

5. CATCHMENT STRATEGIES

INTRODUCTION

The following section describes in detail the strategies that derived from the development of planning and management principles for Rapid Creek.

The strategies are intended to provide clear guidelines for the future planning, design and management of the creek.

STRATEGIES

The strategies are collated under three common headings and should be read in conjunction with the corresponding drawings:

- *Water Management and Habitat Conservation* (refer Figures 5.1 and 5.2)
- *Recreation, Access and Landscape Character* (refer Figure 5.3)
- *Open Space Planning and Management* (refer Figure 5.4)

ROLE AND RESPONSIBILITIES

Under each heading the specific strategies are documented in detail with a corresponding indication of the parties that should be responsible for implementation or further development. Explanations of abbreviations used are provided below.

PRIORITIES AND OPPORTUNITIES

At the end of each strategy, an abbreviation in bold letters indicates the *priority* and *opportunity* for implementation. This is based on a combination of the urgency of implementing the strategy and the opportunity to do so. Thus, whilst an action may be urgent, the opportunity to implement it immediately may be precluded by lack of opportunity (e.g. land unavailable).

The first letter represents *priorities*

- H** high (requires action as soon as possible)
- M** medium (requires action in the short to medium term)
- L** low (not urgent but should be undertaken as part of the programme)

The second letter represents *opportunity*

- N** achievable now (can/should be undertaken in years 1-2)
- S** achievable soon (can/should be undertaken in years 2-5)
- E** achievable in the long term (can/should be undertaken in years 5-10 or later)
- X** achievability dependent on workforce, budget and an agreed programme

Thus by way of example:

- H/N** action can and should be undertaken now or within the next 2 years
- H/E** action should be undertaken as soon as the constraint is removed
- M/S** action should be taken in years 2-5
- L/N** action can be taken now but is not a high priority.

ABBREVIATIONS FOR STAKEHOLDERS AND INTEREST GROUPS

AAPA	Aboriginal Areas Protection Authority
ATCV	Australian Trust for Conservation Volunteers
DCC	Darwin City Council
DEF	Defence
DIA	Darwin International Airport
DLPE	Department of Lands, Planning and Environment
ECNT	Environment Centre NT
FN	Field Naturalists
FRS	Fire and Rescue Service
GANT	Greening Australia NT
KAB	Keep Australia Beautiful
NGC	Northlakes Golf Course
NTU	Northern Territory University
PAWA	Power and Water Authority
PWCNT	Parks and Wildlife Commission of the Northern Territory
RCCAC	Rapid Creek Catchment Advisory Committee
RCLG	Rapid Creek Landcare Group
TENPS	Top End Native Plant Society
THS	Territory Health Services
TW	Transport and Works

5.1 WATER MANAGEMENT AND HABITAT CONSERVATION

5.1.1 WATER MANAGEMENT

(To be read in conjunction with Figure 5.1)

Manage water in Rapid Creek in a manner compatible with its landscape/bushland context and to provide a high quality water as an integral aspect of the natural systems, pursuing the following strategies in conjunction with all other strategies listed elsewhere:

Generally

Establish links with adjoining major landholders and interest groups. Agree common strategies on water management and integrated water management planning and design. Concentrate on upstream influences and downstream effects. **(H/N)**

Govt
Departments/
Authorities/
Community
Groups
RCCAC

Develop a catchment management plan for Rapid Creek having consideration to total catchment management. **(H/N)**

Govt Depts
Authorities
Community Groups
RCCAC

Information and Management Advice

Undertake a community liaison programme informing residents of the need to reduce nutrient inputs into the stormwater and creek system by encouraging them to:

DCC
RCCAC

- reduce fertilizer inputs and prevent runoff
- undertake washing of vehicles, boats etc on lawns rather than the streets
- stop dumping of garden wastes into drainage lines

Furthermore, inform residents of the negative impacts of low flows from the stormwater system into the creek and advise on actions to prevent this. **(H/N)**

Water Quality

Improve and maintain water quality by:

- Establish a monitoring program that extends that done by DIA and PAWA between 1990 and 1993. Determine application role of Waterwatch and similar community based programmes to include monitoring in the area of the Rapid Creek mouth and at the major inlet points to the upper catchment. (H/N) Community Groups
PAWA
- Investigating the need for gross pollutant traps at stormwater inlets to remove litter and coarse to medium sediments. (M/N) DCC
DIA/DEF
PAWA
- Establishing vegetation filter strips (minimum 5 metres wide) where possible incorporating low profile mounding in Northlakes Golf Course, Marrara Sports Complex, DIA, DEFENCE and in other developed park areas. (M/N) NGC
DIA
DEF
DCC
NTU
- Undertake a joint review of the water quality monitoring and assess success of other programmes on a yearly basis. Amend or extend programmes as required. (M/N) DCC
DIA/DEF
PAWA
RCCAC

Creek Stability

- Improve creek stability by implementing rock armouring at critical locations identified. (M/N) PWCNT
DCC

Erosion Control

- Undertake erosion control measures and prevent sediment runoff from all building and development sites in the catchment. (H/N) Govt Depts
DIA
Authorities
DCC
- Stabilize any eroding areas at the outlets of all stormwater drains. (M/N) DCC

Flooding

Reduce the potential for increased flooding in the catchment by:

- undertaking detailed flood impact assessment as it relates to any development proposals within the catchment (on-going)
(H/N) DLPE
- maintaining wetlands and slow flow areas in upper catchment in the present undeveloped state
(H/N) DEF
- removing choking weeds and debris from creek below McMillans Road as part of an on-going maintenance program
(M/N) DCC

5.1.2

HABITAT CONSERVATION

(To be read in conjunction with Figure 5.2)

Conserve the natural systems of Rapid Creek catchment in a manner compatible with the natural attributes, pursuing the following specific strategies:

Vegetation Management

Manage the remnant vegetation communities and adjoining open space to optimise their habitat and ecological values through the following actions:

- Consolidate and expand healthy remnant bushland areas into areas that are degraded. Stabilize degraded areas and undertake spot removal of highly invasive weed species (eg *Mimosa pigra*). Undertake all works by applying regeneration and revegetation techniques as described in 3.4
(H/X)
Govt Dept
Authorities
Community Groups
RCCAC
- Implement a weed control programme for gradual removal of all weed species from remnant vegetation, based on regeneration/revegetation techniques and incorporating other actions described here. This can be undertaken concurrently with the action above but should not precede them
(H/X)
Govt Dept
Authorities
Community Groups
RCCAC
- Install a formal boundary/maintenance edge between cultivated grass areas and bushland areas (eg shared pathway)
(M/S)
DCC
PWCNT
DIA
NTU
DEF
- Rationalise existing open space along Rapid Creek Road and Lakeside Drive and undertake revegetation using indigenous species where appropriate
(L/N)
DCC
NTU
- Implement a programme of tree and shrub planting in open space areas that uses plant material that will provide habitat value to native fauna
(L/N)
Govt Depts
Authorities
Community Groups

RAAF Base

Greening Australia, DCC and PWCNT to liaise with the Defence in preparing a detailed conservation plan, incorporating the strategies described here, for protecting the upper catchment (M/N)

DCC
PWCNT
GANT
DEF
RCCAC

Fire Management

Develop a fire management strategy and plan for the different vegetation communities as described in 3.4, and implement the plan (H/N)

PWCNT
DCC
GANT
FRS
DEF
RCCAC

Human Resources

Establish formal planning meetings between management authorities maintenance contractors and volunteers to co-ordinate habitat conservation work in the catchment through the RCCAC. (H/X)

Govt Depts
Authorities
Community Groups
RCCAC

Develop forward plans for the use of employment programme schemes (H/X)

DCC
RCCAC

Nursery and Seed Bank

Establish indigenous seed bank and undertake collection of seed material from remnant vegetation in the catchment (HN)

DCC
Community Groups

Establish a nursery as a community resource to support the propagation of locally indigenous species for regeneration revegetation and landscape treatments (M/S)

PWCNT
DCC
NTU
Community Groups

Public Information / Neighbouring Residents

Establish an information brochure free to the public and circulated to local residents containing information on the conservation value of the creek, reasons for and locations of access and footpaths, and means by which individual property owners and Rapid Creek users may reduce negative impacts in the catchment (M/N)

DCC
RCCAC

Fauna Study

Undertake formal fauna study or develop and co-ordinate a community based monitoring programme similar to that undertaken by Australian National Conservation Agency (Urban Wildlife Survey) (L/N)

PWCNT
DCC
Community Groups
RCCAC

WATER MANAGEMENT

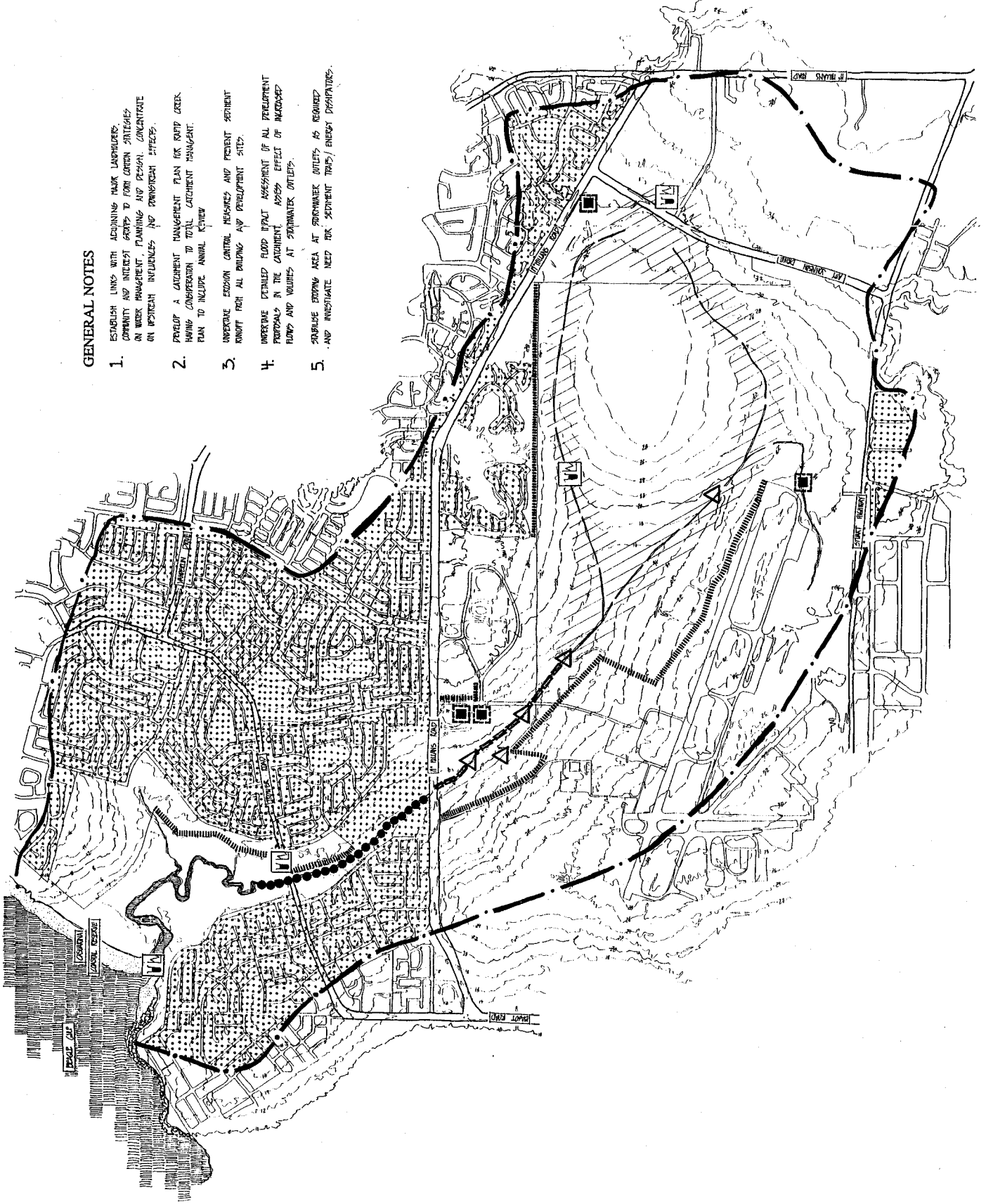
Figure 5.1

GENERAL NOTES

1. ESTABLISH LINKS WITH EXISTING PLANNING LAWS, POLICIES, COMMUNITY AND INTEREST GROUPS TO FORM COHESIVE STRATEGIES ON WATER MANAGEMENT, PLANNING AND DESIGN, CONCENTRATE ON UPSTREAM INFLUENCES AND DOWNSTREAM EFFECTS.
2. DEVELOP A CATCHMENT MANAGEMENT PLAN FOR RUPP CREEK, HAVING CONSIDERATION TO TOTAL CATCHMENT MANAGEMENT, PLAN TO INCLUDE ANNUAL REVIEW.
3. INVESTIGATE EROSION CONTROL MEASURES AND PREVENT SEDIMENT RUNOFF FROM ALL BUILDING AND DEVELOPMENT SITES.
4. UNDERTAKE DETAILED FLOOD IMPACT ASSESSMENT OF ALL DEVELOPMENT PROPOSALS IN THE CATCHMENT, ASSESS EFFECT OF INCREASED FLOODS AND VOLUMES AT SEWAGEWORK OUTLETS.
5. STABILISE EROSION AREA AT SEWAGEWORK OUTLETS AS REQUIRED, AND INVESTIGATE NEED FOR SEDIMENT TRAPS/ ENERGY DISSIPATORS.

LEGEND

- COMMUNITY LIAISON AND EDUCATION PROGRAMME NOTING RESIDENTS ON IMPACTS OF NITROGENS AND OTHER POLLUTANTS WITH LOW WATER FLOWS ON THE HEADS OF THE CREEK.
- RE-ESTABLISH PLANT WATER QUALITY MONITORING.
- ADDITIONAL WATER QUALITY MONITORING.
- INVESTIGATE NEED FOR GROSS POLLUTANT TRAPS AT RUPP CREEK OUTLETS.
- IMPROVE STRATEGIES TO STABILISE BANKS AT CRITICAL LOCATIONS.
- CONSTRUCT VEGETATED FILTER STRIPS AS REQUIRED TO INTERCEPT AND FILTER OVERLAND FLOWS.
- MAINTAIN WEEDLANDS AND SLOW FLOW ACROSS IN UNDEVELOPED STATE TO PREVENT FLOODING.
- REMOVE WEEDS AND OTHER DEBRIS FROM CREEK CHANNEL.
- CATCHMENT BOUNDARY



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C
DARWIN

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HABITAT CONSERVATION

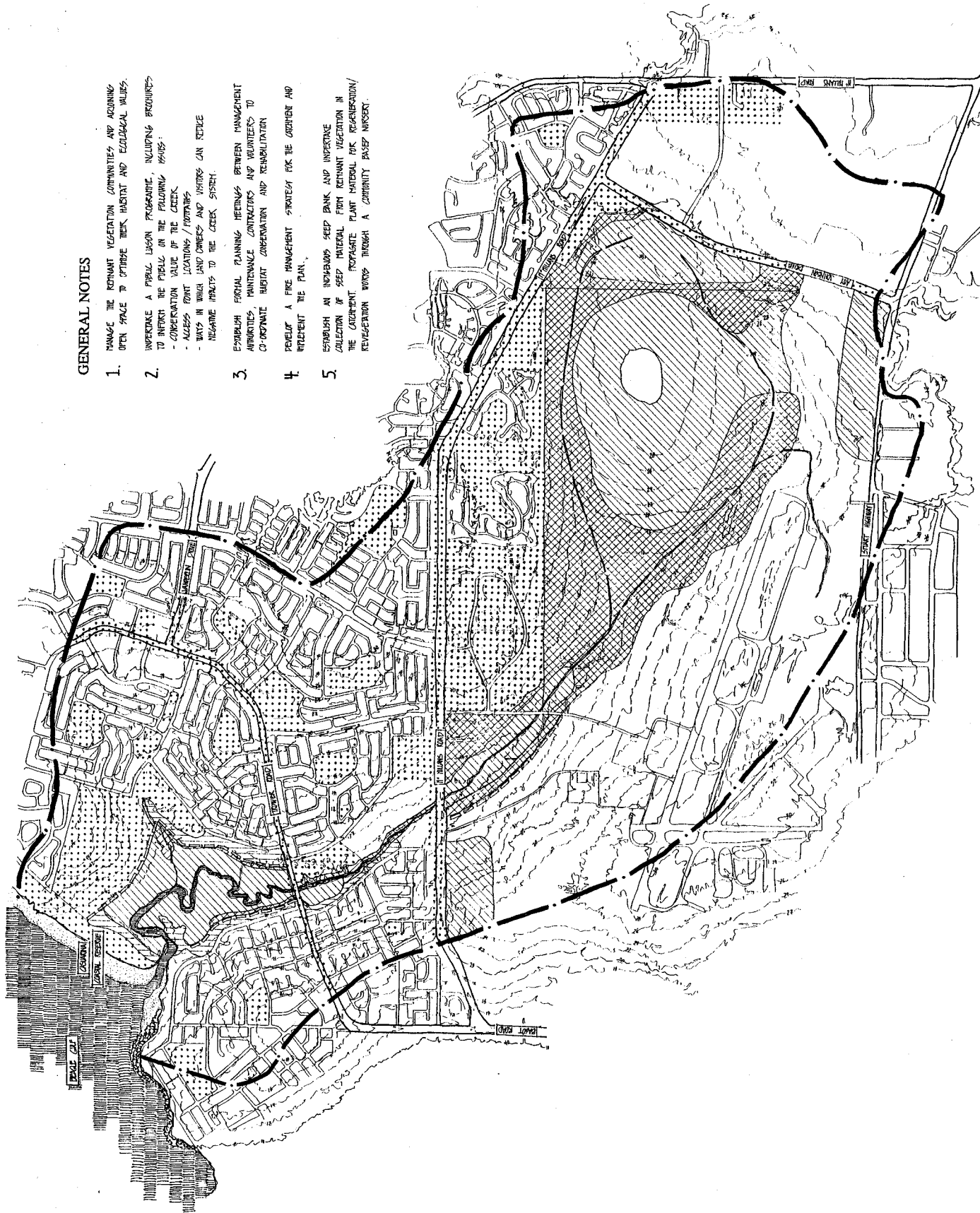
Figure 5.2

GENERAL NOTES

1. MANAGE THE REMNANT VEGETATION COMMUNITIES AND ADJOINING OPEN SPACE TO OPTIMIZE BIODIVERSITY AND ECOLOGICAL VALUES.
2. IMPLEMENT A PUBLIC LEARN PROGRAMME, INCLUDING MEASURES TO INCREASE THE PUBLIC ON THE FOLLOWING ISSUES:
 - CONSERVATION VALUE OF THE CREEKS
 - ACCESS POINT LOCATIONS / ROUTES
 - WAYS IN WHICH LAND OWNERS AND VISITORS CAN REDUCE NEGATIVE IMPACTS TO THE CREEK SYSTEM
3. ESTABLISH PERIODIC PLANNING MEETINGS BETWEEN MANAGEMENT AUTHORITIES, MAINTENANCE CONTRACTORS AND VOLUNTEERS TO CO-ORDINATE HABITAT CONSERVATION AND REHABILITATION PROJECTS.
4. DEVELOP A FIRE MANAGEMENT STRATEGY FOR THE CATCHMENT AND IMPLEMENT THE PLAN.
5. ESTABLISH AN INDIVIDUALS SEED BANK AND IMPLEMENT COLLECTION OF SEED MATERIAL FROM REMNANT VEGETATION IN THE CATCHMENT FOR FUTURE PLANT MATERIAL FOR REGENERATION/REVEGETATION WORKS THROUGH A COMMUNITY BASED NURSERY.

LEGEND

- COMPLICATE AND EXPAND READING REMNANT VEGETATION COMMUNITIES, INCLUDING SPOT REMOVAL OF INVASIVE SPECIES AND REVEGETATION TECHNIQUES
- AS ABOVE, TOGETHER WITH WEED CONTROL PROGRAMME
- RATIONALISE EXISTING OPEN SPACE AND IMPLEMENT REVEGETATION USING INDIGENOUS SPECIES WHERE APPROPRIATE
- IMPLEMENT A PROGRAMME OF TREE AND SHRUB PLANTING IN OPEN SPACE AREAS OF HABITAT VALUE TO NATIVE FAUNA
- FORMALISED BOUNDARY / MAINTENANCE EDGE BETWEEN CONTAINED LANDSCAPES AND REMNANT VEGETATION
- CATCHMENT BOUNDARY



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5.2 RECREATION, ACCESS AND LANDSCAPE CHARACTER

(To be read in conjunction with Figure 5.3)

5.2.1 RECREATION AND ACCESS

Generally upgrade and enhance the Rapid Creek Corridor to encourage appropriate use and enjoyment of the creek for low key recreational activities. These strategies will ensure a heightened sense of community ownership and encourage greater casual surveillance and reporting of incompatible activities.

Bushland Generally

The primary concerns for remnant vegetation will be conservation (refer 5.1.2), however low key recreational use and access will be permitted as described below. The remnant vegetation will be monitored and details of use and access reviewed annually (M/N)

DCC
PWCNT
Community Groups
RCCAC

The Gurumbai Centre

As a demonstration project, and to serve as a focus for education and interpretation of the Rapid Creek environs, develop the Gurumbai Centre, including vehicle access and parking, interpretive centre, walking paths and interpretive signage, dual-use pathway links, planting and rehabilitation. This proposal would be subject to the appropriate transfer of land, since portions of the site are presently under NT Government control and reserved for future use. (Refer to Figure 6.12)

(H/S)

PWCNT
DCC
DLPE
Community Groups
RCCAC

Marrara Swamp

Public access to this important area will be excluded apart from strictly controlled guided visits for scientific and educational reasons. Interpretative information would be provided at the location shown. Extend security fence to prevent uncontrolled access (H/N)

RCCAC
DEF

RAAF Base (between Marrara Swamp and flood mitigation weir)

For security reasons, public access to this area of the catchment would be excluded. However ,the NT Government should seek a lease arrangement for a portion of Defence land, along their northern boundary to provide for a shared pathway link from the lower to the upper catchment (M/S)

DLPE
DEF
RCCAC

Monsoon Rainforest

Instigate a programme of planning, design and management proposals to provide for limited recreational use of this area, without compromising the strategies outlined in 5.1. The following strategies will form part of such a programme:

DCC
Community Groups
RCCAC

- control vehicle access and provide for parking well clear of creek bank and monsoon rainforest. (H/X)
- provide shared pathway link through the area in an appropriate location to provide access and for service vehicles. (M/S)
- allow restricted access to the creek itself, for swimming, fishing and relaxing, in such a manner as to minimise degrading impacts and allowing for regeneration and revegetation as outlined in 5.1 (H/X)
- provide for boardwalk creek crossings above and below Henry Wrigley Drive in locations shown. (M/S)
- develop an information and interpretative centre in the location shown and provide interpretative trails out from this centre and linking with the major shared pathway (M/S)

Darwin Water Gardens

Upgrade the existing facilities to enhance the recreational value of this centrally located reserve and include the following proposals in the redevelopment programme:

DCC
RCCAC

- strengthen existing planting structure with use of indigenous plants where appropriate
- define the recreational spaces and provide visual link to mangroves by reprofiling western boundary
- investigate options for upgrading the water features themselves to a level suitable for swimming and develop a more sympathetic solution to safety fencing
- develop a major information / interpretation centre with trails linking to mangrove and monsoon rainforest when the level of use supports such expenditure (M/X)

Local Reserves

Improve the recreational potential of all local reserves by enhancing their landscape character to generate greater attractiveness for use (and thereby remove pressures from more sensitive areas) and modifying layouts to cater for a particular range of recreational pursuits. As a rule, only passive non-organised pursuits should be encouraged with some facilities for unstructured active recreation, if the reserve can accommodate them without compromising other users.

PWCNT
Community Groups
DCC
NTU

- Instigate a programme of improvement of seating, play equipment, shade trees, revegetation to extend bushland areas, and boundary planting definitions in the reserves fronting Rapid Creek Road, Casuarina Drive and Lakeside Drive (L/X)

Casuarina Coastal Reserve

- Instigate a programme of planning, design and management proposals for the reserve to provide for improved access and recreation facilities for the Rapid Creek Open Area, as described in the Casuarina Coastal Reserve Management Plan (PWCNT, 1991)
(L/X) PWCNT
- Provide for limited pedestrian access to the mangrove areas. facilities to be provided would include marked walking tracks, interpretative materials and possibly boardwalks. The area of mangroves to the north of Rapid Creek, zoned future determination in the Casuarina Coastal Reserve Management Plan (PWCNT, 1991) should be fully protected and utilised as an educational resource since it contains the richest diversity in the mangrove habitat
(H/N) PWCNT
- Upgrade existing access route along boundary with NTU, linking Alawa Sports Ovals with Casuarina Coastal Reserve and Brinkin
(M/X) PWCNT
NTU

Play Equipment

Rationalise locations to avoid inappropriate provision or local over/under supply. Improve and extend equipment to meet varying age range needs and provide ancillary facilities, such as seating and drinking fountains wherever possible
DCC

(M/N)

Access

Extend and improve access and circulation within the catchment for pedestrians and cyclists, and strictly control vehicle access, as described above. Improve the network by adopting the following strategies also:

A U G U S T 1 9 9 4 - N D 7 7

- Develop a major shared pathway for the entire length of the catchment, linking the different vegetation communities with residential areas and other recreational areas. The major linear route will be complimented by cross links and circuit paths as appropriate
(M/X)
DIA
DCC
DEF
PWCNT
RCCAC
- Establish a hierarchy of entrances appropriate to their location and level of use. Use design features and planting for identification of major entrances (entrance feature, directional signage and planting), secondary entrances (directional signage and planting) and minor entrances (planting)
(M/N)
PWCNT
DCC
RCCAC
- In bushland areas identify incompatible access points and circulation routes that are leading to degradation and fragmentation. Close off such areas and incorporate regeneration/revegetation strategies as outlined in Section 5.1
(H/N)
PWCNT
DCC
DIA
DEF
RCCAC
- Maintenance and firebreak/ access routes should be easily and readily available to service and manage the open space resource. Ensure security of all such entry points by providing padlocked gates including at Casuarina Coastal Reserve, monsoon rainforest, Defence grounds and parks facing Lakeside Drive, Rapid Creek Road and Casuarina Drive
(H/N)
PWCNT
DCC
DIA
NTU
DEF
RCCAC
- Provide facilities, including paths, parking and lay back kerbs wherever possible to cater for access by the disabled and prams to the open space resource
(H/N)
PWCNT
DCC
NTU
DEF
RCCAC

5.2.2 LANDSCAPE CHARACTER

Manage the creek corridor to enhance the existing natural character of the creek corridor by optimising existing landscape features and undertake all new development works based on a theme emphasising the natural qualities of the creek environment. All enhancement measures to be developed in concurrence with strategies described in Section 5.1. The specific strategies to include:

Generally

Manage the catchment as a coherent landscape element emphasising the linear, complete nature of the creek itself and identifying the discrete landscape character types and settings as identified in Section 2.2.1 and discussed in Section 3.6
(M/N)

PWCNT
DCC
DIA
DEF
RCCAC

Native Vegetation

Protect and enhance existing remnant bushland to strengthen natural character by incorporating strategies described in Section 5.1
(H/X)

PWCNT
Community Groups
DCC
DIA
DEF
RCCAC

Entrances and Road Crossings

Heighten the sense of special place that the creek corridor constitutes to residents and local road users by strategies for entrances (see 5.2.1 Recreation and Access)
(M/N)

PWCNT
DCC
DIA
DEF
TW
RCCAC

Street Planting

Develop an integrated strategy for native street tree planting for streets within a minimum street block of the creek corridor emphasising the presence of the creek
(M/S)

DCC
TW

Undertake substantial boundary planting of native species to 'open' boundaries at:

DCC
NTU

- Rapid Creek Road
- Casuarina Drive
- Freshwater Road
- Lakeside Drive

(M/S)

Urban Design Vocabulary

Establish a coherent design approach for all urban design elements in and bordering the creek corridor. Make use of appropriate materials in keeping with the natural character of the creek. Elements to include:

- Rapid Creek Logo
- Signage and interpretation panels
- Structures / construction
- Paving and furniture (H/N)

PWCNT
DCC
NTU
RCCAC

Visual Appreciation

Maintain existing vistas and views into and within the creek corridor, particularly long views at:

- Casuarina Coastal Reserve along the beach and out from the footbridge
- down the runway from Amy Johnson Avenue
- high points within the Darwin Water Gardens and Northern Territory University

PWCNT
DCC

PWCNT

DEF

DCC
NTU

and enclosed views at:

- creek crossing on Henry Wrigley Drive, and
- within the various remnant communities (M/N)

RECREATION, ACCESS AND LANDSCAPE CHARACTER

Figure 5.3

RECREATION AND ACCESS NOTES

1. UPGRADE AND ENHANCE THE RAPID CREEK CORRIDOR TO ENHANCE APPROPRIATE USE AND ENJOYMENT OF THE CREEK FOR LOW KEY RECREATIONAL ACTIVITIES
2. IMPROVE SERVICE OF ORDINARY OWNERSHIP TO ENHANCE USUAL SURVEILLANCE AND REPORTING OF INAPPROPRIATE ACTIVITIES
3. MODIFY THE LANDS AND LANDSCAPE CHARACTER OF ALL LOCAL RESERVES TO CATER FOR A PARTICULAR RANGE OF RECREATIONAL PURPOSES. REDUCE RECREATIONAL PRESSURES IN ENVIRONMENTALLY SENSITIVE AREAS
4. REVIEW PLAY EQUIPMENT LOCATIONS, IMPROVE AND EXTEND EQUIPMENT TO MEET THE NEEDS OF WORKING AGE GROUPS AND PROMOTE FACILITIES
5. FACILITATE RECREATIONAL ACCESS TO REMAIN VEGETATION WHERE WATER AND WILDLIFE CONSERVATION IS THREATENED
6. PROVIDE A NETWORK OF MAINTENANCE/EMERGENCY ACCESS ROUTES TO FACILITATE MANAGEMENT OF THE OPEN SPACE RESERVE
7. PROVIDE FACILITIES FOR DISABLED WHEREVER APPROPRIATE

CASUARINA COASTAL RESERVE

- INSTITUTE A PROGRAMME OF:
 - IMPROVE ACCESS, RECREATION FACILITIES AND PLANTING IN OTHER AREAS
 - PROVIDE FOR LIMITED PERSONAL ACCESS TO THE MANGROVES FROM INTERPRETIVE MATERIAL AND UTILISE THE AREA AS AN EDUCATIONAL AND VISUAL RESOURCE
 - IMPROVE EXISTING ACCESS ROUTE ALONG THE NEW PROMENADE

DARWIN WATER GARDENS

- UPGRADE THE EXISTING FACILITIES TO ENHANCE THE RECREATIONAL VALUE OF THE RESERVE IN A RECREATION PROGRAMME:
 - STRENGTHEN EXISTING PLANTING STRUCTURE
 - PLANT INDIGENOUS PLANTS WHERE APPROPRIATE
 - IMPROVE VISUAL LINKS TO MANGROVES
 - RECREATE WATER FEATURES, INTERLUDE ZONES
 - PRELAP A PLANT INFORMATION CENTRE WITH INTERPRETIVE WALKS AND THE RAINFOREST AND MANGROVE COMMUNITIES

MONSOON RAINFOREST

- INSTITUTE A PROGRAMME OF PLANNING DESIGN AND MANAGEMENT PROPOSALS TO PROVIDE FOR LIMITED RECREATIONAL USE WITHOUT COMPROMISING CONSERVATION OF THE WALKS AND INDIGENOUS RESERVE. PROPOSALS WILL INCLUDE:
 - CONTROL OF VEHICLE ACCESS
 - PROVISION OF SHARED CYCLOPATHS/PATHWAYS AND SELECTED ACCESS POINTS TO THE CREEK
 - DEVELOPMENT OF AN INFORMATION CENTRE AND INTERPRETIVE WALKS

LEGEND

- STEEP RECREATIONAL AREA STRATEGIES
REFER NOTES ON DRAWING
- SPECIAL RECREATION / LANDSCAPE CHARACTER STRATEGIES REFER NOTES ON DRAWINGS
- SHARED USE PRIMARY SPORT, LAUNDRY WITH SHARING NETWORK
- INTERPRETATION AND INTERPRETIVE DECKS
- DESIGNATE APPROPRIATE LONG APPROPRIATE TO AVOID BUILT USE AND ACCESS TO EAST, NW AND SOUTHWEST
- MAJOR ENTRANCES TO RAPID CREEK CORRIDOR
- MINOR ENTRANCES TO RAPID CREEK CORRIDOR
- DEVELOP STRATEGY FOR NECESSARY STREET TREE PLANTING
- MAINTAIN/DENYANCE LONG VIEWS AND VIEWS
- MAINTAIN/REMOVE ENCLOSED VIEWS
- CREEK CROSSINGS

LANDSCAPE CHARACTER NOTES

1. MAINTAIN THE NATURAL QUALITIES OF THE CREEK CORRIDOR. ALL NEW WORKS ARE TO EMPHASISE THE EXISTING NATURAL CHARACTER OF THE CREEK ENVIRONMENT
2. URBAN ELEMENTS WITHIN AND BORDERING THE CREEK CORRIDOR MUST BE IN KEEPING WITH A COHERENT DESIGN APPROACH FOR THE CREEK, INCLUDING APPROPRIATE MATERIALS FOR THE NATURAL CHARACTER OF THE CREEK

MARRARA SWAMP

- PUBLIC ACCESS TO BE RESTRICTED TO GUIDED EDUCATIONAL AND SCIENTIFIC VISITS
- UPGRADE AND EXTEND SECURITY FENCE
- INTERPRETIVE INFORMATION BOARD TO BE PROVIDED

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5.3 OPEN SPACE PLANNING, MANAGEMENT AND COMMUNITY LIAISON

(To be read in conjunction with Figure 5.4)

5.3.1 OPEN SPACE PLANNING AND MANAGEMENT

Adopt the following specific planning and management strategies:

Catchment Management Body

Instigate the necessary actions to establish the required legislation to empower a group, to be known as Rapid Creek Catchment Advisory Committee. The Committee would comprise representatives from Council various Government departments and authorities, other groups with a vested interest in the catchment, and community groups. Establish an agreed structure for the trust and a programme for regular formal and informal liaison and meetings. The Committee would co-ordinate the major strategies relating to habitat conservation and water management (Section 5.1), community liaison and education programmes. If considered appropriate, consultative sub-groups would be established for:

ATCV
PWCNT
DCC
DLPE
DLPE
NTU
FN
GANT
DIA
DEF
NGC
RCLG
RCCAC

- bushland planning and management
- water management
- community liaison
- education programmes

The Committee would advise on these matters on a catchment wide basis, and would be the body to adopt and implement the Management Plan (H/N)

Planning Structure and Objectives

The Parks and Wildlife Commission NT will prepare a detailed proposal for establishment of the Catchment Advisory Committee, to present to the Minister for Conservation and Tourism(H/N)

PWCNT

Establish Landuse Objectives for "Residential Developments Neighbouring Bushland" following strategies developed in this Management Plan. Such an instrument would particularly apply to the rural blocks downstream of McMillans Road. Matters for consideration in the assessment of a development application may include all or any of the following criteria:

DLPE
RCCAC

- Height, scale and relationship with adjacent buildings
- Setbacks from creek boundaries
- Extent of earthworks required
- Extent of vegetation to be cleared
- Finished levels above the flood line
- Extent of proposed open space
- Landscape treatment and removal of weeds
- Dedication of land along creek corridor to management authority
- Impacts on site run-off and stormwater disposal

(M/N)

Establish Landuse Objectives for the area east of Amy Johnson Avenue, as an extension to the existing landuse policy. The primary consideration for assessment of development applications will be:

DLPE
RCCAC

- Impacts on site run-off and stormwater disposal
- Protection of downstream areas from erosion and sediment (during and after construction)
- Impacts on nutrient load entering Marrara Swamp
- Extent of vegetation to be cleared

(H/N)

Statutory Authorities

Circulate all authorities with a copy of the Management Plan for comment and liaison on common and agreed work practises in the creek

(DCC)
RCCAC

(H/N)

Council Departments

Circulate the Management Plan to all Council departments for their information, drawing attention to agreed departmental roles, responsibilities and coordination

(DCC)
RCCAC

(H/N)

Land Ownership

Seek to transfer ownership of the following land to a public body or establish appropriate lease arrangements to improve compatibility of management practices:

- Liaise with Defence to transfer the land area enclosing Marrara Swamps to Council control (or RCCAC) (L/S)

(DCC)
DEF
RCCAC

- Liaise with Defence to transfer the land along their common boundary with Marrara Sports Complex and Northlakes Golf Course to Council control (or RCCAC) (L/S)

(DCC)
DEF
RCCAC

- Liaise with DIA to transfer land enclosing the monsoon rainforest and transitional communities between McMillans Road and the flood mitigation weir to Council control (or RCCAC) (H/S)

(DCC)
DIA
RCCAC

Leases

Wherever possible, new leases issued in close proximity to Rapid Creek to include provisions consistent with the principles of the Management Plan. As for other private landholders, an education process will also play a part.

DLPE
RCCAC

Redevelopment of Existing Properties

Ensure that all forms of redevelopment of existing properties along the creek line including subdivisions, dual occupancies or building renovations comply with the principles set out in the Management Plan by a process of public information and education (M/S)

DLPE
RCCAC

Funding

Undertake a research / review of Federal funding/grant opportunities to be directed to Rapid Creek (see also Section 6, Funding Alternatives) (M/N)

PWCNT
DCC
RCCAC

Rapid Creek Park

Consider identifying the creek catchment study area under the umbrella name of "Rapid Creek Park" or similar, and establishing it as a distinct regional park in Darwin's open space inventory (H/N)

PWCNT
DCC
DIA
DEF
RCCAC

5.3.2 COMMUNITY LIAISON

A number of initiatives should be instigated to assist Council / authorities / community liaison.

Catchment Advisory Committee

Establish the Rapid Creek Catchment Advisory Committee as described above as the primary vehicle for liaison and co-ordination
(H/N)

Government Departments
Community Groups

Management Officer

Identify an officer from the Advisory Committee to oversee the implementation of strategies for a fixed period to ensure that momentum for this work is maintained and to facilitate community liaison (M/N)

(DCC)
RCCAC

Ordinance/Surveillance

Encourage frequent use and casual surveillance of the creek and corridor by users through the strategies outlined in this Plan and encourage reporting of ordinance violations, littering and dumping to management officer (M/N)

Community
RCCAC

Emergency Contact Officer

Identify and circulate the name of a contact officer for rapid response to urgent / emergency concerns in the creek corridor, reported by community (M/N)

(DCC)
RCCAC

Council Meeting

Provide adequate notice and agenda to RCCAC and other interested individuals / groups of any full Council or Council Committee meetings at which issues concerning Rapid Creek Catchment are to be raised, and provide opportunity for a member of RCCAC to make a presentation if appropriate or necessary (H/N)

DCC

Interpretation and Information

Develop an integrated programme of signage, information leaflets, interpretation panels and media releases to inform, interpret and educate creek users and the local community including:

- Directional Information: Signage and pamphlets for various lengths of walks within the creek corridor and links to other path systems, including cycling and disabled access information

(M/S)

DCC
PWCNT
RCCAC

- Interpretation: Pamphlets (as above and readily available) and display panels to interpret the natural environment and local heritage. This could be an extension of Greening Australia's present programme

(M/N)

GANT
DCC
PWCNT
RCCAC

Education Resource

Liaise with local schools to establish an educational resource and ease of access to the creek and remnant bush. Involve school children and local residents in the active management of the creek corridor. Guided walks, field trips, monitoring programmes and survey exercises are legitimate educational activities

(M/N)

GANT
DCC
PWCNT
RCCAC

Further Historical Investigation

Carry out a coordinated oral history based on interviews and walks with local residents, particularly those who have lived in the vicinity for substantial periods of time. Compile a written record of the interviews, summarising the key events, developments, personalities (This programme would continue on from work already performed by Sean Heffernan (1991)






(L/S)

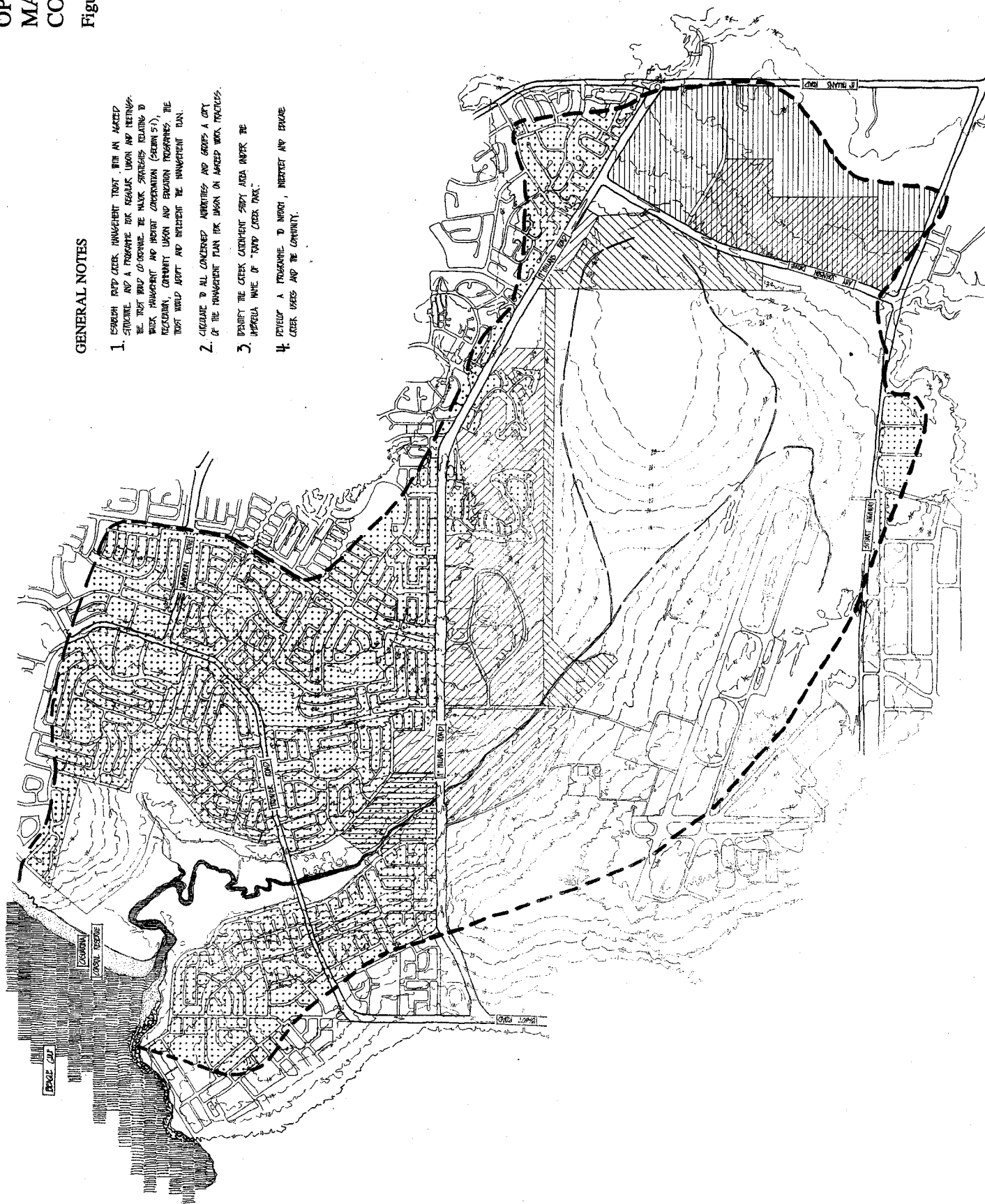
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RCCAC

OPEN SPACE PLANNING, MANAGEMENT AND COMMUNITY LIAISON

Figure 5.4

1. ESTABLISH A JOINT CREEK MANAGEMENT TRUST WITH AN ACTING CHAIRMAN AND CREEK MANAGEMENT TRUST WITH AN ACTING CHAIRMAN. THE TRUST WOULD CO-ORDINATE THE MAJOR ACTIVITIES RELATING TO JOINT CREEK MANAGEMENT AND HARBOR DEVELOPMENT (CHASING 51), RECREATION, COMMUNITY LIAISON AND EDUCATION PROGRAMS. THE TRUST WOULD ADVISE AND BRIDGE THE MANAGEMENT DIV.
2. CIRCULATE TO ALL CONCERNED AGENCIES AND GROUPS A COPY OF THE MANAGEMENT PLAN FOR JOINT CREEK MANAGEMENT ACTIVITIES.
3. IDENTIFY THE CREEK CATCHMENT SUB-AREA UNDER THE IMMEDIATE INFLUENCE OF "JOINT CREEK PARK".
4. PREPARE A PROGRAMME TO MONITOR, MAINTAIN AND EDUCATE CREEK USERS AND THE COMMUNITY.

- 
 FOCUS: LONG-TERM OBJECTIVES, STRATEGICAL REQUIREMENTS, REQUIREMENTS REGARDING "BUILDING" STRATEGIES DEVELOPED IN THIS MANAGEMENT PLAN.
- 
 FOCUS: LONG-TERM OBJECTIVES, THE IMMEDIATE-TERM GOING, PARTICULAR CONSIDERATION TO WATER QUALITY AND MANAGEMENT.
- 
 GOES TO TRANSFER, MANAGEMENT OF CROWN LAND TO A PUBLIC BODY TO ENSURE CONTINUITY OF MANAGEMENT PRACTICES.
- 
 FIRST FIVE LONG TERM REQUIREMENTS TO TEST THE STRATEGIES IN THE MANAGEMENT PLAN, TO BE IMPLEMENTED AT DUNE CENTRAL, (WILSONS HILL/ALCANTARA).
- 
 FACILITATE COMMUNITY LINKAGE AND CO-OPERATION OF THEIR VIEW, THROUGH THE RATIO SEEKING CURRENT MANAGEMENT TEAM.



RAPID CREEK MANAGEMENT STUDY



LANDSCAPE ARCHITECTS • LANDSCAPE PLANNERS
FOR GREENING AUSTRALIA AND DARWIN CITY COUNCIL