





249 Ewingsdale Road

BYRON BAY

PLAN OF MANAGEMENT

Adopted by Council 20 December 2005 for

Byron Shire Council

prepared by LandArc Pty Limited Landscape, Environmental and Heritage Consultants **CONTROLLED DOCUMENT** Adopted by Council 20 December 2005

> This Plan of Management for 249 Ewingsdale Road, Byron Bay was prepared by



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CONTENTS

1.0	Introd	luction	5
	1.1	Overview	5
	1.2	Study area	7
	1.3	Aims and objectives	7
	1.4	Relevant legislation and policies	9
	1.5	List of abbreviations	10
2.0	Land	Description and Planning	11
	2.1	Introduction	11
	2.2	Background to land acquisition	11
	2.3	Classification of public land	12
	2.4	Operational land	12
	2.5	Community land	13
	2.6	Discussion of land capability options	13
	2.7	Regional context – adjoining land zoning	18
	2.8	Existing zoning of 249 Ewingsdale Road	19
	2.9	Proposed zoning of 249 Ewingsdale Road	22
	2.10	Leases, licences or other estate	25
	2.11	Other legislative requirements	25
3.0	Comn	nunity Consultation	27
	3.1	Introduction	27
	3.2	Public workshop/ open house	27
	3.3	Further consultation	28
	3.4	Key options and issues	31
4.0	Basis	for Management	34
	4.1	Objectives	34
	4.2	Community values	34
	4.3	Determining key values and significance	35
	4.4	Natural and cultural settings	36
	4.5	Indigenous and cultural values	39
	4.6	Environment and biodiversity	40
	4.7	Future recreation, facilities and access	51
	4.9	Vision statement	55

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Mana	gement Strategies	56
5.1	Objectives	56
5.2	Community land categories	56
5.3	Guidelines for categorising community land	56
5.4	Community land – core objectives (Sheet 1 of 8)	61
5.5	Action plan (Sheets 2-8 of 8)	62
5.6	Capital works program	69
5.7	Concept Plan: Community Sports Fields	71
Biblic	ography	72

List of Figures

5.0

	-	
1.	Location Plan	6
2.	Study Area	8
3.	Proposed Boundary –	
	Reclassification of Operational Land to Community Land	17
4.	Existing Zoning	21
5.	Proposed Zoning	24
6.	Regional Context –	
	High Conservation Value, Habitats and Corridors	43
7.	Existing Vegetation and Conservation Value	47
8.	Community Land Categories	57
9.	Concept Plan: Community Sports Fields	71
List o	f Tables	
1.	Land Description – 249 Ewingsdale Road, Byron Bay	11
2	Operational Land and Community Land	18

2.	Operational Land and Community Land		18
3.	Summary of Community Issues		29
4.	Values and Level of Significance		36

Appendices

Appendix I: Written Submissions & Questionnaires

4

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1.0 INTRODUCTION

1.1 OVERVIEW

The Byron Shire Council Management Plan 2004-2007 identifies Council's commitment to working with the community to achieve a "Sustainable Future that will endure the forces of time and change". Council's vision for a thriving community is based on provision of quality service delivery, infrastructure and sustainable environmental management. This vision seeks to balance economic and social needs of the present and future community with the objectives of maintaining functioning and viable ecosystems.

This principle of sustainability is particularly relevant to the public land described by this plan of management. The site encapsulates the competing pressures for land and resources which are shaping the future of the Byron Shire. The site has significant environmental and biodiversity values. It also has the potential to provide significant social, cultural and recreational values. The western portion of the site has also been identified for possible extension of the West Byron Effluent Reuse Wetland and associated infrastructure.

Accordingly, the strategic planning process has identified this land as a significant or priority area for investigation and development of a suitable plan of management. It is important that management should be consistent with Council's vision of a sustainable future and the requirements of all relevant legislation.

In late 2003, LandArc Pty Limited was commissioned to prepare a Plan of Management for this site. Byron Shire Council considered the Draft Plan of Management (Issue A: 5 June 2004) at an extraordinary meeting on 25 June 2004 and resolved *"that Council allocate the area of Lot 3 DP706286, 249 Ewingsdale Road, on the sole basis of funds contributed by the Section 94 Fund (being \$1.33 million – 72%) and the Sewer Fund (\$0.52 million – 28%)."* This resolution establishes the boundary between the operational land and community land portions of the site.

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Following further community consultation, a concept plan was developed by the Sporting Fields Working Group, specifically to address issues relating to supply of local sporting and recreational facilities. On 31 March 2005, Council resolved *"to endorse the Concept Plan provided by the Sporting Fields Working Group for Lot 3 DP 706286, 249 Ewingsdale Road, Byron Bay."* This Concept Plan replaces *Figure 9: Landscape Masterplan* in this revised Draft Plan of Management. Accordingly, the document has been amended to address these changes, including alterations to the community land and operational land boundary.

1.2 STUDY AREA

This plan of management applies to the eastern portion of the 40.10 hectare parcel of public land, identified as Lot 3 in DP 706286 and located at 249 Ewingsdale Road, Byron Bay *(refer to Figure 1: Location Plan)*. The site is located approximately 3.5 kilometres to the west of the Byron Bay town centre and shares boundaries with the following geographical features and land uses:-

- Byron Bay Arts & Industry Estate (east);
- West Byron Effluent Reuse Wetland (north);
- Rural/ agricultural land use (west); and
- Ewingsdale Road.

This flat, low-lying site was purchased by Byron Shire Council for operational and community uses. The site has a history of partial clearing and modification for agricultural activities. Nevertheless, most of the land still retains significant sedgeland habitat and biodiversity, particularly within the greater western portion of the site. The eastern portion has an existing cottage serviced by an unsealed access road. This area has been largely cleared for livestock grazing *(refer to Figure 2: Study Area)*.

1.3 AIMS AND OBJECTIVES

A community land plan of management provides the framework for managing community land. This plan of management has been prepared for Byron Shire Council under the direction of Council's Administration and Community Services. It has been prepared in accordance with the *Local Government Act 1993* and all other relevant legislation and policies.

The plan of management also establishes the framework for public land classification into separate operational and community land parcels. Following the private land purchase, Council resolved to classify the land as operational (as an interim measure) pending a land use study and assessment. Issues relating to the acquisition and classification of public land and categorisation of the community land portion are discussed in the following section 2.0 Land

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Description and Planning.



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This plan of management aims to be performance oriented in order to contribute towards Council achieving its strategic goals, vision and outcomes as identified in the *Management Plan 2004-2007*. The following key objectives have guided the preparation of this plan of management:-

- establish an appropriate framework for land management in accordance with the relevant legislation;
- address land classification and community land categorisation issues;
- identify and assess key values and existing land condition;
- identify and assess land capability, potential future uses, facilities and improvements (including scale and intensity) and potential impacts;
- define the future role of the community land within the local area and Byron LGA;
- set a vision for the future reserve spanning the next 20-30 years;
- establish appropriate management strategies based on a balanced, sustainable approach to conservation, recreation, cultural and social needs of the community;
- address future leases/ licences affecting the community land;
- develop performance targets to assess and monitor objectives;
- ✤ assign directions and priorities (spanning the next 5-years); and
- develop a masterplan for implementation of the strategic plan.

1.4 RELEVANT LEGISLATION AND POLICIES

This plan of management has been prepared in accordance with the provisions contained in relevant legislation and policy guidelines, including but not limited to the following:

- Local Government Act 1993
- Local Government (General) Regulation 1999
- Environment Protection and Biodiversity Conservation Act 1999
- □ Threatened Species Conservation Act 1995
- □ Fisheries Management Act 1994
- □ Native Vegetation Conservation Act 1997
- National Parks and Wildlife Act 1974
- □ Noxious Weeds Act 1993
- Rural Fires Act 1997
- □ Environmental Planning and Assessment Act 1979
- Disability Discrimination Act 1992
- □ Integrated Catchment Management Plan Northern Rivers Catchment (2002)
- □ NSW Flood Policy 1984
- □ NSW Wetlands Management Policy 1996
- NSW Floodplain Management Manual 2001
- Byron Shire Council Management Plan 2004-2007
- □ Byron Local Environmental Plan (LEP) 1988 (as amended)

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- Byron State of the Environment Report
- Byron Flora and Fauna Study
- Byron Biodiversity Conservation Strategy 2003
- □ Byron Shire Council Social Plan 1999
- Byron Shire Community Profile (based on 2001 census data)
- Byron Shire Council Community Safety Plan 2003
- Byron Section 94 Plan 2001

1.5 LIST OF ABBREVIATIONS

BBCS	Byron Biodiversity Conservation Strategy 2003
DIPNR	Department of Infrastructure Planning and Natural Resources
LEP	Byron Local Environmental Plan 1988
LGA	Local Government Area (Byron Shire Council)
NPWS	National Parks & Wildlife Service (NSW)
NSWRFS	New South Wales Rural Fire Services
BSC	Byron Shire Council
TSC Act	Threatened Species Conservation Act 1995

2.0 LAND DESCRIPTION AND PLANNING

2.1 INTRODUCTION

Table 1: Land Description – 249 Ewingsdale Road, Byron Bay identifies the existing buildings and improvements to the subject land. A brief assessment of condition is provided. The existing farm cottage is currently under lease and two cattle agistment leases are in operation. The land is primarily vegetated with native sedgeland, fernland and grassland. The existing vegetation is described in other sections (refer to 4.0 Basis for Management).

TABLE 1:

Land Description	Area (Ha)	Existing Facilities/ Improvements	Condition
Lot 3 DP 706286	40.10	livestock fencing/ entry gates (boundary/ internal)	0
		gravel access road (to cottage)	good
		brick/ concrete block & metal roof cottage	poor
		attached storage shed/ verandah	poor
		dam/ pond & stockpiled materials/ soil	poor
		power poles/ lines	good
		native sedgeland/ fernland/ grassland	n/a
		mixed native paperbark/ woodland regrowth	n/a
		slash pine plantation & exotic grasses/ weeds	n/a

LAND DESCRIPTION - 249 EWINGSDALE ROAD, BYRON BAY

2.2 BACKGROUND TO LAND ACQUISITION

The property described as 249 Ewingsdale Road, Byron Bay (Lot 3 in DP706286) was purchased by Byron Shire Council on 16 May 2003. The purchase was based on a preliminary investigation of potential operational and community uses for the land as follows:-

- operational use of the western portion of the land as an extension of Council's West Byron Effluent Reuse Wetland Project;
- suitability of the relatively flat eastern portion for sporting fields (identified as a high need/ priority in Byron Bay);

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- potential for other community uses including a festival site, out-oftown parking and opportunities for an entry "gateway" to the township;
- benefits associated with the contiguous nature of Council owned land including the West Byron Effluent Reuse Wetland (northern boundary) with further options for access; and
- options for partial rezoning and alternative uses.

The land acquisition was made in accordance with the *Byron Shire Council Management Plan 2003-2006* and the key strategic objectives of a *resilient community*, *infrastructure assets*, *revenue and resources*. Council resolved on 18 August 2003:

"that all land being Lot 3 DP 706286 be classified as operational pending a land use study and assessment to be conducted by staff to assist Council in the determination of the use and proportional funding for the purchase...".

Originally, it was envisaged that the boundary between operational land (ie. area targeted for future extension of effluent reuse wetland) and community land (ie. community open space) would be established through the plan of management process. The Draft Plan of Management (Issue A: 5 June 2004) was prepared on this basis. Following consideration of the Draft Plan of Management, Council at its meeting on 25 June 2004 resolved that the boundary should be determined solely on the basis of funding for purchase of the land (ie. Section 94 Fund – community land portion (72%) and Sewer Fund – operational land portion (28%)).

2.3 CLASSIFICATION OF PUBLIC LAND

In accordance with the *Local Government Act 1993* all public land must be classified (s.25) as either community land or operational land (s.26). The purpose of classification is to clearly identify public land for use by the general public (community land) and land which would be used for operational purposes (operational land).

Classification has a direct consequence on council's ability to dispose or alienate the land by sale, leasing or some other means. The classification or reclassification of public land will generally be achieved by a local environmental plan (LEP) or in some circumstances, by a resolution of Council under sections 31, 32 and 33 of the *Local Government Act 1993*.

2.4 OPERATIONAL LAND

Operational land is not subject to the same restrictions placed on community land under the *Local Government Act 1993*. Operational land would usually include the following:

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- land held as a temporary asset;
- land held as an investment;
- land which facilitates the carrying out by a council of its functions; or
- land which may not be open to the general public (eg. sewage treatment plant).

There is no requirement under the *Local Government Act 1993* to prepare a plan of management for operational land. This plan of management covers only the community land portion of the site and does not include any land to be retained for operational purposes.

2.5 COMMUNITY LAND

Community land must be managed in accordance with the *Local Government Act 1993* and all other relevant legislation and policies. The ways in which community land can be used and managed are strictly governed in accordance with an adopted plan of management and any law permitting the use of the land for a specified purpose or otherwise regulating its use. The nature and use of community land may not change without an adopted plan of management. Community land must not be sold, exchanged or otherwise disposed of except in the instance of enabling the land to be added to Crown reserve or a protected area under the *National Parks and Wildlife Act 1974*.

The use and management of community land must also be consistent with its designated categories (ie. natural area, sportsground, park, area of cultural significance and general community use) and their respective core objectives (refer to *5.0 Management Strategies – Community land categories and core objectives*).

2.6 DISCUSSION OF LAND CAPABILITY OPTIONS

No specific requirement for extension of the West Byron Effluent Reuse Wetland has been identified at this stage, however this option was a key consideration in the purchase of this land at 249 Ewingsdale Road. Future operational land area requirements have not yet been defined. Nevertheless, partial funding for the land acquisition was sourced from the Water and Sewerage Fund on the basis that a portion of land would be retained for possible future extension of constructed wetlands and other sewerage infrastructure. Land for this purpose would need to be retained as operational land.

In addition to operational issues, community expectations have been raised with respect to a substantial portion of the site being developed as community land. Community demand for additional recreational infrastructure in Byron Bay, particularly sporting fields, was identified as a key consideration in the

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land purchase. A range of other potential community uses were also raised. The land assessment process has given due consideration to a broad range of inter-related environmental, social and economic factors in accordance with the principles of sustainability. The Concept Plan identifies the need for sporting and recreational facilities as the key element in determining the way most of the community land portion should be developed (refer to *Figure 9: Concept Plan*).

It is also important to recognise that any community land that includes natural areas (eg. this site's sedgeland, sedge/ fernland, sedge/ grassland and coastal woodland habitats) is subject to legislation covering the protection and maintenance of biodiversity under the *Local Government Act 1993* and *Threatened Species Conservation Act 1995*. Accordingly, the site offers significant challenges in terms of potential suitability of land uses, recreational activities, conservation and sustainability. Options relating to construction of sporting fields, associated recreational infrastructure, access and parking are affected by site constraints, particularly with respect to the following:-

- 1. Ecological sensitivity/ biodiversity natural area/ biodiversity protection and management (significant habitat, threatened species and wildlife corridor).
- 2. Peat/ sand soil characteristics limitations on soil capability for sports field construction (ie. peat/ sand levels and acid sulfate soils).
- 3. Recreational spatial requirements spatial requirements for recreational infrastructure.
- 4. Traffic management and site access traffic management and access to the site off Ewingsdale Road.

1. Ecological Considerations

The *Byron Biodiversity Conservation Strategy (BBCS, 2003*) highlighted the important ecological and biodiversity values associated with this site. Most of the sedgeland complex was ranked as "Extremely High Ecological Value" and assigned the highest priority for conservation. At least three scheduled threatened species – the Wallum Froglet, Wallum Tree Frog and Grass Owl, were believed to be dependent on the existing wetland complex of sedgeland/ fernland and grassland habitats (*Bower, H. and Fitzgerald, M, pers. comm.*). The Draft Plan of Management (Issue A: 5.06.2004) identified the need for further data on threatened species and ground truthing of existing habitat mapping. In particular, concerns were raised over the potential modification or removal of vital habitat and local corridor linkages for threatened species. During the latter part of 2004, Byron Shire Council appointed ecological consultant, Mark Fitzgerald to prepare an Ecological Habitat Assessment and Flora and Fauna Survey for the site.

14

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This study identified six threatened fauna species during the survey and three more recorded from the WBSAS SIS. An additional seven species are expected to occur on the site, particularly during flood events. The study highlighted the site's significance as a locally important area, "a rare habitat within Byron Shire" and "an important local link in the major north-south wildlife corridor of the Byron coastal plain" (Fitzgerald, M., *Ecological Habitat Assessment and Flora and Fauna Survey at 249 Ewingsdale Road, West Byron Bay – Final Report for Byron Shire Council*, p.42). The conclusions and recommendations of this ecological study need to be carefully integrated within the objectives of this plan of management. For further discussion of biodiversity values refer to *4.6 Environment and Biodiversity – Conservation Significance*.

2. Peat/ Sand Soil & Acid Sulfate Soil Considerations

Site investigations were undertaken in June-July 2003 to establish the depths of peat soil and sand layers over the site (*Survey of Sand and Peat Soil Layers on a 40 Hectare Block at West Byron Bay by T. Ryffel & K. Bolton*). The study identified deep peat layers over the western portion of the site grading to more shallow levels of peat towards the middle section of the site (approx. 65% of total area). No peat layer was found in the eastern portion of the site (approx. 35% of total area). An internal report to Council subsequently identified a potential area of 14 hectares in the eastern portion of the site which could be used for sports fields without any major ground works. It was noted that removal of peat to enable development of further sports fields may raise environmental concerns.

The relationship between the peat/ sand soil depths is an important factor affecting future recreational development on the site. Filling and levelling for construction of playing fields over peat subgrade may lead to patterns of differential settlement and subsidence of the playing surface. The Concept Plan establishes a required area of 16.20 hectares (ie. an additional 2.4 hectares compared to the area identified in the earlier report) and extends the boundary of proposed playing fields to within the –550 mm peat contour depth. This proposal will require major ground works for these western edge playing fields in order to avoid potentially costly repairs at later stages. Any disturbance, excavation and removal of the peat layer would be subject to stringent environmental controls. The study findings support the extent and range of Class 2 and 3 Acid Sulfate Soils on this site as shown on the *Acid Sulfate Soils Planning Map.* For further discussion of peat and sand soil depths refer to *4.6 Environment and Biodiversity – Geology and Soils*.

3. Recreational & Social Infrastructure Considerations

There is no current recreational needs assessment or data relating to existing or future recreational demand within the Byron Bay area. Nevertheless, demand for sports playing fields and other active recreation were highlighted

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in the community consultation process. In terms of supply, public playing fields are restricted to only one major location – Byron Bay Recreation Grounds in the centre of town. Facilities are needed for soccer, rugby, hockey, cricket, softball, basketball, netball, athletics and track cycling. These recreational needs and supply issues are critical factors in the preparation of this Plan of Management. Other potential uses which were reviewed for 249 Ewingsdale Road included "park and ride" facilities, visitor information/ environmental interpretation, an area for a festival site and shared pedestrian/ bikepath with connections to the town centre.

During the consultation phase of this study, the Byron Sports Association submitted a proposal outlining a supply target for recreational facilities which would cover a site area of approximately 19 hectares. Multi-use sporting fields and facilities catering to various user groups have been considered in the demand/ supply analysis. The area available for recreational development, as defined by land capability and environmental priorities, is significantly smaller than this figure. Refer to section *4.7 Future recreation, facilities and access*.

4. Traffic Management Considerations

Traffic management and vehicular access to the site needs to be investigated under the proposed *Traffic Management Plan for Ewingsdale Road* through to Byron Bay township. These investigations are beyond the scope of this plan of management but will nevertheless have a significant impact on the future outcomes for this site. This road carries high volumes of traffic with peak periods of chronic congestion. Alternate access off Bayshore Drive via an existing stockpiling yard would require movement through the STP site and potential disturbance of high value habitat. At this preliminary stage of investigations, site access off Ewingsdale Road is the preferred option and this would need to be part of a broader rationalized approach to traffic management. Existing access points into neighbouring properties would need to be considered in these investigations. In the interim, the Concept Plan in this Plan of Management proposes an optional roundabout adjacent to the Island Quarry site, approximately 200 metres west of the existing access point to 249 Ewingsdale Road.

Recommendations

As discussed in earlier sections, Byron Shire Council at its meeting on 25 June 2004 resolved that the boundary should be determined solely on the basis of funding for purchase of the land (ie. Section 94 Fund – community land portion (72%) and Sewer Fund – operational land portion (28%)). Refer to *Figure 3: Proposed Boundary for Reclassification to Operational Land and Community Land* and *Table 2: Operational Land and Community Land*. This boundary lies within the highly significant sedgeland complex habitat and vital faunal corridor. The *Byron Biodiversity Conservation Strategy* has ranked this area as "Extremely High Ecological Value" – the highest conservation priority

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in the study. It is recommended that these important habitat values affecting all of the designated operational land and part of the community land portion are given appropriate protection and management.



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The approach to land management should be values-based and emphasise the "precautionary principle" as identified in the Guiding Principles of the Byron LEP (3)(a). The precautionary principle is defined by the *Australian Natural Heritage Charter* as follows:-

"...where there are threats or potential threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation."

This approach is consistent with Council's LEP and current zoning objectives, Council's vision of a sustainable future for the Byron LGA and biodiversity planning provisions under the TSC Act.

An important correlation exists between the peat and sand soil interface and the extent of significant sedge/ fern and grassland habitat as identified in the BCCS (2003). A similar boundary is defined in the *Weed Management Plan – West Byron STP*. The physical boundary defining past land uses (ie. natural vegetated areas on waterlogged soils vs. cleared drier areas/ pasture grasses) also provides a subtle indicator of land capability. Community, social and recreational values also need to be considered. The pressing need for recreational facilities has been identified by the community and Sporting Fields Working Group as the major factor determining land use capability in this study. Accordingly, this factor has been given a very high priority in establishing the extent of proposed sports fields within community land (refer to *Figure 9: Concept Plan – Community Land Sports Fields*).

TABLE 2: OPERATIONAL LAND & COMMUNITY LAND	

Land Description	Portion	Area (hectares)	Proposed Classification
Part Lot 3 in DP 706286	western	11.23	operational land (28%)
Part Lot 3 in DP 706286	eastern	28.87	community land (72%)

2.7 REGIONAL CONTEXT - ADJOINING LAND ZONING

The land lies within a significant corridor of remnant coastal habitat linking Bilongil Swamp and Tyagarah Nature Reserve (north), Cumbebin Swamp Nature Reserve (east) and Hayters Hill Nature Reserve (south). This habitat is highly fragmented with a broad range of zonings under the existing Byron LEP. Significant opportunities exist to promote and enhance bio-linkages within this corridor. The West Byron Effluent Reuse Wetland located immediately to the north of the site, is zoned 5(a) (SPECIAL USES ZONE). This area includes SEPP 14: Coastal Wetland zoned as 7(a) (WETLAND) and 7(b) (COASTAL HABITAT ZONE). The land immediately to the south of the

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site, adjoining Ewingsdale Road, is also zoned 7(b) (COASTAL HABITAT ZONE). The adjoining Island Quarry site, located within this corridor, is a Crown reserve and former quarry. The land, zoned as 1(a) (GENERAL RURAL ZONE) is now under the management of a reserve Trust – Island Quarry (IQ) Association Inc. The land is currently used as a centre for community arts and environmental workshops/ events and waste recycling.

The wildlife corridor is bounded on the western side by land zoned as 1(b1) (AGRICULTURAL PROTECTION (b1) ZONE). Land included under this zoning has the following objectives:-

"to ensure that the use and other development of land adjacent to areas of significant vegetation, or wildlife habitat, or in a potential wildlife corridor, does not result in any degradation of that significant vegetation, wildlife habitat or potential wildlife corridor, and that any such development conserves, protects and enhances the value of the flora or fauna or the potential wildlife corridor concerned."

Although broad buffer provisions for habitat protection and enhancement are contained in the existing LEP for lands adjoining the western side of the site and corridor there are no such provisions for adjoining land along the eastern boundary of the site. The Byron Bay Arts & Industry Estate adjoining the eastern boundary of the site is zoned 4(a) (INDUSTRIAL ZONE). The land immediately to the south-east is used for poultry farming and includes buildings for processing (Sunnybrand Chickens). This land is zoned 1(ah) (HAZARD INDICATION ZONE). Under this zoning, Council must consider potential hazards such as flooding, bushfire and acid sulfate soils with respect to proposed development.

There is little or no landscape embellishment to the neighbouring industrial estate and public streets. All native vegetation has been removed. Building forms and finishes on adjoining industrial land have an abrupt and disjunctive impact on the rural and natural landscape character of the area. At the macro-level, this neighbouring industrial area has a far-reaching negative impact on the landscape character and scenic quality of the bay. This impact is particularly significant from the coastal foot-hills (Pacific Highway southern approach near McLeod's Shoot), St Helena Road and Bangalow Road (near Hayters Hill).

2.8 EXISTING ZONING OF 249 EWINGSDALE ROAD

The existing sedgeland on the site is not covered by *State Environmental Planning Policy (SEPP) No.14 – Coastal Wetlands.* All of the land on this site is described as Class 2 or 3 – Acid Sulfate Soils (refer to *4.6 Environment and Biodiversity*). The land is currently zoned as 1(d) (INVESTIGATION ZONE) in accordance with the *Byron Local Environmental Plan (LEP)* (refer to Figure 4:

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Existing Zoning) The objectives of this zone are as follows:-

- to identify land which is to be investigated in respect of its suitability for rezoning for more intensive development;
- to ensure that development within the zone is compatible with the anticipated future development of the land;
- to ensure that development maintains the existing character of the locality and minimizes disturbance to the scenic value of the escarpment and landscape through clearing, earthworks, access roads and construction of buildings;
- to ensure that development does not create unreasonable or uneconomic demands, or both, for provision or extension of public amenities or services;
- to identify land requiring protection of significant vegetation and wildlife habitats, and to ensure that development does not adversely affect the integrity of the environment.

The zoning objectives focus on future development strategies which would maintain the existing landscape character and scenic quality, protect significant vegetation and wildlife habitats and ensure a balanced approach to provision of public amenities or services. In considering any development application in relation to future uses of this land, Council must ensure that the following matters are investigated:-

- land capability;
- demand for the development of the land;
- whether the land can be serviced with water, sewerage and roads, and the likely future road network;
- strategic implication of the development of the land;
- whether the land is located within the buffer area of a quarry, piggery or sewage treatment works; and
- environmental management of the land.

Development consent cannot be granted by Council unless it has considered the need to protect significant vegetation and wildlife habitats and to ensure that any development will not adversely affect significant vegetation and wildlife habitats on this land or adjacent land.

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22

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2.9 PROPOSED ZONING OF 249 EWINGSDALE ROAD

It is important to ensure consistency between the LEP and the principles of community land management, particularly with respect to classification of public land and categorisation of community land. The site's zoning will be subject to the changing place-based LEP process. In the interim however, it is recommended that in accordance with the land assessment, as described in this plan of management, the land should be rezoned as follows (refer to *Figure 5: Proposed Zoning*)

- all operational land [western portion of site] and portion of community land [west of proposed sports fields] rezoned as 7(k) (HABITAT ZONE); and
- proposed community land [eastern portion including sports fields and associated infrastructure] rezoned as 6(a) (OPEN SPACE ZONE).

Proposed Habitat Zone 7(k) Objectives

The LEP objectives for this zone are:-

- to identify and protect significant vegetation and wildlife habitats for conservation purposes;
- to prohibit development within the zone that is likely to have a detrimental effect on the wildlife habitats which exist;
- to enable the carrying out of development which would not have a significant detrimental effect on the wildlife habitats; and
- to enable the careful control of noxious plants and environmental weeds by means not likely to be significantly detrimental to the native ecosystem.

No works on this portion of the site would be permissible without development consent. The following land uses, activities and development on this portion of the site would be permissible, subject to development consent:-

• agriculture (other than animal establishments and clearing of land); bushfire hazard reduction; appropriate ecological management regimes; environmental facilities; roads and utility installations.

This portion of the site is mapped as Class 2 on the Acid Sulfate Soils Planning Map. The following works would be subject to development consent:-

- works below the natural ground surface; and
- works by which the watertable is likely to be lowered.

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Proposed Open Space Zone 6(a) Objectives

The relevant LEP objectives for this zone are:-

- to ensure that there is adequate provision of both active and passive open space to serve the present and future recreational needs of residents and visitors;
- to identify land where existing recreation facilities for the general use of the community are provided;
- to provide opportunities to enhance the total environmental quality of the Shire of Byron.

Works on this portion of the site which would be permissible without development consent include:-

 landscaping; general park maintenance; bushfire hazard reduction; bush regeneration/ restoration.

The following land uses, activities and development on this portion of the site would be permissible, subject to development consent:-

 agriculture (other than animal establishments); childcare centres; cycleways; drainage; environmental facilities; markets; primitive camping grounds; recreation areas; restaurants; roads; recreation vehicle areas; showgrounds; carparking; festival areas; roads; carparking and utility installations.

The western portion of this area is mapped as Class 2 on the Acid Sulfate Soils Planning Map (refer to *Proposed Habitat Zone 7(k) Objectives* for development consent requirements). The greater eastern portion is mapped as Class 3 on the Acid Sulfate Soils Planning Map. The following works would be subject to development consent:-

- works beyond one metre below the natural ground surface;
- works by which the watertable is likely to be lowered beyond one metre below the natural ground surface.

For further details of permissible uses, activities, scale and intensity of future development refer to *5.0 Management Strategies*.

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2.10 LEASES, LICENCES OR OTHER ESTATE

A lease, licence or other estate may be granted, in accordance with an express authorisation by this plan of management, providing the lease, licence or other estate is for a purpose prescribed in s.46 of the *Local Government Act 1993*. The purpose must be consistent with core objectives for the category of community land (refer to *5.3 Community Land – Core Objectives*).

An existing lease for use of the farm cottage is operating on a month to month basis. Two cattle agistment leases are also current. It is envisaged that these leases would be terminated prior to development of the site for community uses. For express authorisation of future permitted leases, licences or other estate refer to *5.0 Management Strategies: items D1-D4*.

Council must not grant a lease, licence or other estate for a period (including any period for which the lease could be renewed by the exercise of an option) exceeding 21 years. A lease, licence or other estate may be granted only by tender in accordance with s.46A of the *Local Government Act 1993 (as amended)* and cannot exceed a term of 5 years (including any period for which the lease could be renewed by the exercise of an option), unless it satisfies the requirements as scheduled in s.47, or is otherwise granted to a non-profit organisation (refer to *Leases, licences and other estate in respect of community land – s.46, 46A, 47 and 47A Local Government Act 1993)*. In the event of an objection to the proposed lease or license, the Minister's consent must be obtained. Furthermore, leases, licences or other estate must not be granted in respect of land categorised as a natural area, unless it is for a purpose prescribed in s.47B of the *Local Government Act 1993*.

2.11 OTHER LEGISLATIVE REQUIREMENTS

Native Vegetation Conservation Act 1997

This plan of management aims for consistency with the following objectives of the *Native Vegetation Conservation Act 1997*:-

- (a) to provide for the conservation and management of native vegetation on a regional basis;
- (b) to encourage and promote native vegetation management in the social, economic and environmental interests of the State;
- (c) to protect native vegetation of high conservation value;
- (d) to improve the condition of existing native vegetation;
- (e) to encourage the revegetation of land and the rehabilitation of land with appropriate native vegetation;
- (f) to prevent the inappropriate clearing of vegetation;
- (g) to promote the significance of native vegetation in accordance with the

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principles of ecological sustainable development.

Threatened species legislation

This plan of management aims for consistency with threatened species legislation. The *Threatened Species Conservation Act 1995* provides the legislative mechanisms for dealing with listed items. The operational land and community land on this site contain habitat of extremely high significance *(BBCS, 2003)*. A total of six threatened fauna species were identified in a recent study. When endangered species, populations or ecological communities are scheduled under the TSC Act, the following legal responses are triggered:-

- (a) land can be declared as "critical habitat"; or
- (b) a "recovery plan" must be prepared; and
- (c) where key threatening processes have been identified under Schedule 3, a "threat abatement plan" must be prepared.

In accordance with the *Local Government Act 1993*, community land which is affected in any of these ways under the *Threatened Species Conservation Act 1995* or *Fisheries Management Act 1994*, the following applies:-

- the land must have its own plan of management (it cannot be a generic plan);
- the plan must state whether the land has been declared as "critical habitat" or affected by a "recovery plan(s)" or "threat abatement plan";
- the land must be categorised as a natural area;
- must have consistency in the management objectives of the land and the *Threatened Species Conservation Act* or the *Fisheries Management Act*,
- the plan must incorporate the core objectives prescribed for a natural area;
- the draft plan must be forwarded to the Director General of National Parks and Wildlife or the Director of NSW Fisheries and must incorporate any requirements made by either person;
- no change in the use of the land is permitted until a plan of management has been adopted that meets the above requirements;
- no lease or licence can be granted until a plan of management is in place – (leases and/or licences that are in place before the land was affected by threatened species laws can continue to operate).

LandArc Pty Limited 27

3.0 COMMUNITY CONSULTATION

3.1 INTRODUCTION

Community consultation has been an important component of the plan of management process. Byron Council has promoted an open, transparent approach to community consultation, providing opportunities for stakeholders and members of the community to contribute comments and submissions or to discuss specific issues.

It is important that community consultation continues through to public exhibition phase and release of the draft plan of management, at which time the community has a further opportunity to make final comments and submissions. This process highlights the significance of community ownership in the final plan of management.

3.2 PUBLIC WORKSHOP/ OPEN HOUSE

A public workshop was held at Byron Bay Community Centre – Fletcher Street Room, Byron Bay on Thursday 11th March 2004. The format for the workshop was designed as an informal "open house" style where individuals, community groups and Councillors could drop-in and leave as desired. The open house was widely advertised by Council as follows:-

- press releases to Byron Shire News and the Byron Shire Echo;
- notice in Council's block of the Byron Shire News for the two weeks ending 27.2.04 and 5.3.04;
- notice in Councillor Newsletter; and
- signs erected on location during the week of the consultation.

Council prepared a stakeholders list for the consultants, LandArc Pty Limited. These people were contacted in the week leading up to the open house. A number of issues were discussed with stakeholders who could not attend the open house. These issues have been noted and reviewed as part of the consultation process. Meetings were also held between Council staff and major stakeholders during the week of the open house.

The open house aimed to establish community values and to discuss the relevant issues affecting the future use of the public land acquired at 249 Ewingsdale Road, Byron Bay. The proceedings were facilitated by Noel Ruting, a Director of LandArc Pty Limited. It was intended to run the open

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house between 4-6 pm and 7-9 pm, however discussion continued through without any break. A total of 16 people attended the open house session. People were encouraged to ask questions, make comments and provide further detailed submissions for the future use of the public land. Apart from Councillors and individual participants, the key stakeholder groups represented at the workshop included the following (in alphabetical order):-

- BEACON Byron Environment and Conservation
- Bikes Committee (Byron Shire Council)
- Byron Bay Hockey Club
- Byron Bay Little Athletics Centre Inc.
- Byron Bay Soccer Club
- Byron Bay Sports Association
- Byron Environment Centre
- Ewingsdale Progress Association & Hall Committee Inc.
- IQ Inc. (Island Quarry Reserve Trust)
- Women for Wik

The issues raised by participants were recorded at the open house session. A Community Issues Questionnaire (pro forma) was also distributed for written comments. A total of eight completed questionnaires were received. Most of the submissions and completed questionnaires were mailed to LandArc after further consideration of the issues. Written submissions were received from the following individuals and groups (refer to *Table 3: Summary of Community Issues and Appendix I: Written Submissions & Questionnaires*):-

- Byron Bay Sports Association
- Byron Bay Soccer Club
- Byron Bay Little Athletics Centre Inc.
- Byron Bay Freeriders Inc.
- Ewingsdale Progress Association & Hall Committee Inc./ R. Grinberg;
- IQ Association Inc./ S. Rennie (Island Quarry Reserve Trust)

3.3 FURTHER CONSULTATION

Following concerns raised over the small number of people at the open house, the questionnaire was placed on Council's web-page to ensure further opportunities for community consultation. Issues relating to the future of the site were also highlighted in a front page article of the Byron Bay Echo following the open house.

In addition, Council's staff (including administration and community services, strategic planning water and waste, environmental planning, infrastructure planning) were consulted prior to completion of the Draft document. After submission of the Draft Plan of Management (Issue A: 5 June 2004), Byron

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Shire Council conducted further consultation with the community to address issues regarding future provision of recreational facilities on this site.

TABLE 3:	SUMMARY	OF COMMUNITY ISSUES	,
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Name/ Stakeholder	Key Issues
Byron Bay Sports Association	 acknowledges size constraints on land parcel
,, .,	 sporting facilities are considered paramount
	 critical shortage of land available for community
	 inadequate sporting and recreational facilities
	 also need for passive recreation/ community buildings
	 allow adequate room for expansion (next 50 years)
	 need to address a wide range of usage/ shared facilities
	 requests following recreational infrastructure:
	 2 X rugby fields
	 1 X hockey field
	 2 X cricket fields (1 turf/ 1 concrete wicket)
	 1 X softball diamond
	- 3 X soccer fields
	 4 X netball courts
	- 1 X indoor stadium (incl. indoor basketball/
	soccer/ hockey/ cricket/ netball)
	- carparking area
	(incl. sketch plan showing layouts/ approx. 19 Ha)
Byron Bay Soccer Club	 adequate areas for all sporting clubs to service needs
	 soccer identified as largest club sport in Byron Bay
	 need for quality playing surfaces (incl. wet weather)
	 suitable landscaping/ appropriate shade for spectators
	 minimum sports field/ facilities requirements:
	- 3 X international size fields
	- 2 X mini-fields
	- indoor sports complex (multi-purpose/ wet weather)
Byron Bay Little Athletics Centre Inc.	 two seasons operating/ increasing registration 130 to 162
, , , , , , , , , , , , , , , , , , ,	 existing inadequate facilities at Byron Bay High School
	 cannot host zone events/ need for athletes to travel
	 need for quality playing surfaces (incl. wet weather)
	 athletics requirements:
	- 400 metre/ 8 lane running track & areas for discuss,
	javelin, long jump and shot put
	 storage area for equipment (approx. 40m³)
	 adequate change-rooms/ toilets (for carnivals)
	 canteen facilities
	 carparking for up to 1000 athletes at carnivals
Byron Bay Freeriders Inc.	over 40 club members
-j.en baj i rechario inc.	 current permitted closed circuit racing in Industrial Estate
	 current permitted closed circuit racing in industrial Estate need for closed circuit criterium bicycle racing
	 600-800 metres length/ 6 metres width
	 potential use of a future service access road system
	 improved safety/ less disruption to business & services
	 growth sport/ raise community profile/ juniors
	 requests banked concrete track around one sports field
Byron Environment Centre	 preference for division of site into 2/3 wetland sanctuary
by on Livinoiment Gentle	
	and 1/3 showground/ 'park and ride' facility
	 no objection to irrigation with treated effluent
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protect native flora & fauna (incl. endangered species) urgent need for 'park and ride' for a sustainable future

Name/ Stakeholder	Key Issues
Ewingsdale Progress Association & Hall Committee Inc.	 Ewingsdale Road is the main tourist artery in Byron Shire estimated 1.7 million visitors per year using this road very poor visual quality of roadway turn delicate marsh environment into an eco-tourism facilit like Fleay's Wildlife Park, Gold Coast vision for landscaped tourist road/ entry statement in a 'tropical modern style' with road-side art installations appropriate management of roadside environment (incl. dumped vehicles, litter, vandalism, graffiti, etc.) urgent need to address road safety issues (narrow/ no road shoulder, steep drop to sides; no space for bicyclists this road has highest incidence of car accidents in Shire; peak season traffic congestion; need for reduction in speed limit from 80kph to 60kph) in addition to festivals/ sporting fields, site should be used for promotion of tourism (incl. information kiosk, ample parking and 'park and ride' facilities other stated issues (relevant to this plan of management): Council's use of road for gravel storage Sunnybrand Chickens (smell and visual aspects) need for separate bikepath
IQ Association Inc. (Island Quarry Reserve Trust)	 envisages opportunities for synergies between the IQ site and 249 Ewingsdale Road supports a mix of environmental protection and buffers, community sporting facilities, a 'park and ride' facility and bikeway connecting to Byron Bay town centre believes some merit in a tourist information centre proposes a new through road (across site) connecting to Bayshore Drive and Sunshine Beach and connections between on-site eco-bus station/ "park and ride" with access to a new train station and shuttle link into town (incl. sketch plan of "Byron Gateway" proposal) future roadworks should incorporate bikeway linkages between Bilongil Bridge and the Pacific Highway, incl. overhead bridge connection between the site and IQ need for safe access to community facilities, sports fields, skateparks, playgrounds and meeting venues concern over extending constructed effluent re-use wetlands and impact on habitat of endangered species
Other Questionnaire Responses	 need for Ewingsdale Road to be made better and safer need for more sports fields and facilities for Byron Bay equitable distribution of land for community facilities potential traffic and noise issues (Ewingsdale residents) need appropriate multiple use of the land (ie. wetlands/ habitat areas separated by a buffer to showground area, sports fields and "park and ride" facility) use of the site as a showground with show rings, spectato stands, stock holding areas, tea-room, public amenities, ef potential use of wetlands for local eco-tourism facility incl. walkways and environmental education/ signage concern over effluent re-use seepage impacting habitat of

31

endangered speciesflood management issues

3.4 KEY OPTIONS AND ISSUES

The response to the pro forma question *"How would you like to see this public land managed for the community?"* identified a range of options and preferred uses as follows:-

- sports fields and associated infrastructure;
- tourist "gateway" to Byron Bay;
- improved road linkages and access to the site;
- "park and ride" facility;
- visitor information centre;
- wetland eco-tourism facilities
- showground/ festival and events site;
- environmental protection/ wildlife sanctuary (wetlands);
- use of operational land portion for effluent reuse wetland.

The current and previous community consultations together with Council's Management Plan 2004-2007, the Byron LEP, State of the Environment Report and other policy documents have identified two key requirements for this community land portion of the site:-

- development of active recreational infrastructure to service the needs of the Byron Bay community; and
- appropriate protection and management of vital wildlife corridors and significant habitat for endangered species.

As outlined in the previous section, the community land portion of the site has important opportunities as well as significant constraints on land capability and future uses. Inappropriate types of development would pose potential threats to existing values. *Sustainability*, a key principle of Council's Management Plan, can only be achieved through a balanced and sensitive approach to resource management. Accordingly, the future development and management of this land must ensure careful integration of economic, social and environmental factors.

The intensity and scale of proposed development options need to be carefully considered with respect to the site's existing context of rural land uses, habitat values and vital wildlife corridors. Proposals for significant intensification of services and facilities within significant habitat areas and along the entry corridor/ interface with Ewingsdale Road would not be considered appropriate under this plan of management.

Sports fields and other recreational infrastructure

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Detailed submissions were received from local sporting groups. Each of these groups expressed interest in developing recreational facilities for organised sports. Recreational facilities as proposed in the submissions are affected by the site's spatial and environmental constraints. It is however envisaged that the site offers scope for staged development of playing fields and recreational facilities, subject to available funding. Additional recreational facilities and infrastructure such as children's play areas, boundary and safety fencing, internal roads and parking areas, public amenities, BBQ/ picnic areas, tables/ seating, pathways and signage also need to be considered. Supply and demand issues are discussed in *4.7 Future recreation, facilities and access*. Refer to *Figure 9: Concept Plan* for proposed site layout of recreational facilities, car parking areas and public access.

"Gateway"/ Ewingsdale road options

Options for significant road re-routing and "gateway" enhancement along this important tourist route need to consider the implications and impacts on existing natural features, scenic and visual quality, habitat values, wildlife corridors and traffic management. It will be important to ensure that visual and environmental buffers and bio-linkages are carefully integrated within future site development and along existing boundaries. The IQ submission for the "Byron Gateway" proposal, including off-site bus/ train interchanges linked to an on-site "park and ride" facility, raises a range of strategic transportation and infrastructure issues which are beyond the scope of this community land plan of management.

Road safety and traffic congestion

Important issues were raised over the need for improved traffic management along Ewingsdale Road, a major tourist route and major link road between the Pacific Highway and Byron Bay. Existing road safety issues would need to be thoroughly addressed with reference to any future site development and access (vehicular, pedestrian and bicyclists). The development of sporting and recreational infrastructure, "park and ride" facilities, festival/ events space and possible other uses are likely to increase traffic volumes and lead to further peak traffic congestion on this section of the road. These issues will be addressed in a future Traffic Management Plan for Ewingsdale Road.

"Park and ride" facility

The issues of increasing visitor volumes and traffic congestion along Ewingsdale Road and the town centre remain a high priority for the local community. Prior to the workshop, public expectations were raised over the use of the site at 249 Ewingsdale Road as a "park and ride" facility. This option received considerable community support during consultation. The preferred type of transportation system was also highlighted in the responses (eg. electric shuttle buses/ cars, use of rail connection and light rail solutions).

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Use of a "park and ride" facility, particularly by visitors to Byron Bay, will be largely dependent upon people considering that this is a preferred option. The solution will need to ensure a high level of convenience to the user, efficient and reliable connections and an equitable pricing policy. In addition, these considerations need to be weighed with respect to the purpose and overall time taken for the return journey. The site is relatively remote at 3.5 kilometres to the centre of town (ie. a total of 7 kilometres for the return journey – a distance which may be considered too far and out of the way for many short-term visitors). The site is also a considerable distance from visitor accommodation and holiday attractions such as beaches, shops and restaurants. The "park and ride" option, whether it is on this site or an alternate location, will need to be investigated in relation to commercial and other considerations. These investigations are beyond the scope of this plan of management.

Visitor Information Centre

The diversity of wetland habitat and endangered species on the outskirts of town offers significant opportunities for establishing environmentally sensitive facilities catering to visitors. These existing biodiversity values should be protected and enhanced rather than fabricating and layering exotic and inappropriate landscape treatments. Furthermore, the site's proximity to Ewingsdale Road and high tourist volumes may support the development of a Visitor Information Centre. Options for facilities and leasing should include a kiosk/ restaurant, outdoor viewing deck over adjoining sedgeland, a short-circuit track with boardwalks and educative signage. Indigenous cultural interpretive facilities should be considered in consultation with the Arakwal people.

Showground and festivals/events space

Although Byron Bay has no existing showground, broad community need for this site to be developed as a showground, has not been established. The availability of space for a showground needs to be considered in view of other recreational needs as identified. Development of a showground with related infrastructure of spectator stands, show rings, exhibition halls and stock holding areas would pose a considerable cost to Council and the community. Other showgrounds in the local Byron area are located at Bangalow and Mullumbimby.

Although purchase of the site considered the need for an alternate festival site for the *Byron Bay Blues & Roots Festival* and *Splendour in the Grass*, the need for this site has not been confirmed by festival organisers.

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4.0 BASIS FOR MANAGEMENT

4.1 **OBJECTIVES**

This section of the plan of management addresses the following objectives:-

- to identify the values attached to this land by the community, why they are valued and the importance of each of these values;
- to determine the land's potential role in servicing the needs of the local community;
- to identify key values and assess their relative significance;
- to establish a mechanism for protecting key values in relation to specific issues and threats; and
- to develop principles for sustainable management.

4.2 COMMUNITY VALUES

"Values" can be simply described as the things which make a place important. The site's environmental values provide an outstanding natural setting for a broad range of recreational, cultural, social and other potential purposes. The consultation process defined a strong sense of community ownership of the land. It also identified a shared desire to develop and promote a high standard of public open space and facilities for the Byron Bay community.

Community values identified in the consultation process highlighted the importance of *potential* cultural values, including opportunities for public access, preferences for future community infrastructure and future recreational facilities. The site's potential value as a terminus for "park and ride" facilities, a showground/ festival event site, "gateway" site, eco-tourism and interpretive facilities were all highlighted in discussions, questionnaires and submissions.

Future sports facilities ranked very highly in the discussion of future community values. Suggested recreational facilities included playing fields for rugby, soccer, hockey and softball, cricket ovals, athletics track and field areas, criterium bike circuit and purpose-built stadium track, netball and basketball courts, indoor stadium facilities, public amenities and spectator facilities (refer to *4.7 Future recreation, facilities and access*).

The significance of the site's existing natural and cultural values, biodiversity and setting within a vital wildlife corridor were identified by only a small

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proportion of participants. Only three of the responses to questionnaires identified these existing values and the need for environmental protection. One submission included these values as a minor consideration in the context of more significant changes.

It is important to recognise that community and visitor values are closely related to environmental quality and the opportunities provided by the setting. Wetland areas have historically been regarded as "swamps" with little intrinsic value – marginal places which could be cleared, farmed, filled with local waste and rehabilitated for other purposes, such as recreation. This site has been subject to a range of past disturbances and modification which have affected the integrity of many of its intrinsic values. Nevertheless, 249 Ewingsdale Road retains a range of exceptional values associated with its large area of wetland habitat. It is vital that these values are protected and managed on a sustainable basis.

4.3 DETERMINING KEY VALUES AND SIGNIFICANCE

The site's broader management objectives must be based on a sound understanding of the resource or supply base. The following key values have been developed through further investigation, analysis and assessment. Key values are divided into four major categories which form the basis for further discussion in this section as follows:-

- 1. Natural and cultural setting
- 2. Indigenous and cultural heritage
- 3. Environment and biodiversity
- 4. Future recreation, facilities and access

Table 4: Values and Level of Significance assigns a significance ranking to values, based on either a local/ district, regional or state level. Values assessed as being of State significance relate to the presence of threatened species on the site which are subject to NSW threatened species legislation. The significance ranking of sedgeland habitat and the wildlife corridor values are assessed as regional significance in accordance with their "extremely high ecological value" as determined by the *Byron Biodiversity Conservation Strategy*. An assessment of Aboriginal cultural values relating to this site would be subject to further investigation and consultation with the Arakwal people.

The site's recreation values relate to potential future values based on appropriate development of the community land. These include values of potential local/ district significance (ie. sports and passive recreational facilities/ "park and ride") and those of potential regional significance (ie. visitor information centre/ nature-based recreation).

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Key Values	Leve	el of Significa	nce
	Local/ District	Regional	State
Natural and cultural setting			
natural and cultural setting			
visual quality/ scenic & aesthetic values			
Indigenous and cultural values			
Aboriginal/ Indigenous values	subject to fur	ther investigation/	consultation
European/ historic values			
Environment and biodiversity			
sedgeland habitat & wildlife corridor			
threatened species/ scientific values	subjec	t to further investig	ation
Recreational facilities and public access			
potential public access & linkages [vehicle, pedestrian/ cycleways]			
potential range of sporting facilities/ "park and ride" facility			
potential informal, passive & family-based recreation			
potential visitor information and nature-based recreation			

Note: Recreational facilities and public access relate to potential/ future values rather than existing values.

4.4 NATURAL AND CULTURAL SETTING

Significant natural areas and rural landscape

The landscape is flat, low-lying and open with expansive views over the landscape and surrounding hills to the south and west. The western portion of the site is dominated by extensive native sedgeland broken by a small exotic pine plantation, two shallow earth dams and pockets of native Paperbark/ coastal wattle regrowth. Most of the western (operational land) portion of the site is subject to periods of inundation and waterlogging. The site has a history of clearing and management for agricultural purposes, primarily for cattle grazing. The marginal nature of agriculture, particularly in the western portion of the site, has resulted in the retention of significant sedgeland habitat (refer to *4.6 Environment and Biodiversity – Conservation Significance*).

The drier, slightly elevated eastern portion of the site has been largely modified through clearing and introduction of exotic pasture grasses for cattle grazing. This area still retains native sedgeland (south-eastern corner), sedge/ grassland, Paperbark/ coastal wattle regrowth and smaller areas of sedge/ fernland, and reedland. This portion of the site also retains a cottage, small dam and unsealed road access. The cottage is in poor condition and should be demolished to allow for development of sporting fields and other

recreational facilities in this location.

38



PHOTO 1: View of Ewingsdale Road looking east towards Byron Arts & Industry Estate [left background]. Site access would need to be provided off this busy road.



PHOTO 2: View of the site looking south-west along the eastern boundary to Byron Arts & Industry Estate [Centennial Circuit]. Natural buffers such as this reedland and Paperbark/ Coastal Wattle regrowth woodland need to be protected and restored.



PHOTO 3: View of access road to existing cottage [looking south]. This eastern portion of the site has been largely cleared and modified with pasture grasses. The site is currently being leased for agistment purposes.



PHOTO 4: View of existing cottage [under current lease] looking north-west. Works are in progress on adjoining West Byron Effluent Reuse Wetland site [background].

Visual quality and scenic character

The predominant landscape quality of open, rural vistas and natural areas extends to the south across Ewingsdale Road and north towards the West Byron Effluent Reuse Wetland. This landscape forms a contiguous wildlife corridor linking with other adjoining protected natural areas. It also provides a vital buffer between the built edge of Byron Bay's Arts and Industry Estate and the surrounding rural landscape. The buildings within the light industrial area are uniformly large in scale, bulky, two-storey block structures. The built western elevations present a visually obtrusive wall of masonry finishes in a range of bright colour schemes.

It will be important to protect, restore and enhance existing remnant and regenerating native vegetation along this site boundary and interface with the future reserve. As previously outlined, the industrial area has a significant negative impact on visual and scenic quality, particularly from the neighbouring hills and approaches into Byron Bay. The future recreational development of this site should be sensitive and low-key. It should reinforce and enhance natural qualities rather than simply establishing large open grassed areas for sporting activities. The scenic and visual qualities of the surrounding rural and natural areas should be reinforced in this important "gateway" location to Byron Bay.

4.5 INDIGENOUS AND CULTURAL VALUES

"Over many thousands of years, Aboriginal people have left signs of their occupation of Australia. The reminders of where people lived, where they ate or collected food, how they hunted, their art and their sacred sites are all a special part of Australia's heritage ... [These places] document the lives of Australian indigenous people not only before European settlement, but also the changes wrought by colonialism".

Australian Heritage Commission (1997)

Aboriginal heritage

The Arakwal people are the traditional custodians of this land. For many thousands of years, this coastal wetland, grassland and woodland mosaic would have provided an immense source of food and materials for the Arakwal people including fishing, hunting and special plants for food, fibres, tools, canoe making and medicine.

The Aboriginal heritage of this area should be further investigated in consultation with the traditional Aboriginal custodians. Identified sites, relics or potential archaeological deposits (PAD) should be properly protected and managed. Under the *National Parks and Wildlife Act (1974)* and the *Heritage Act (1977)* all Aboriginal sites, whether recorded or not, are protected.

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Protection under these Acts includes limiting public access to sites, promotion of educational/ interpretive programmes in Aboriginal heritage and conducting archaeological surveys to better understand this heritage.

Reconciliation

In 2001, the Byron LGA had an estimated population of 347 Aboriginal and Torres Strait Islanders, representing 1.2% of the total population. The Byron Shire Council *Social Plan* identifies the importance of consultation with the Indigenous community and aims to encourage the support, interpretation and communication of Aboriginal cultural heritage and the fostering of its contemporary expression as part of Byron's social and cultural fabric. Accordingly, this plan of management encourages a consultative strategy to address the site's land management issues with the traditional Arakwal custodians (refer to *5.0 Management Strategies*).

4.6 ENVIRONMENT AND BIODIVERSITY

Climate

The Byron LGA has a warm, sub-tropical climate with an average annual rainfall of between 1,429 mm (western part of LGA) to 1,868 mm at Cape Byron. The area has a typical summer rainfall pattern (January to March) with a drier winter and spring. The Byron LGA has recorded significant changing rainfall patterns, oscillating between periods of very high and low rainfall. These rainfall patterns, defined by alternating flood (FDRs) and drought dominated regimes (DDRs), have long term implications for future site management. In mid-2004, the Byron LGA was experiencing severe drought conditions, typical of the entire eastern seaboard and much of the country. Since this period the region has received significant falls of rain with floodwaters inundating the Ewingsdale Road site in December 2004 and again in June-July 2005. The region is also subject to very high rainfall derived from tropical cyclones moving down the Queensland coastline. This low-lying area is subject to flooding during these periods.

Catchment

The site is located within the Belongil Creek Catchment. This relatively small catchment, which includes the township of Byron Bay, has undergone considerable changes and long-term modification of its natural systems in recent decades. These changes have included vegetation clearing, loss of habitat, agriculture, introduction of weeds and pests, pollutants and an ever-increasing rate of urbanisation. The western portion of the site is subject to Flood (1 in 100 year). Drainage channels have been constructed on the site, mainly along boundary lines.

The Integrated Catchment Management Plan for the Northern Rivers

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Catchment (2002) has been prepared to address the need for sustainable management of the Byron and broader northern rivers catchments. The document emphasizes the need for new opportunities with partnerships, education, advocacy and community involvement to deliver the following first order objectives:-

- naturally occurring plant and animal species, populations and their communities, maintained, enhanced and where targeted, restored;
- healthy and productive natural water systems which sustain the environment and the community;
- human settlement and land use activities managed now and in the future, to achieve sustainability in our communities, our ecosystems and in natural resource use;
- the economic, social and spiritual well-being of the Northern Rivers community recognized and promoted, specifically the cultural heritage values of the Bundjalung Nation, with maximisation of Aboriginal involvement in natural resource management; and
- land resources able to support sustainable economic activity and natural ecosystems.

While many of the broader catchment initiatives are beyond the scope of this plan of management, a number of objectives are particularly relevant and have been used in development of the management strategies.

Geology and Soils

This low-lying site is located within a broad area of aeolian sand deposits on the coastal plain. These coastal deposits were derived from wind-blown marine sediments comprising fine to coarse-grained, rounded quartz sand. During the past 8,500 years a peat layer has formed to varying depths over the lower western portion (approximately two-thirds) of the site. This peat layer was derived from the deposition and decomposition of vegetable matter in water and partial carbonisation of the material (ie. Open-sedgeland and Swamp Sclerophyll Forest).

In June-July 2003, Byron Shire Council commissioned a detailed investigation of the site to establish peat and sand layers on this site (*Survey of Sand and Peat Soil Layers on a 40 Hectare Block at West Byron Bay by T. Ryffel & K. Bolton*). The field study divided the site into grid transects for soil sampling using a gouge auger. Sample cores were taken up to a maximum depth of 2 metres and the relative depth of peat and sand layers were recorded. The study results confirmed the deepest peat layers occurred over the northwestern portion of the site (ranging up to 1550 mm depth). A general rising gradient from deep to shallow peat layers occurs from west to east and northwest to south (adjoining Ewingsdale Road). Approximately 65% of the total site area (26 Ha) contains peat to a depth greater than 100 mm. The eastern portion of the site, approximately 35% of the total area (14 Ha) contains only sandy soil with no peat layer.

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As outlined in previous sections, this interface between peat and sand soil depths is an important factor affecting future recreational development on the site. Filling and levelling for construction of playing fields over peat substrate potentially may lead to problems in the playing surface. Excavation and removal of peat layers would be subject to Council's environmental controls regarding Acid Sulfate Soils. When acid sulfate soils, containing pyritic materials (eg. iron sulfide) are exposed to oxygen, sulphuric acid is generated. This acidic leachate can release toxic concentrations of aluminium and iron into rivers, estuaries and other water bodies. This site is identified by the *Acid Sulfate Soils Planning Map* as containing Class 2 and Class 3 Acid Sulfate Soils (refer to *2.9 Proposed Zoning of 249 Ewingsdale Road*).

Natural vegetation

The site is dominated by natural vegetation – a dense low to tall sedgeland complex comprising sedgeland/ fernland/ grassland communities. The dominant native species include Tassel-rush (*Restio tetraphyllus*), Red-fruited Saw-sedge (*Gahnia sieberiana*) and Water-fern (*Blechnum indicum*). Reedland and coastal regrowth/ woodland are also present on the site. The existing natural vegetation is significant for the following reasons:-

- maintains natural character, high aesthetic and visual qualities and a vegetated buffer to adjoining industrial development;
- contains a reservoir of natural heritage and biodiversity values;
- provides vital habitat for scheduled threatened species (TSC Act);
- allows opportunities for connectivity, gene pool exchange, faunal corridors and bio-linkages (linkages with adjoining wetlands/ other protected natural areas on the coastal plain and escarpment);
- assists in maintaining soil stability and good water quality;
- enhances landscape amenity and recreational opportunities.

Regional Biodiversity

Biodiversity refers to the richness and diversity of a place, its life forms including plants, animals and micro-organisms, the genes they contain, and the ecosystems they form. Byron LGA contains exceptionally high biodiversity values and is considered to be one of the most threatened regions in NSW.

The Shire contains at least 54 threatened plant species, 84 threatened fauna species (excluding marine species) and 2 endangered ecological communities scheduled under the Federal *Environment Protection and Biodiversity Conservation Act 1999* and NSW *Threatened Species Conservation Act 1995* (*Byron Biodiversity Conservation Strategy, 2003*). These figures are revised from data collected during the preparation of the *Byron Flora and Fauna Study, 1999*, which listed only 38 flora species and 70 fauna species as threatened. The high number of threatened species is a function of the

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region's status as a biodiversity hotspot and the cumulative negative impacts of clearing, habitat fragmentation, weed invasion and land use practices over the past 160 years.





PHOTO 5: View looking north-west from the south-eastern boundary of the site. This location contains significant natural sedgeland habitat dominated by Tassel-rush. This community has a ranking of "High Conservation Value" under the *Byron Biodiversity Conservation Strategy*. The native vegetation [foreground] would need to be removed to allow for recreational infrastructure as shown in *Figure 9: Concept Plan*.



PHOTO 6: View of eastern portion of the site [proposed community land] looking towards the adjoining Byron Arts & Industry Estate. Future recreational development of the community land will need to address local and macro- visual and scenic qualities.



PHOTO 7: Sedgeland habitat [operational land portion] – this native vegetation is part of a vital wildlife corridor, provides habitat for threatened species and is identified as being "Extremely High Conservation Value" (ie. area has a priority ranking for conservation) in the *Byron Biodiversity Conservation Strategy*.

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Conservation significance

The Byron Biodiversity Conservation Strategy establishes the basis for a regional conservation strategy. The study identifies the comparative size, distribution, quality and value of remnant, fragmented habitat and relictual landscapes in the Byron LGA *(refer to Maps 2 and 9, BBCS, 2003).* These maps are included in this plan of management as a key strategic tool in developing the management strategies (refer to *Figure 6: Regional Context -- High Conservation Value Habitats & Corridors).* Proposed wildlife corridors and bio-linkages are shown hatched on this map.

The *Byron Biodiversity Conservation Strategy* develops priorities based on the ranking of relative conservation significance of remnant vegetation and habitat in the Shire (refer to *Relative Ecological Values Matrix, BBCS, 2003* for discussion of methodology). Priority areas for the regional conservation strategy are mapped as Very High Ecological Value and Extremely High Ecological Value. It is envisaged that the recommendations of the strategy will be included within a new *Byron Local Environmental Plan*.

The sedgeland complex covering the western portion of 249 Ewingsdale Road (operational/ part of community land) is ranked – Extremely High Ecological Value (*BBCS, 2003*). This area is dominated by open sedgeland which grades to sedge/ fernland and sedge/ grassland near the peat layer/ sandy soil interface. The eastern edge of the sedge/ grassland habitat (community land) is ranked – Medium Ecological Value (*BBCS, 2003*). The south-eastern corner of the site (community land) contains an important, albeit fragmented, component of open sedgeland which is ranked – High Ecological Value. The north-eastern corner of the site (community land) is ranked – Very Low Ecological Value. This area is considered the most durable portion of the site for proposed sports fields and other recreational infrastructure. It will be essential to establish appropriate buffers between areas of very high ecological value and proposed development. Similarly wherever possible, fragmented habitat of high ecological value should be consolidated and connected to core natural areas via suitable bio-linkage treatments.

The natural vegetation communities and habitat at 249 Ewingsdale Road are mapped in accordance with *Vegetation Mapping for West Byron STP* and further site investigations by LandArc Pty Limited (refer to *Figure 7: Existing Vegetation & Conservation Value)*. The relative conservation value and priority rankings are identified on this map in accordance with the *Byron Biodiversity Conservation Strategy (BBCS, 2003)*. The proposed boundary between operational land and community land and extent of sports fields and other recreational infrastructure are also marked on this figure. The proposal outlined in *Figure 9: Concept Plan*, prepared by the Sporting Fields Working Group, would require the removal of approximately 2.7 hectares of the

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sedgeland complex (including sedge/ fernland and sedge/ grassland) ranked as "Extremely High Ecological Value" in the *Byron Biodiversity Conservation Strategy, 2003* (ie. an area representing the highest conservation ranking in the Byron LGA).

The sedgeland complex at 249 Ewingsdale Road is currently the largest area of this type of habitat in the Byron LGA (refer to *Byron Flora and Fauna Study 1999, Map 3 of 7 – Vegetation of Byron Shire*). A study prepared by *Landmark et al (BSC, 1999)* identifies a total area of 98 hectares of sedgeland- fernland/ grassland in the Byron LGA. The 29 hectares of sedgeland complex occurring on this site represents approximately 29% of this total vegetation community in the LGA (*Fitzgerald, M.,2004, p.26*). The BFFS identifies this area as Quarry Lane Wetlands (No.35) and describes the sedgeland association as dependent upon regular firing. Discontinuation of regular firing or slashing would probably result in eventual conversion to Paperbark woodland. This study states: *"These wetlands are an integral part of a coastal vegetation corridor forming an important link between Tyagarah NR and the Ewingsdale wetlands to the south"*.

Threatened Species

The Byron Biodiversity Conservation Strategy (BBCS, 2003) had highlighted important ecological and biodiversity values associated with this site. Data gaps however existed in relation to the significance of the site in terms of vital habitat/ local corridor for threatened species and potential impacts on these species should the habitat be modified in any way from its present condition. The Draft Plan of Management (Issue A: 5.06.2004) identified the need for further detailed investigation of threatened fauna species and ground truthing of existing habitat mapping. It was recommended that a proper investigation be conducted into the populations, distribution and habitat requirements for threatened species on this site. The present condition of the site also provided opportunities for comparative analysis with the neighbouring effluent reuse wetland habitat.

During the latter part of 2004, an *Ecological Habitat Assessment and Flora and Fauna Survey* (EHA & FFS) for 249 Ewingsdale Road was prepared by ecological consultant, Mark Fitzgerald for Byron Shire Council. Prior to commencement of the study, it was believed that there were at least three scheduled threatened species dependent on the existing wetland complex of sedge/ fern and grassland habitats (*Bower, H. and Fitzgerald, M, pers. comm.*). These species included the Wallum Froglet (*Crinia tinnula*), Wallum Tree Frog (*Litoria olongburensis*) and Grass Owl (*Tyto capensis*). The recent study detected not three, but six threatened fauna species during the survey, and three more recorded from the WBSAS SIS. Threatened species identified during the study included (in order of abundance) the Wallum Froglet, Common Planigale, Grey-headed Flying-fox, Square-tailed Kite, Wallum

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Sedge Frog (Olongburra Frog) and Koala (*Fitzgerald, M., 2004, p.33*). An additional seven species are expected to occur on the site, particularly during flood events.

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Site investigations established a broad distribution for the Wallum Froglet, including sedgeland in the south-eastern corner (proposed community land and sports fields). The Wallum Tree Frog was recorded in only one location, the WBSTP lands, adjoining the western portion of the site. Little is known about the critical habitat of these frogs or the way they move around (*Fitzgerald, M, pers. comm.*). The frogs need isolated ponds without fish and a sufficient hydro-cycle to allow reproduction and development. It is important to ensure that the Plague Minnow or Mosquito Fish (*Gambusia holbrooki*) scheduled as a Key Threatening Process on Schedule 3 of the *Threatened Species Conservation Act 1995* is not introduced to the site.

In its conclusions, the EHA & FFS confirmed the site's significance as an "area of rare habitat within Byron Shire" and "an important local link in the major north-south wildlife corridor of the Byron coastal plain" and recommended rehabilitation and management for conservation "as the optimal environmental outcome for the area designated as Operational Land." (*Ecological Habitat Assessment and Flora and Fauna Survey at 249 Ewingsdale Road, West Byron Bay – Final Report for Byron Shire Council,* Fitzgerald, M., p.42). It is believed that the operational land identified in this ecological study refers to the area and boundary shown in the Draft Plan of Management (Issue A: 5.06.2004). The study makes no reference to the amended boundary as proposed in *Figure 9: Concept Plan* (Feb, 2005) nor the potential loss of significant habitat.

Management strategies which perpetuate habitat loss, fragmentation and isolation of populations will increase the chance of local extinction. This may occur through random fluctuations, introduced pathogens, predation, habitat disturbance, reproductive isolation and reduced gene flow. The potential for modification and conversion of existing open sedgeland habitat for a constructed effluent reuse wetland may have a significant negative impact on threatened species. For example, the two frog species, known as "acid frogs" are dependent on a specific low pH value in their environment. The Grass Owl is dependent on an open sedgeland habitat rather than a constructed Paper bark woodland dominated by Broad-leaved Paperbark (*Melaleuca guinguenervia*).

Exotic weed species

Environmental weeds tend to be fast-growing colonizing species with highly aggressive reproductive strategies. The site tends to have higher levels of weed invasion within the areas of greatest disturbance and modification. The site perimeters, particularly along Ewingsdale Road and the eastern area (community land) have the highest levels of weed invasion. A large portion of the community land has been modified with exotic pasture grasses including Broad-leaved Carpet Grass (*Axonopus compressus*) and Vasey Grass (*Paspalum urvillei*). The major woody weed species on community land are Camphor Laurel (*Cinnamomum camphora*), Slash Pine (*Pinus elliottii*),

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Cadaghi (*Corymbia torelliana*) and Groundsel (*Baccharis halimifolia*). An original plantation of Slash Pine, established as part of a former development scheme, is located in the centre of the site (community land). This species is currently self-seeding throughout the sedgeland and in all the disturbed areas. It should be removed as a priority and new regrowth monitored and treated accordingly. Water Lettuce (*Pistia stratiotes*) on the dam near the cottage is a W1 category noxious weed species and should be eradicated in accordance with the *Noxious Weeds Act 1993*.

Weed Management, Regeneration and Restoration

The site will continue to be affected by dispersal of exotic weeds from external and adjoining developments. The Plan of Management will need to address these issues as well as potential nutrient loadings, erosion and sedimentation from various sources. The *EHA* & *FFS* makes important recommendations with respect to maintenance of the sedgeland complex and general weed management on the site (*Fitzgerald, M., 2004, s.8.5 and 9.0, pp.38-40*). In particular, native fauna habitat values associated with weed species need to be carefully managed through staged removal and restoration.

The weed management strategy would need to be adequately funded, staged and monitored to deliver a sustainable outcome (ie. address long term objectives of building ecosystem resilience and durability). The strategy needs to be linked to the ongoing management of potential negative impacts and control of threatening processes. It must be consistent with the conservation significance rankings and their management regimes. Council staffed programs, contract bush regeneration and volunteer Landcare programs must give due consideration to the priorities identified in the conservation significance assessment when planning and implementing regeneration and restoration works. Best-practice standards will need to be followed for bush regeneration/ restoration, seed collection, replanting and ecological fire management or slashing regimes. It is important that the strategy remains flexible and responsive to the site, emphasizing the balanced integration of conservation processes as follows:-

- promote community education, involvement and stewardship in the ongoing management of significant habitat;
- use skilled labour (ie. qualified and experienced bush regenerators) in conjunction with other community volunteers, school groups and employment training programs;
- clearly delineate management zones (eg. no mowing areas);
- ensure appropriate management and maintenance of areas and targeting of bush regeneration programs;
- establish an appropriately phased restoration strategy in relation to exotic weed species which may be used by native fauna for habitat;
- selectively target and control environmental weeds based on priority

targets set in weed management study;

- selectively target weeds in future high use/ high visibility areas in conjunction with appropriate restoration and enhancement strategies;
- develop opportunities for consolidating gains (eg. reduce edge to area ratios, enhance buffers and bio-linkages).

The strategy for buffers and core area consolidation should aim to establish a representative level of species and structural diversity which is appropriate to this site and specific location. Some areas may respond to bush regeneration techniques while others may require other intervention strategies based on their level of resilience. Only local provenance-sourced native plant species which are appropriate to the specific community should be used. Paperbark woodland/ forest species should be used to ensure the desired level of screening between active and passive recreational spaces, the roadway and unsympathetic perimeter development. The type of preferred structural characteristics, particularly the density of understorey, may need to be modified in some locations. High recreational use areas and pathways should maintain a high level of visibility, passive surveillance and public security. The strategy will need to control public access and recreational impacts in environmentally sensitive areas while ensuring access to more durable sites or site-hardened areas.

Buffers and faunal corridors will need to incorporate ecologically sensitive water quality control devices for managing stormwater run-off, exotic weeds and nutrient loadings from sports fields and carparking areas. These measures may include porous paving surfaces in carparking areas, collection channels, constructed earth retention ponds, rock flumes/ gabion structures and wetlands). These treatments should be considered in relation to potential enhancement of threatened species habitat.

Measures for monitoring conservation processes also need to be undertaken on a regular basis. These measures include soil sampling, analysis and amendment, recording of biophysical variables, assessment of any impact on threatened species and habitat values, introduction of site assessment methodology (eg. use of quadrats or rapid assessment methods) and research into fire management strategies for desired ecological outcomes.

Connectivity and bio-linkages

The enhancement of faunal corridors with proposed buffers and bio-linkages aims to reduce the effects of isolation, ecosystem simplification and instability. While potentially enhancing vital habitat and increasing the movement of mobile species, corridors can also extend edge effects and facilitate movement of weed species, feral animals and diseases between isolated populations *(Hobbs, 1997 and Crome, 1997)*. Proposed buffers should be designed to reduce edge effects as well as providing improved habitat values.

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It is proposed that buffer width should be a minimum of 30 metres along the Ewingsdale Road frontage and a minimum of 20 metres for the eastern and western boundaries (ie operational land boundary). The northern boundary to the Effluent Reuse Wetland Area has an existing boundary buffer treatment. Internal buffer planting within the community land portion (eg. between car parking areas and sports fields) should promote opportunities for bio-linkages and enhance overall habitat values (eg. Paperbark woodland copses and sedgeland).

4.7 FUTURE RECREATION, FACILITIES AND ACCESS

Population and Demographics

The Byron Shire Community Profile (based on 2001 Census data) provides a detailed social profile of the Byron LGA. At the time of this last Census, Byron Shire had a total population of 30,249, including 1,329 overseas visitors and 1,982 domestic visitors from outside the Shire. At this time, the township of Byron Bay had a population of 5,241. Byron Shire experienced a slower rate of population growth between 1996 and 2001 (1.9% per annum) compared to the previous period between 1991 to 1996 (3.3% per annum). Byron Shire has experienced a period of high growth over the past three years, associated with population movement and rising coastal land values. The Shire receives an estimated 1.75 million visitors per annum and is host to festivals and events such as the Byron Blues and Roots Festival, Splendour in the Grass, Writers Festival, Byron Film Festival and the Billycart Derby.

Recreational Supply and Demand

The community consultation process identified a strong local need for playing fields and other recreational facilities in Byron Bay. Submissions were received from Byron Bay Sports Association, Byron Bay Soccer Club, Byron Little Athletics and Byron Bay Freeriders (cyclists). There was a strong community expectation that these facilities would be provided on this land (refer to *3.0 Community Consultation*).

At present, Byron Bay Recreation Grounds, located between Tennyson Street and Cowper Street Byron Bay, offers the only regularly available playing fields for senior and junior soccer, hockey, rugby union and cricket (synthetic turf wicket). This public reserve also has four tennis courts, croquet lawn and a scout/ girl guides hall. Other secondary playing field options include Byron Bay High School and St Finbars Catholic Primary School, the latter being used occasionally for soccer and rugby union training purposes. Byron Bay Little Athletics also share the Byron Bay High School playing fields. Red Devil Park, located near the junction of Bangalow Road and Broken Head Road, is a privately-held field for rugby league seniors and touch football. Other football

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codes cannot use these playing fields.

As previously discussed, the Sporting Fields Working Group prepared a concept plan for the development of recreational facilities. The proposed facilities would address critical shortfalls in supply as well as developing vital opportunities for regional representation and hosting of events. On 31 March 2005, Byron Shire Council resolved to endorse this *Concept Plan: Community Sports Fields – Byron Bay* (refer to *Figure 9* in this Plan of Management).

Proposed recreational open space and facilities

The *Concept Plan* provides a greater number of multi-use sports fields and range of other recreational facilities. The total area of proposed sporting fields is 13.27 hectares. An area of 2.35 hectares is designated for landscape buffers. A further 0.58 hectares contains a pond (treated effluent re-use for grounds), bus interchange and Visitor Information Centre. The environmental impact on key habitat and conservation values together with other environmental constraints have been discussed in previous sections.

Figure 9: Concept Plan proposes the following layouts and recreational facilities for organised sport, subject to available funding:-

- Multi-use community sports fields including:
 - 3 № cricket pitches (including two senior (1 x turf) and one for social cricket);
 - 1 № senior soccer (association) field, 2 № senior and junior soccer fields and 2 № junior soccer fields;
 - 1 № rugby union field (not full-size) and touch football field and 1 № shared touch football field (soccer and softball);
 - 1 № athletics field including multi-use playing field for hockey, softball, frisbee, track and field events;
 - 1 № special community use field/ open grassed area for social cricket/ junior soccer (see above) and space for special events, temporary over-flow event parking/ park and ride options;
 - floodlighting of all playing fields and courts.
- 4 № netball courts
- 4 № cricket nets
- criterium closed bike circuit (one kilometre circuit)
- indoor recreation facility:
 - including indoor basketball, netball, soccer, cricket, volleyball;
 - rooms/ facilities for other community/ leisure activities including music and arts;
 - equipment storage area, change-rooms and amenities.
- 2 № separate amenities buildings
- 3 № children's play areas

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- bike and skate park
- main car parking area (211 car spaces)
- second car parking area (102 car spaces)
- visitor information centre including kiosk/ shop, café/ restaurant, meeting rooms and car parking area (not designated), picnic area and bus interchange
- park and ride facility (optional special community use area)
- workshop/ maintenance building
- fencing to playing areas/ security fencing
- shared pedestrian/ bikepath (linking to Byron Bay Ewingsdale)
- treated effluent re-use pond for grounds maintenance
- restored buffers to boundaries and habitat zones (shown as "landscaped mound" and "landscape buffer").

The provision of organised sporting infrastructure should focus on high quality playing fields, facilities and amenities. In addition to sporting infrastructure, passive recreation should be considered as an integral component of the overall recreational experience. In this way, organised sports activities can be part of the broader opportunities spectrum or simply remain as stand alone activities separate to other uses and facilities.

Passive recreational opportunities

Passive recreational spaces should include places for informal group activities/ family gatherings, picnic and BBQ areas/ shelters, walking tracks/ boardwalks and opportunities for bike-riding, jogging, nature-based recreation, environmental study and educational activities. The Visitor Information Centre including a kiosk/ shop, café/ restaurant (small to medium capacity) and outdoor viewing deck would provide a focus for passive recreation and environmental education. This area would offer special opportunities for interaction with the surrounding natural environment.

Proposed public access to the site

The proposed *Traffic Management Plan for Ewingsdale Road* will need to consider the impacts associated with development of this site. Issues such as location of a suitable site entry/ exit point (possible roundabout), traffic movements, potential increased traffic volumes and peak loadings, shared bikeway/ pedestrian connections, street lighting and public safety should be considered in this traffic study. A roundabout would provide a slow point and safer vehicular access into the reserve. An internal sealed access road would need to be constructed (linking to the car parking areas). No vehicular access to Bayshore Drive or the Byron Arts and Industrial Estate should be provided. A shuttle system/ bus interchange for the proposed "park and ride" facility should examine options such as the use of electric transit buses and taxis.

57

The reserve's car parking areas and facilities should be linked to a shared internal pedestrian/ bikepath system (separate to vehicular access) with connections to an external bikepath along Ewingsdale Road. Options should be examined in the *Traffic Management Plan* for formalising bikepath connections to Byron Bay township. Consideration should also be given to extending this bikepath to the Pacific Highway. Walking tracks and boardwalks within ecologically sensitive areas should be low-key and constructed in a compacted decomposed aggregate finish.

Managing recreational values

The trend towards increasing urbanization and the site's proximity to the town centre will inevitably impose further recreational pressures on natural values. The number of visitors to the region, time available to participate in leisure activities and increasing range of recreational pursuits will also add to existing pressures on environmental quality and biodiversity. Over time, the reserve will attract greater numbers of visitors and the interests of a broader range of user groups. The positive side of this would be greater visibility of people, an improved level of security, broader community "ownership" and possible reduction of anti-social behaviour.

In addition, the site is likely to experience incremental and cumulative environmental impacts which will need to be carefully managed. It will be important to achieve a sustainable balance which is not simply demand driven. These issues need to be addressed in innovative and creative ways to enhance visitor carrying capacity whilst protecting significant natural values.

It will be important to control and manage the spatial extent of recreational activities. General maintenance practices will also need to be addressed. Regular maintenance, particularly mowing and edging, have the potential to cause considerable damage within natural areas, significantly reducing opportunities for natural recruitment. These areas should be clearly delineated and managed in a way which prevents these impacts, promotes public education and enhances opportunities for biodiversity.

An integrated signage system incorporating a simple, coherent graphic style, should be developed as a recognisable and unifying element throughout the reserve. In addition to identification and way finding, signage should serve an interpretive and educational function with information describing natural and cultural heritage, ecological values and threatened species. The proposed Visitor Information Centre should provide an important educational role in appropriate visitor behaviour.

It is essential that all environmental and social impacts are managed on a sustainable basis in order to meet the future needs of the community. Objective limits need to be established on the *types* and *amounts* of change

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that are either desirable or acceptable for the reserve. Principles for managing future recreational impacts should therefore include the following:-

- maintain and promote long term sustainability of the reserve's natural areas as a limited and finite resource;
- provide for recreational activities within the most durable areas including options for enhanced recreational infrastructure and appropriate site shielding;
- restrict and regulate inappropriate management regimes, activities and visitor dispersal within fragile natural areas;
- enhance opportunities for low impact education (eg. visitor information centre, interpretive signage and brochures/ flyers);
- ensure that future recreational development is integrated with appropriate conservation strategies (eg. regeneration, restoration and enhancement).

In establishing limits of desirable or acceptable change, this plan of management provides a framework for the reserve's future management.

4.8 VISION STATEMENT

The following statement provides a vision for this community land which will form the basis of management strategies:-

"To promote and enhance the site's future role as a significant and unique asset within Byron Shire's recreational open space, ensuring protection of identified values through appropriate management in a way which best meets the environmental, recreational, educational, cultural and social needs of the present community and for future generations".

59

5.0 MANAGEMENT STRATEGIES

5.1 **OBJECTIVES**

This section of the plan of management addresses the following objectives:-

- to identify community land categories;
- to establish core objectives for each of the community land categories;
- to develop an action plan for implementation of core objectives and management strategies (ie. desired outcomes);
- to develop performance targets to assess and monitor strategies;
- to assign directions and priorities (spanning the next 5-years);
- to address future leases and licences; and
- to provide a "Concept Plan" for implementation of the strategic plan.

5.2 COMMUNITY LAND CATEGORIES

Community land must be categorised as either a natural area, a sportsground, a park, an area of cultural significance or for general community use, or a combination of these categories. The *Local Government Act 1993* has a further requirement that land categorised as a "natural area" must be given a sub-category of either bushland, wetland, escarpment, watercourse, foreshore or a category prescribed by the regulations. This plan of management categorizes the community land portion of the site into the following (refer to *Figure 8: Community Land Categories*):-

- Sportsground;
- General community use;
- Natural area: wetland; and
- Natural area: bushland.

5.3 GUIDELINES FOR CATEGORISING COMMUNITY LAND

The *Local Government Act 1993* was amended from 1 January 1999 to integrate the management of community land with threatened species laws, in particular the preparation of plans of management. The following definitions are in accordance with the guidelines for categorising community land under the *Local Government (General) Regulation 1999*:-

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Adopted by Council 20 December 2005

62

Sportsground

Land should be categorised as sportsground under s.36(4) of the Act if the land is used or proposed to be used primarily for active recreation involving organised sports or the playing of outdoor games.

Section 11, Local Government (General) Regulation 1999

Most of the eastern portion of community land is to be categorised as sportsground in accordance with proposed active recreational uses.

General Community Use

Land should be categorised as general community use under s.36(4) of the Act if the land:

- (a) may be made available for use for any purpose for which community land may be used, whether by the public at large or by specific sections of the public, and
- (b) is not required to be categorised as a natural area under section 36A, 36B or 36C of the Act and does not satisfy the guidelines for categorisation as a natural area, a sportsground, a park or an area of cultural significance.

Section 14, Local Government (General) Regulation 1999

The community land comprising the proposed Visitor Information Centre (including kiosk/ restaurant, meeting rooms and car parking) and bus interchange are to be categorised as general community use.

Natural Area

Land should be categorised as a natural area under s.36(4) of the Act if the land, whether or not in an undisturbed state, possesses a significant geological feature, geomorphological feature, landform, representative system or other natural feature or attribute that would be sufficient to further categorise the land as bushland, wetland, escarpment, watercourse or foreshore under section 36(5) of the Act.

Section 10, Local Government (General) Regulation 1999

Natural Area: wetland

Land that is categorised as a natural area should be further categorised as wetland under s.36(5) of the Act if the land includes marshes, mangroves, backwaters, billabongs, swamps, sedgelands, wet meadows or wet heathlands that form a waterbody that is inundated cyclically, intermittently or permanently with fresh, brackish or salt water, whether slow moving or stationary.

Section 16, Local Government (General) Regulation 1999

The western portion of community land and a small area in the south-eastern corner (proposed as an effluent re-use pond and remnant habitat) is to be

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categorised as natural area - wetland.

Natural Area: bushland

Land that is categorised as a natural area should be further categorised as bushland under s.36(5) of the Act if the land contains primarily native vegetation and that vegetation:

- (a) is the natural vegetation or a remainder of the natural vegetation of the land, or
- (b) although not the natural vegetation of the land, is still representative of the structure or floristics, of the natural vegetation in the locality.Such land includes:
- (a) bushland that is mostly undisturbed with a good mix of tree ages, and natural regeneration, where the understorey is comprised of native grasses and herbs or native shrubs, and which contains a range of habitats for native fauna (such as logs, shrubs, tree hollows and leaf litter), or
- (b) moderately disturbed bushland with some regeneration of trees and shrubs, where there may be a regrowth area with trees of even age, where native shrubs and grasses are present in the understorey even though there may be some weed invasion, or
- (C) highly disturbed bushland where the native understorey has been removed, where there may be significant weed invasion and where dead and dying trees are present, where there is no natural regeneration of trees or shrubs, but where the land is still capable of being rehabilitated.

Section 15, Local Government (General) Regulation 1999

The proposed buffers to boundaries are to be categorised as natural area – bushland. This category includes areas which have been cleared in the past but retain opportunities for natural regeneration and restoration.

5.4 COMMUNITY LAND - CORE OBJECTIVES

In accordance with the *Local Government Act 1993*, each category and subcategory are provided with a set of core objectives. Refer to *5.1 Schedule of Core Objectives (Sheet 1 of 8)* and *Development of community land (s.47E Local Government Act 1993).*

5.5 ACTION PLAN

The core objectives and desired outcomes form the basis for development of *performance targets*. In turn these guide the preparation of specific *management actions* or the *means of achievement*. A system of checks and balances to assess actions and performance are provided by the *means of assessment*. Priorities for each management action are assigned according to its relative importance (refer to *5.2 Action Plan: Sheets 2-8*). Action Plan tables are divided into the following sections:-

- public land classification (Sheet 2 of 8);
- community land development (Sheets 2-3 of 8);
- future recreation, facilities and public access (Sheets 3-6 of 8);

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- leases and licences (Sheets 6-7 of 8);
- cultural heritage (Sheet 7 of 8);
- environment and biodiversity (Sheet 8 of 8).

5.6 CAPITAL WORKS PROGRAM

Priorities and cost estimates are further developed in the 5-year capital works program (refer to *Capital Works Program*). The Opinion of Probable Landscape Construction Costs is based on the *Concept Plan: Community Sports Fields (Figure 9)* and is indicative only.

5.7 CONCEPT PLAN: COMMUNITY SPORTS FIELDS

The Concept Plan: Community Sports Fields (refer to Figure 9) prepared by the Sporting Fields Working Group identifies key management actions to be implemented throughout the 5-year capital works program, subject to available funding.



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Priority		y very high of	very high		ongoing ongoing	gnigno
Means of Assessment	(of the actions)	untity land. Operational land [as applicable] reclassified as community land in accordance with Council resolution and this Plan of Management.	Further investigations with respect to operational land undertaken and recommendations implemented.	y land. () and bushland (36J).	Level of community consultation implemented for any new development within the future reserve. Number and % of changes to future reserve which are not consistent with relevant legislation and policy.	Number and % of proposed developments that address and adhere to development guidelines. Measure trends over time.
Means of Achievement	(Management Actions)	Desired Outcome: To provide consistency in land management objectives and to address issues of classification of operational land to community land. A1 This Plan of Management establishes a boundary based on Council's resolution of operational objectives for proposed community land. A1 This Plan of Management establishes a boundary based on Council's resolution of operational objectives for proposed community land. Operational close the area of Lud 3 DP 706286, 249 Ewingsdale Road, on the land in accounted by the Section 94 Fund (being \$1.33 million - 12%), shad the area of Lud 3 DP 706286, 249 Ewingsdale Road, on the land in accoordentiant boundary between Management to stablishes to proposed community land. Management of the section 94 Fund (being \$1.33 million - 12%), and the aperational land and community land. Management to special and and community land. Management to proposed community land parels. Plan of the section 94 Fund (being \$1.33 million - 12%), the Section 94 Fund (being \$1.33 million - 12%), the Section 94 Fund (being \$1.33 million - 12%), the Section 94 Fund (being \$1.33 million - 12%), the Section 94 Fund (being \$1.33 million - 12%), the Section 94 Fund (being \$1.33 million - 12%), the Section 94 Fund (being \$1.33 million - 12%), the Section 94 Fund (being \$1.33 million - 12%), the Section 94 Fund (being \$1.33 million - 12%), the Section 94 Fund (being \$1.33 million - 12%), the Section 94 Fund (being \$1.33 million - 12%), the Section 94 Fund (being \$1.33 million - 12%), the Section 94 Fund (being \$1.33 million - 12%), the Section 94 Fund (being \$1.33 million - 12%), the Section 94 Fund (being \$1.33 million - 12%), the Section 94 Fund (be	of eastern portion of site to community land. Review Operational Land objectives in relation to land assessment - Extremely High Conservation Significancel Regional Habitat & Corridov rakues and presence of threatened species. This Plan of Management recommends that all remaining operational and and the vestern portion of proposed community land is zoned 7(k) HABITAT ZONE and that the eastern portion of proposed community land is zoned 7(a) OPEN SPACE ZONE, subject to preparation of the place-based LEP.	Desired Outcome: To establish guidelines for assessing development proposals and impacts in compliance with requirements for community land. Core Objectives: Management of community land categorised as Sportsground (36F), General community use (36I), Natural area wetiand (36K) and bushland (36J).	Provide an open community-based consultative process with all development proposals. Ensure consistency in development proposals with Local Covernment Act 1993 and all other relevant Pederal and State legislation, Byron Shine Council Management Plan 2004-2007, Byron Local Environmental Plan, State of the Environment Report, Social/ Commit Plan and all other relevant Council plans and policy.	Development proposals, uses and activities within the reserve must be consistent with the following requirements: - promote sustainability - promote sustainability - pronote and enhance identified values - protect and enhance identified values - ordinue to diversity and quality of recreational and community uses - demonstrate a clear connection with reserve's role and natural cultural settings - demonstrate consistency with community and core objectives - promote balanced, sustainable management of recreational infrastructure - main natural ground evels, water quality and groundwater flows - enhance visual and environmental amenity - ensure that future recreational facilities and infrastructure are consistent with natural and nard' cultural scillies and infrastructure are consistent with - nature and nard' cultural scillies and infrastructure are consistent with natural and nard' cultural scillies and infrastructure are consistent with rottect and enhance native vegetation and habitat values
Item		d manager A1	8	sessing de	83	B
Performance Target	(Management objectives)	Desired Outcome: To provide consistency in lant To promote consistency in land management objectives for proposed community land. To determine boundary between operational land and community land.	To address issues of reclassification of operational land and review objectives for this land. To ensure consistency between land management objectives and LEP zoning. To ensure appropriate protection of threatened biodiversity values.	Desired Outcome: To establish guidelines for as: Core Objectives: Management of community land	To ensure thorough community consultation with all development proposals. To promote the future reserve's orle as a broadly accessible community asset for the local and	To protect the reserve's values from inappropriate development. To implement actions which will prevent incremental impacts and address threatening processes. To protect fragile and sensitive areas, perifoularly areas of high conservation' ecological significance. To promote appropriate active sporting facilities and passive unstructured recreational opportunities.
		uonsonnes	public land cla	1 Maria	Juamqu	community land develo

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renormance rarger (Management objectives)	IIIali	means or Actinevenient (Management Actions)	(of the actions)	f inour L
Desired Outcome: To establish guidelines for as: Core Objectives: Management of community land	tessing d	Desired Outcome: To establish guidelines for assessing development proposals and impacts in compliance with requirements for community land. Core Obiectives: Management of community land categorised as Soortsground (365). General community use (361). Natural area wetland (36K) and bushland (36J).	ity land. 6K) and bushland (36J).	
To ensure a high level of public safety and security. To promote public access and equity. To ensure consistency in permitted uses, scale	B3 [cont'd]	 maintain and enhance public safety and security adequately provide for public access, equity and broad community use minimise traffic hazards and pedestrian conflict in reliation to vehicular access, 	Number and % of proposed developments that address and adhere to development guidelines.	BujoBuo
and mensity or tuture recreations are exerginater. To address adjoining industrial land-uses and minimize polerital impacts on the future use of the reserve. To ensure that development proposals will not have a novarishe immact on identified values.	8	Incuestor, ref parmary, storwa uperation an outview) areas Investigate strategies to minimize negative visual, sortin, aesthetic and environmential impacts of adjoining industrial development on this land and broader landscape quality. Ensure that existing native vegetation regrowth along boundary is protected and enhanced to statibilish an appropriate buffer. Use only locally sourced, indigenous sponse, in the restruction strateou.	Number and % of proposed developments on adjoining land that address and adhere to development guidelines. Measure trends over time.	very high ongoing
To restrict threatening processes and ensure	88	Development proposals which may directly or indirectly threaten the natural or cultured settings of the reserve and/or other identified values are not permissible.	as above	ongoing
To permit the use of the land for sustainable development of appropriate facilities.	B	Proposed development, activities and uses must be consistent with threatened species legislation - Threatened Species Conservation Act 1995 and Environment Protection and Biodiversity Conservation Act 1999.	as above	ongoing
	87	This Plan of Management expressly authorises the staged development of proposed facilities and infrastructure [as shown in Figure 9: Concept Plan] subject to compliance with orce objectives for the community land categories and the development guidelines [see items B1-B6].	Proposed staged development/ capital works items completed subject to available funding and the current Capital Works Program.	ongoing
Desired Outcome: To promote opportunities for Core Objectives: Management of community lan	public ac. 1 categori	Desired Outcome: To promote opportunities for public access and appropriate recreational and community infrastructure. Core Objectives: Management of community land categorised as Sportsground (36F), General community use (36I), Natural area wetland (36K) and bushland (36J).	6K) and bushland (36J).	
To investigate traffic management study for Ewingsdale Road [incl. reference to this site development]. To make recommendations for addressing Ewingsdale Road issues.	2	Access off Ewingsdale Road and Traffic Management Prepare a Traffic Management Plan for Ewingsdale Road including consideration of the potential impacts associated with development of this sale - location of suitable site entry/ exit point lentry roundbour option west of Quarry Foxed traffic movements, potential increased traffic volumes and peak loadings, speed limits and salety, shared bikeway/ pedestrian commotions, "gateway" treatment options, "park and ride" alternate options, street limiting and cubic safety.	Investigations completed and recommendations implemented.	very high
To provide appropriate safe vehicular access of Erwingsdale Road into this site To provide access to proposed facilities.	8	Internal vehicular access Subject to investigations and recommendations, construct a new roundabout on Ewingsdale Road west of Quarry Road. Construct a sealed bitmme access road from roundabout into reserve, connecting to proposed Visior Information Centrel bus interchange facilities, proposed car parking areas and recretional facilities.	Proposed development/ capital works items completed subject to available funding and the Capital Works Program.	very high

5.0 MANAGEMENT STRATEGIES5.2 Action Plan

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	Performance Target	Item	Means of Achievement	Means of Assessment P	Priority
10.0	(Management objectives)		(Management Actions)	(of the actions)	
	Desired Outcome: To promote opportunities for p	ublic ac	Desired Outcome: To promote opportunities for public access and appropriate recreational and community infrastructure.		
	Core Objectives: Management of community land	catego	f community land categorised as Sportsground (36F), General community use (36I), Natural area wetland (36K) and bushland (36J).	3K) and bushland (36J).	
	To protect significant habitat values.	ខ	No through vehicular access to be provided to Bayshore Drive. Provide slow-points/	Public safety/ traffic management issues addressed	high
14.3	To address public safety and access issues.		traffic calming devices along internal road at strategic locations incl. pedestrian/ bikepath	as an integral component of access road development.	
8	To movide recreational and community	5	crossings and carparking areas. Identify and protect significant natural unrelation/ habitat areas existing provind lavels	Number and % of annovad developments that	hinh viav
1911	in provide recreational and community infrastructure within the most durable areas.	5	overland flows and drainage lines. Ensure that roadway is kept low-key (no kerb		buidbuid
	To ensure appropriate safeguards to protect		and guttering) with all surface water/ run-off collected in detention areas/ wetlands		
sə	environmental quality and habitat values.	-	and other water quality control devices within buffer areas.		
24	To provide appropriate site shielding methods.	3	Car parking areas [incl. park and ride facility]		
1	To provide an appropriate level of service		Provide staged development of carparking facilities as follows:-	Proposed staged development/ capital works items	high
2	and facilities for public use of the reserve.		 Two car parking areas for 211 + 102 = 313 car spaces in total; 	completed subject to available funding and the	ongoing
	To protect and maintain environmental quality.		"Park and ride" facility/ transit area facilities and sealed bitumen carparking area;	current Capital Works Program.	
	To ensure appropriate level of screening, buffers		3. Establish open grassed area (southern area) for temporary over-flow event parking		
	amenity and integration of carparking areas.		requirements or extension of "park and ride" facility.		1
	To review options for "park and ride" facility.	ප	Investigate options to establish a "park and ride" facility/ transit area and shuttle service	Investigations conducted and recommendations implemented w	very high
			to alleviate peak congestion/ traffic volumes in Byron Bay town centre.	-	
	To ensure protection and enhancement of existing	C3	Protect, restore and enhance existing native vegetation/ buffers along boundaries to	laries.	very high
100	native vegetation along boundaries/ buffers to site.		Operational Land, Ewingsdale Road and Byron Arts & Industry Estate. Establish	Positive net gains in buffers/ bio-linkages over 5 years.	
			natural buffers and visual screening to roads and carparking infrastructure within the		
		1	reserve (shown as "landscaped mound" and "landscape buffer" on the Concept Plan).		
e 14	To address visual and scenic impacts with	r	Upgrade local visual quality of Ewingsdale Road as "gateway" to Byron Bay with		
1.0	development of roadways, carparking areas		integrated regeneration/ restoration and weed management strategy. Consider public		
21	and other facilities.		safety issues/ protection of sight distances along entry roadway, carparks and		
1.			pedestrian/ bikepath connections.		
	To provide safe pedestrian/ bikepath access	8	Shared pedestrian/ bikepath access		
	and connections within the site and along		Provide staged development of shared pedestrian/ bikepath as follows:-	Proposed staged development/ capital works items	high
1.14	Ewingsdale Road.		 Ewingsdale Road - Byron Bay connection; 	completed subject to available funding and the	ongoing
	To expand opportunities for alternate visitor		Ewingsdale Road - Pacific Highway/ Ewingsdale connection;	current Capital Works Program.	
	access and enhance recreational experience.		3. Internal connections - separate Ewingsdale Road access, proposed Visitor		
			Information Centre, "park and ride" facility and sports fields/ indoor centre.	-	
850			Investigate opportunities for pedestrian/ bikepath connection through to Bayshore Drive,	Investigations conducted and recommendations implemented.	medium
			subject to environmental protection.		

PLAN OF MANAGEMENT 249 Ewingsdale Road, Byron Bay

4 of 8

69

(Management objectives) butcome: To promote opportunities for p sctives: Management of community land			MEANS OF ASSESSMENT	Priority
ote opportunities for p ant of community land		(Management Actions)	(of the actions)	
ent of community land	ublic ac	Desired Outcome: To promote opportunities for public access and appropriate recreational and community infrastructure.		
	l catego	Core Objectives: Management of community land categorised as Sportsground (36F), General community use (36I), Matural area wetland (36K) and bushland (36J)	iK) and bushland (36J).	
To address significant shortfalls in supply of sports	C10	Multi-use community sports fields		
fields and recreational facilities in the local area.		 3 X cricket pitches (including two senior (1 x turf) one for social cricket); 3 X cricket pitches (including two senior (1 x turf) one for social cricket); 	Proposed staged development/ capital works items	very high
To improve the quality and range of facilities and increase opportunities for competition at regional level		 I A senior soccer (association) iteria, z A senior and junior soccer iteras and z A junior soccer fields. 	completed subject to available tunding and the	ongoing
To ensure broad community access to multi-use		 - 1 X rugby union field (not full-size) and touch football field and 1 X shared touch football 		
sports fields, recreational and community facilities.		field (soccer and softball);		
To encourage broad community involvement		 1 X multi-use athletics field/ track including 400 metre running track, straight for sprint 		
in the reserve's future management.		events, areas for discus, shot put and javelin, long jump and triple jump events; softball		
to promote equity and transparency in the		nets and playing held for hockey and trispee.		
management of facilities and playing fields.		 special community use field/open grassed area for social cricket/ junior soccer (see 		
to provide new and expanded facilities to address		above), special events and temporary over-now event parking/ park and noe opnons,		
growur sports. Fo maximico usano of fielde economicului (eramond				
solidiry (summen				
winter sports) including evening/ night use.		- floodignting of all playing heids.		
To provide a range or passiver unstructured		- diteriuti tudeu bike di cuit (dite kitolitette di cuit)		
		- 2. A separate attratives buildings		
To ensure appropriate security, public safety and		- bike and skate park facility		
		 workshop/ maintenance building 		
		 fencing to playing areas/ security fencing 		
To provide a ranne of multiluse indoor ornanised	5	 Iteated effluent re-use poind for grounds maintenance Indoor Pacreation Eacility. 		
ro provide a range or many-use indoor organised	5	Indoor recreation/ community building to include multi-use facilities for indoor haskethall	Dransead staned development/ renited worke iteme	hinh
		netball, soccer, cricket and volleyball. Other facilities to include club meeting room, canteen/	completed subject to available funding and the	P
	-	klosk, space for community/ leisure activities (eg. music and arts) and equipment storage.	current Capital Works Program.	
To promote innovative sustainable technologies	CIZ	Recreation facilities development and management		10000
in the development of recreational infrastructure.		Ensure high standard of playing field construction and maintenance with adequate	as above	very high
to etisute a ringit statituatu ut ueverupritetit attu maintenance of nlavino surfaces		suosoli urailiage (as requireu), quality turi piaying suriaces, autoriaut irrigatori systerii fsi hiart to interration with water storane/recucing technologies) and floodinghting	IIIVesugatoris contracted and recontinuendations implemented.	
To promote opportunities for positive outcomes		Investigate solar options for general lighting requirements.		
amongst stakeholder user groups and the	C13	Promote community awareness of the future staged development of the reserve	Number of complaints/ unresolved issues over time.	medium
		for organised sports activities and other opportunities. Ensure transparency and		ongoing
To address management issues, operational		equity in the management of these facilities.		
protocols and responsibilities in the use of facilities.	C14	Investigate options for establishing a Park Management Committee. Develop an	Investigations conducted and recommendations implemented.	medium
to assist user groups in sourcing appropriate funding for development of facilities		Uperauonan Manuar addressing membership Issues, omoe-bearers, meeungs, imance/ insurances lasses/licences use of buildings facilities and novinde reconsibilities	Operations manual prepared and implemented. Number of successful arent andicelians	ongoing
		for capital works, sports funding applications and general maintenance, public safety/	Works implemented subject to appropriate funding.	_
		risk management, security, insurances and environmental protection.		

5.0 MANAGEMENT STRATEGIES

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70

Performance Target	Item	Means of Achievement	Means of Assessment	Priority
(Management objectives)		(Management Actions)	(of the actions)	
Desired Outcome: To promote opportunities for	public a	Desired Outcome: To promote opportunities for public access and appropriate recreational and community infrastructure.		
Core Objectives: Management of community lan	d catego	Core Objectives: Management of community land categorised as Sportsground (36F), General community use (36I), Natural area wetland (36K) and bushland (36J).	6K) and bushland (36J).	
To permit the use of the land for sustainable	C15	Visitor Information Centrel Interpretive Facilities and Cafél Restaurant Devide stands developments of a Visitor Information Control Industrian local and reviewed	Insurfactions and used and recommendations implemented	modium
development or recreational, current and routist facilities and infrastructure.		r rowad staged development or a visitor minormation derive involuting local and regional tourist information services, environmental education and interpretive facilities, meeting	Proposed works implemented subject to available funding.	
To promote site's "gateway" location to Byron Bay.		rooms, displays and kicsk/ visitor's shop with outdoor deck, tables/ seating.		
To investigate opportunities for involvement of Arakwal people.	619	Investigate opportunities to involve local Arakwai people in the development of these facilities and interpretive programs.	Investigations conducted and recommendations implemented.	hgh
To investigate option of a cafe/ restaurant.	C17	Investigate separate option for inclusion of small to medium sized cafe/ restaurant and kitchen with seating up to 40-50 people.	Investigations conducted and recommendations implemented.	low
To promote low impact visitor access to	C18	Wetland walking track/environmental education		
adjoining wetland areas and environmental		Investigate options to provide a low-key, sensitively designed walking track (short circuit)	Proposed works implemented subject to available funding.	medium
education.	_	through adjoining sedgeland/ Paperbark woodland, linked to Visitor Information Centre (incl. boardwalks and interpretive signage).		
To improve visitor orientation, recreational	C19	Reserve signage		
experience, awareness of appropriate		Provide a logical, coherent and integrated approach to signage. Introduce a simple historycol information with lattoring could be distance visuancial and mode of	Proposed works implemented subject to available funding.	medium
veriariour, range or racines and open space linkages.		meratory of monitation with retering scaled to distance, verypoint and more of transportation.		Buindino
Desired Outcome: To establish guidelines for as	sessing	Desired Outcome: To establish guidelines for assessing leases, licences and other estate for community land.		
Core Objectives: Management of community lan	d catego	Core Objectives: Management of community land categorised as Sportsground (36F). General community use (36). Natural area wetland (36K) and bushland (36.J).	6K) and bushland (36J).	
To provide express authorisation for appropriate	6	This Plan of Management expressly authorises the granting of leases, licences or other	Leases/ licences granted in accordance with	ongoing
leases, licences or other estate over community land.	č.	estate over this community land for the purposes of providing goods, services and	this Plan of Management.	
To ensure consistency with relevant legislation		facilities, and the carrying out of activities, appropriate to current and future needs	Assess against Council policies, principles and	
affecting the uses and activities on community land.		within the local community and of the wider public in relation to any of the following:	permitted uses consistent with community land	
To protect the future reserve's values from		 public recreation, social and educational activities; the sheared and social and indicational indications of the second social activities in the second social activitities in the second social activities in the second social act	categories and core objectives.	
To permit the granting of leases licences or other		- ure prigsteat, cultural, social allo intellectual wellare of ueverupritetic	Medonia Ucirdo Over mille.	
estate which are consistent with community needs	_	 only if the number for which it is anatted is consistent with the core 		
and the community land core objectives		onig is the properties internet and granted to consider that and one		

71

	Priority	ongoing	ongoing	ongoing	high angoing high
	Means of Assessment (of the actions)) and bushland (36.1). Short-term and casual licences granted in accordance with this Plan of Management.	Leases and/ or licences granted in accordance with this Plan of Management.	Short-term and casual licences granted in accordance with this Plan of Management.	() and bushland (36.)). Number of programs initiated/ level of involvement. Measure trends over time. as above
	Means of Achievement (Management Actions)	h guidelines for assessing leases, licences and other estate for community land. to f community land categorised as Sportsground (36F), General community use (36I), Natural area wetland (36V) and bushland (36J). nand casual D2 In accordance with s.24 of the Local Government (General) Regulation 1999, the use or compation of community land for the local Government (General) Regulation 1999, the use or compation of community land for the lolowing events is prescribed as a purpose in with this Plan of Managrees of the physing of ta Muscle instrument, or singing for a feo or reward; engaging in a tardition a council may grant in licence on a short-term, casual basis; engaging in a tardition target in licence on a short-term, casual basis; engaging in a tardition of the control may grant a licence on a short-term, casual basis; engaging in a tardition target in the or reward; engaging in a tardition or sport; engaging in a tardition or short-term, casual basis; entercing a public address; engaging in a tardition context entercing a public address; engaging; entercing a public address; entercing a public address; f f functions such as weddings and family gratherings; f fine use or cocupation of community land for such short term or casual events f fine use or cocupation of community land for such short term or casual events f fine use or cocupation of community land for such short term or casual events f fine use or cocupation of commu	building or structure of a permanent nature. This Plan of Management expressly authorises the granting of a lease or licence over community land categorised as general community use' sportsground for the following uses and activities: - 'Park and ride" transit' shuttle services (see items CS/ CB) - 'Vsikor information Cente - Josk and/or visitor's shop (see item C15) 	This Plan International course compared requesting to the plane over This Plan d Alengement expressly authorises the graning of a licence over community land categorised as sportsground for the following uses and activities. - Indoor Recreation Facility - canteent kicks [see item C11]	Desired Outcome: To promote opportunities for dialogue with traditional Aboriginal custodians. Autural area wetland (36K) and bushland (36J). Core Objectives: Management of community land categorised as Sportsground (36F), General community use (36I), Natural area wetland (36K) and bushland (36J). Number of programs in the indigenous community and number of programs in with traditional Aboriginal custodians. To promote opportunities for dialogue and consultation E1 Continue to promote opportunities for consultation with the indigenous community and number of programs in with traditional Aboriginal custodians. Number of programs in consultation and community use (36K), and bushland (36J). To promote opportunities for community and custodians. E1 Continue to programs in contemporary expression. To promote opportunities for community outure E2 Review opportunities in rowhe had a pravisal people, the area's traditional Aboriginal custodians. To promote opportunities for community outure E2 Review opportunities in rowhe hardward people, the area's traditional Aboriginal custodians.
	Item	ssing leas ategorise D2	8	4	alogue wi E1 E2 E2
Action Plan	Performance Target (Management objectives)	Desired Outcome: To establish guidelines for asse Core Objectives: Management of community land o To permit the granting of short-term and casual licences consistent with the relevant legislation.	To permit the granting of leases, licences or other estate which are consistent with community needs and the community land core objectives.	To permit the granting of short-term and casual licences consistent with the relevant legislation.	Desired Outcome: To promote opportunities for dialogue with traditional Aboriginal custodians. Core Objectives: Management of community land categorised as Sportsground (36F), General cc To promote opportunities for dialogue and consultation E1 Continue to promote opportunities for contemporary expo encourage the support, interpretation and and therpretation of cultural values. To promote opportunities for community education E1 Continue to promote opportunities for contemporary expo encourage the supportunities for contemporary expo and interpretation of cultural values.
5.2		nces and other estate	leases, lice		cultural heritage

5.0 MANAGEMENT STRATEGIES5.2 Action Plan

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72

NCIL

7 of 8

5.0 MANAGEMENT STRATEGIES
 5.2 Action Plan

5.2	Action Plan				
	Performance Target	Item	Means of Achievement	Means of Assessment	Priority
	(Management objectives)	11/18	(Management Actions)	(of the actions)	
	Desired Outcome: To protect and enhance the exte	ent, qua	Desired Outcome: To protect and enhance the extent, quality and connectivity of existing native vegetation and habitats.		_
	Core Objectives: Management of community land	categori	Core Objectives: Management of community land categorised as Sportsground (36F), General community use (36I), Natural area wetland (36K) and bushland (36J).) and bushland (36J).	
1990	To conserve biodiversity and maintain	Ξ	Management zones		
	ecosystem function in respect of the land,		Clearly delineate management zones [eg. significant habitat/ buffers and corridors	Management zones clearly delineated within proposed	hġh
	or the feature or habitat in respect of which		under restoration regimes, informal passive/ active open spaces with mown	development.	ongoing
1000	the land is categorised as a natural area.		understorey or open grassed areas. Install mowing strips, interpretive signage and/	Numbers or % of vegetative cover damaged or	
	To provide for community use of and access		or low-key timber protective fencing, barriers or bollards as required to protect tragile	destroyed due to inappropriate maintenance regimes,	
	to the land in such a manner as will minimise		natural areas from inappropriate maintenance regimes or where trampling may occur.	trampling, vandalism, sporting activities, etc.	
ĥ	and mitigate any disturbance caused by	F2	Ecological buffers and 'mosaics'		8
is	human intrusion.		Ensure appropriate protection and management of adjoining sedgeland habitat designated	Area under restoration/ enhancement per annum.	ongoing
le	To improve quality, extent and connectivity		as an area of Extremely High Conservation Value. Provide ecological buffer treatments	Measure trends over time.	8 5
vi	of native habitat and enhance biodiversity.		and integrate approach using 'mosaics' within the sportsground edges and margins rather		
ро	To address the long term objectives of building		than simply turfing these areas. Investigate options for using commercially available		
iq	ecosystem resilience and durability.		native turf grasses.		
р	To develop appropriate intervention strategies.	£	Minimise opportunities for invasion by pest/ noxious species, including proposed wetland	Number of pest/ noxious species monitored over 5 years	ongoing
ue	To secure genetic integrity as a key component		effluent re-use pond (eg. Plague Minnow, Cane Toads, Water Lettuce - see	and programs initiated to address issues.	
1	of the restoration and enhancement strategy.		recommendations in EHA & FFS, 2004).		
uə	To establish a representative level of species	F4	Develop an adequately funded, staged and monitored weed management and	Number and % of changes to native vegetation and habitat	hġh
w	and structural diversity.		regeneration/ restoration program which will deliver sustainable outcomes for the	which are not consistent with this Plan of Management	ongoing
uo	To manage recreational impacts and protect		community land categorised as Natural Area: wetland and bushland.	and threatened species legislation.	
, in	regeneration/ restoration areas from	53	Consolidate adjoining core habitat areas through staged removal of weed species and	Area under regeneration per annum.	ongoing
۸u	trampling and erosion.		buffer enhancement. Implement a minimal disturbance bush regeneration approach	Area under restoration/ enhancement per annum.	
ə			where positive net gains are achievable [ie. high levels of resilience]. Ensure the	Measure trends over time.	
			program protects and enhances vital habitat for threatened species and bio-linkages.		
		99	Use locally-sourced indigenous species in these strategies [ie. use of local genotypes	Number and % of overall species used being locally-	ongoing
			of species rather than introducing genotypes from different unrelated areas).	sourced [ie. local genotypes].	
	To improve visitor awareness of environmental	E	Provide opportunities for environmental education (eg. interpretive signage, walking tracks/	Proposed works implemented subject to available funding.	medium
	programs and promote community involvement.		boardwalks and Vistor Information Centre - see items C15-C18.		
		82	Subject to funding and labour constraints, progressively restore and expand upon	Consolidation and expansion of restoration program	ongoing
			existing work to provide improved habitat, bio-linkages and buffers to reduce effects	in accordance with appropriate funding.	
			or tragmentation, ecosystem simplification and instability.	7% of disturbed areas under restoration over 3 years.	

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NCIL

8 of 8

5.6 CAPITAL WORKS PROGRAM

ITEM	ACTION	CAPITAL COST (\$)	IMPLEMENTATIO
			006 009 009
	Public land classification		
and investig	no capital works component		
81-87	Community land development		
B1-B6	no capital works component		
B7	Staged development of facilities/ infrastructure [refer to following items]	see below	
C1	Traffic Management Plan - Ewingsdale Road	not costed	and the second s
C2	Internal sealed bitumen roads [not including roundabout]	\$150,000.00	131 162
C3-C4	Pedestrian/ bikepath crossings/ slow points & water quality control	incl. above	
C5-C6	Staged development of carparking facilities:	COLO 000 00	
	1. Two car parking areas (313 car spaces)	\$250,000.00	100 <u>101</u> 100
	2. 'Park and Ride' facility/ transit area facilities & carparking	\$140,000.00 incl. below	and seen
C7-C8	3. Open grassed temporary over-flow parking area	ITICI. DEIOW	
C9	Staged restoration of native vegetation/ buffers - see items F2-F8 Staged development of shared pedestria/ bikepath access:		
Ca	1. Ewingsdale Road - Byron Bay connection	not costed	
	2. Ewingsdale Road - Pacific Highway/ Ewingsdale connection	not costed	
	3. Internal connections	\$35,000.00	1000
C10	Multi-use community sports fields:	400,000.00	
010	[incl. site preparation/ groundworks - peat soils in western fields & irrigation]		
	1. Multi-use fields (north-west) - cricket/ senior soccer, softball, rugby & touch	\$480,000.00	1231
	2. Multi-use athletics field/ track facilities [incl. hockey/ frisbee/ softball field]	\$320,000.00	
	3. Multi-use fields (south-west) - cricket/ senior & junior soccer	\$400,000.00	100
	4. Special community use (south-east) - cricket & junior soccer/ overflow parking	\$150,000.00	100
	4 No. netball courts X 4 [hard surface]	\$85,000.00	1.00
	floodlighting [all playing fields/ netball courts]	\$250,000.00	1000 6000
	Criterium closed bike circuit [separate section - bitumen seal]	\$140,000.00	
	2 No. amenities buildings	\$160,000.00	100
	4 No. cricket nets	\$25,000.00	
	3 No.children's play areas	\$150,000.00	
	bike and skate park facility	\$100,000.00	
	workshop/ maintenance building	\$45,000.00	
C11	Indoor Recreation Facility	\$950,000.00	
C12	see above for details		
C13-C14	no capital works component		
C15-C17	Visitor Information Centre [incl. building, kiosk/ visitor shop, toilets, displays/	\$1,250,000.00	
0.00	interpretive facilities, café/ restaurant, outdoor deck & landscaping]		
C18	investigate wetland walking track/ interpretive signage [incl. boardwalk]	not costed	
C19	Signage	\$40,000.00	
	no capital works component		1000 (NO) 1000 (NO) 1
4524			THE REAL PROPERTY.
	no capital works component		100 100 100 100 1
SCHERING 1			
F1	Management zones delineation/ protection [incl. fencing/ signage]	\$40,000.00	1271 1221 1221
F2-F8	Staged restoration of native vegetation/ buffers & weed management	\$80,000.00	
	TOTALS	\$5,240,000.00	
THE PARTY OF		CONTRACTOR AND	continued over pa

Note: * Opinion of probable landscape constructions costs is based on the Concept Plan and all figures shown are indicative only.

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5.6 CAPITAL WORKS PROGRAM (CONTINUED)

2006	\$980,000.00
2007	\$985,000.00
2008	\$1,075,000.00
2009	\$1,385,000.00
2010	\$815,000.00

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