Protected Area database.

The draft lists were edited to include thresholding criteria and additional information provided by the Heritage Workshop and the second expert panel. For compilation of the final report the draft site lists were edited as to only contain the sites classified above threshold. These sites were incorporated within a GIS at 1:750 000 scale. Basic site information and GIS coordinates for sites above threshold were prepared in form of a table

For National Parks and State Forest areas classified above threshold for their use as a research, teaching, reference or benchmark sites point locations could not be provided for the following reasons:

- The initial time-frame of this project did not facilitate for a more accurate definition of site boundaries.

The sites classified above threshold within those areas are often used by several organisations for research and teaching. For example, a large number of study sites are often widely distributed throughout the area. Depending on the type of research project, the exact site location is often unknown, while in other cases research and teaching sites were found to be overlapping in their boundaries, making a point location of sites not feasible. In this instance the entire State Forest Area or National Park Area has been mapped.

Sites identified outside National Parks and State Forests were point located within the GIS. Further detailed mapping if required for the identification of sites should be investigated later as part of the RNE nominations.

5.0 Recommendations

As stated earlier (Section 5.2) most contacts of both Government and Non-Government Organisations expressed concern about the limited time that has been made available to undertake this project. It was their opinion that a project of this magnitude requires a

regional perspective to thoroughly assess and identify areas for incorporation in the CRA/RFA process.

We believe that a more comprehensive assessment of potential sites could have been achieved if Environment Australia had anticipated the delays, caused by the impending Christmas period, and allocated more time, or extended the project deadline to march from the beginning. This would have allowed for more effective time management on our behalf and as a result Government and Non-Government Organisations could have been given more time to deliver information on potential sites.

The sites classified as above threshold within this report and the potential sites referred to in the draft report may not include all the sites that are of national estate significance. Therefore it is recommended that:

- The sites listed in the report: 'Identification and Assessment of places of Natural History Significance' should be compared to other RFA projects and their RNE nominations . This would allow potential gaps in the data to be filled and previously unknown sites to be included for nomination.
- An outline of management issues has been included in the report for some areas but a detailed assessment of conservation guidelines has yet to be undertaken. The short time period allocated to this project did not allow the development of conservation and management guidelines relating to the nature of places and values identified.
- A more thorough investigation of forest areas of national estate significance on freehold land is needed for a more comprehensive assessment. Not enough time was available to thoroughly research these areas, leaving potential gaps in the presented data files.
- A comprehensive literature search of research publications might further be useful in the location of potential sites of national estate significance. Research publications would also provide useful information on best management practice and the development of management guidelines for sites identified for potential listing on the Register of the National Estate.

Further points of concern are:

Due to the scant number of RNE nominations that have progressed out of previous RFA's, sites of natural history significance classified above threshold could be submitted to the AHC as reported sites. Following this the Australian Heritage Commission could consider including the preparation of Register of the National Estate nominations for these sites into the 1999 Southern Queensland Research Officer contract.

6.0 Conclusion

This project was carried out under severe time frame and resource constraints. Despite the range of difficulties encountered during this project this report represents a

comprehensive listing of forest areas within the South-east Queensland Bioregion that have been identified as sites of potential national estate significance. A large number of forest areas, especially those located within State Forests and on Private/Freehold land would have required further assessment. However, time constraints and a lack of available information did not allow a more comprehensive assessment and/or listing of potential sites. Many of the sites classified above threshold for their potential contribution to a wider understanding of Australia's Natural History are located within existing National Parks, Conservation Parks, State Forests and other protected areas. Therefore it is likely that a number of these sites are already listed in the Register of the National Estate. This report also identified a number of sites of natural history significance that were previously not identified and compiled additional information that will be useful in updating the statement of significance of existing listings in the Register of the National Estate.

7.0 Reference List

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Persons leading other RFA studies:

David MacFarland

Theresa Eyre

Annie Kelly

David Ransevell

8.0 Appendices

8.1 Summary of Project Terms of Reference

- To identify and assess sites of national estate significance in South East Queensland (SEQ) that have the potential to contribute to a wider understanding of Australian Natural History.
- To assess and document the national estate values of identified places against the national estate criteria.
- To outline conservation and management issues regarding appropriate protection and management of the identified areas and values for further assessment and incorporation in the CRA/RFA process.

8.2 Guidelines for Assessing Levels of Significance

(attachment D1)

8.3 GIS of sites classified above threshold at 1:100 000 scale

(GIS of sites not included in this format)

