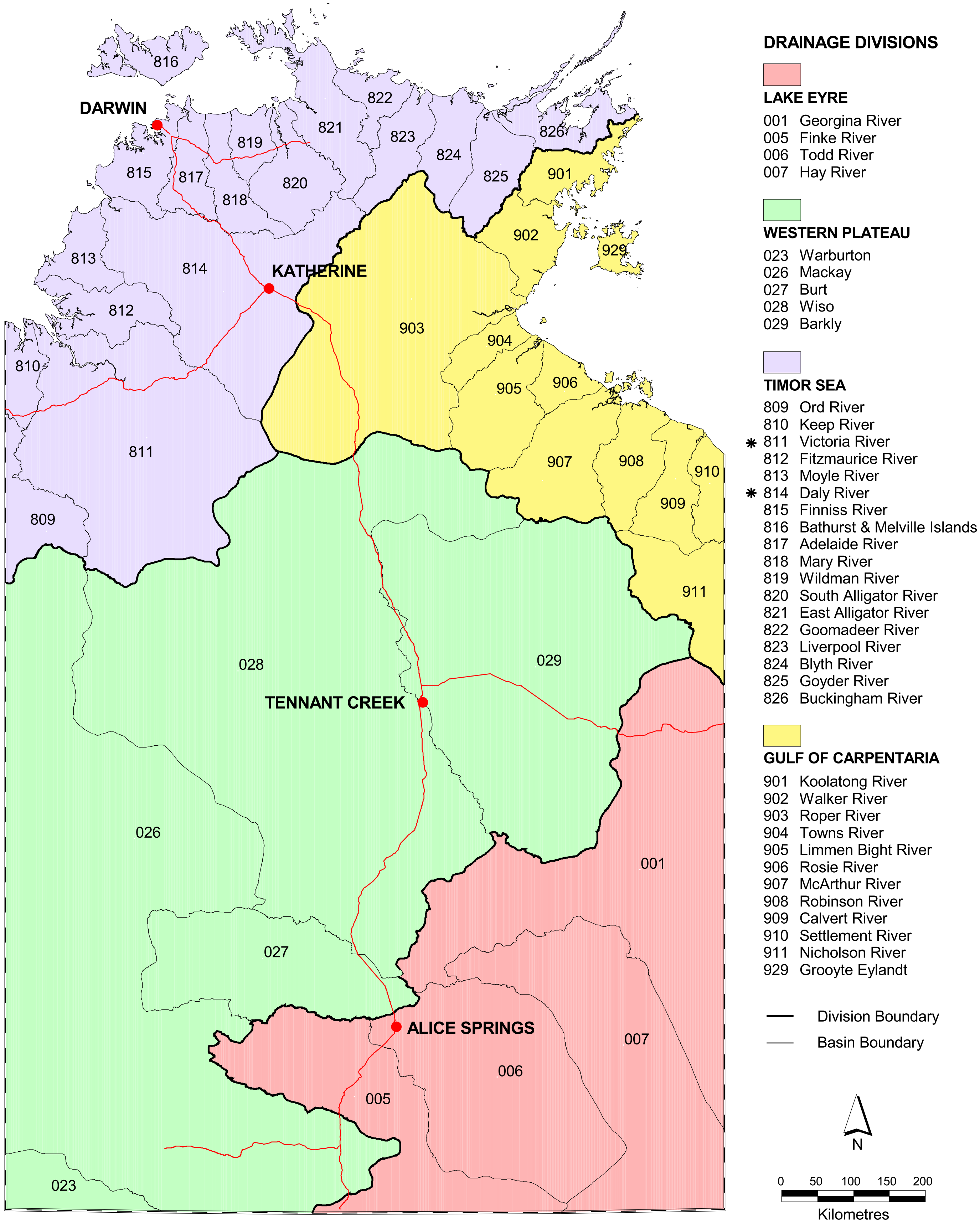
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

CATCHMENT OVERVIEW

MAP SERIES

This document displays the following map series for the report, *Daly River Catchment, Part 1 - An Assessment of the Physical and Ecological Condition of the Daly River and its Major Tributaries*



* Baseline data collected for Top End Waterways Project (1995 - 1997)

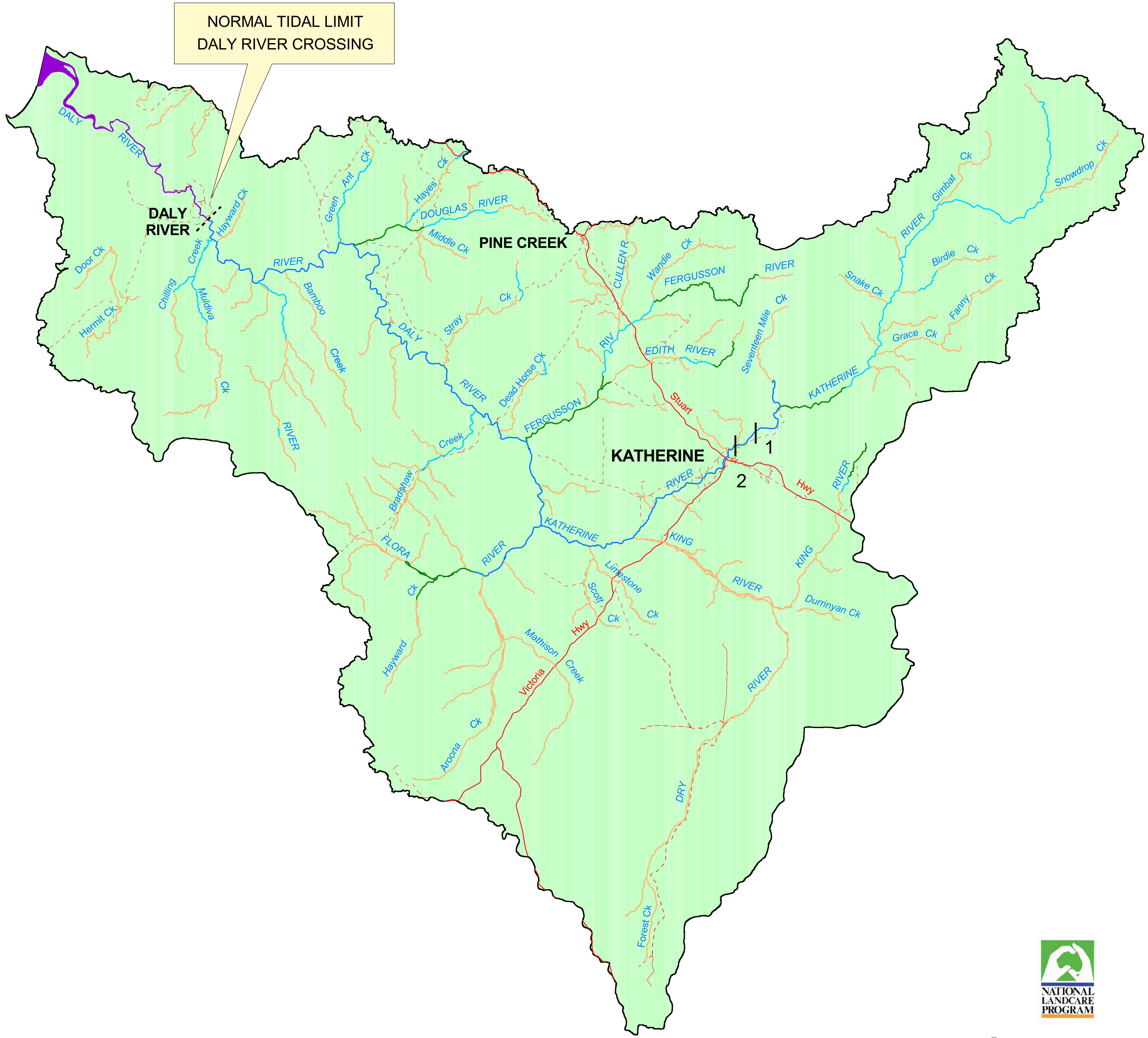
NATIONAL LANDCARE PROGRAM

LANDS PLANNING ENVIRONMENT

NT DRAINAGE DIVISIONS AND BASINS

as defined by the Australian Water Resources Council

Map 1

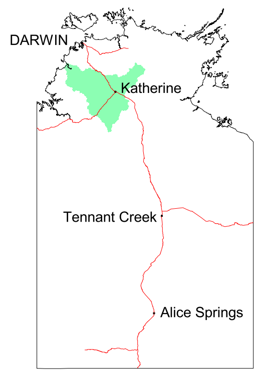


DRY SEASON FLOW REGIME

- Permanent Flow >100 L/s (high)
- Permanent Flow 10 - 100 L/s (medium)
- Permanent Pools and Flow <10 L/s (low)
- Dry (ephemeral)
- Tidal

LEGEND

- Catchment Boundary
- Major Road
- Minor Road
- Weir
  1. Donkey Camp Weir
  2. Knotts Crossing Weir



CATCHMENT LOCATION

N

0 20 40 60 80

Kilometres

TOP END WATERWAYS PROJECT

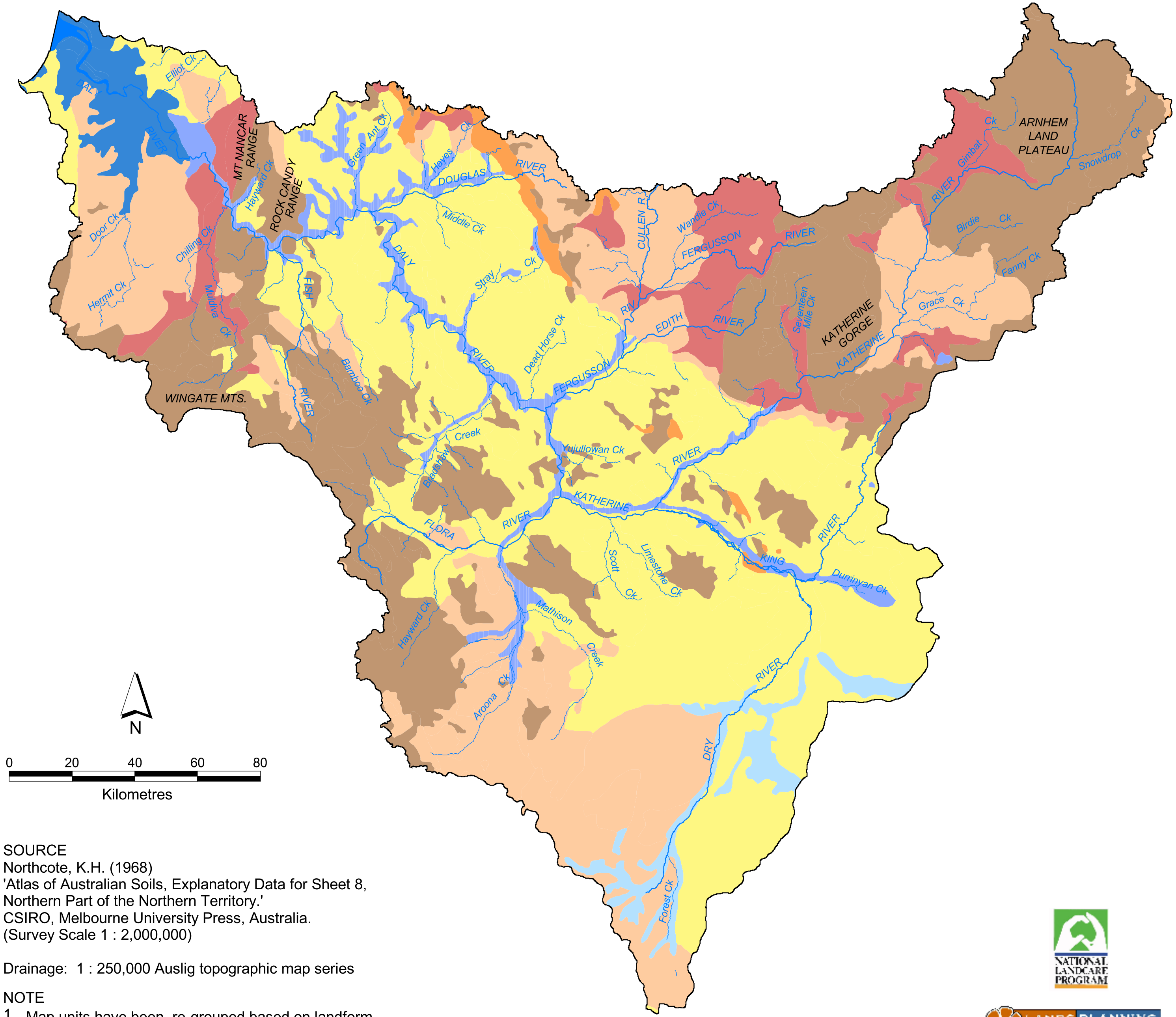
DALY RIVER CATCHMENT

LOCALITY PLAN AND DRY SEASON FLOWS

Map 2

NATIONAL LANDCARE PROGRAM

LANDS PLANNING ENVIRONMENT



SOURCE
Northcote, K.H. (1968)
'Atlas of Australian Soils, Explanatory Data for Sheet 8, Northern Part of the Northern Territory.'
CSIRO, Melbourne University Press, Australia.
(Survey Scale 1 : 2,000,000)

Drainage: 1 : 250,000 Auslig topographic map series

NOTE
1. Map units have been re-grouped based on landform
2. The soil survey does not fully align with the drainage due to the difference in original mapping scales

LANDFORM DESCRIPTION

- Undulating plains to hilly country with isolated mesas and buttes (Map units AC13, CC56, If4, Mo23, Mo24, My68, SQ1, Wd12, Wd13)
- Plateaus, mesas, buttes, plateau escarpments and adjacent rough rocky hills (Map units AB33, BA6, BA7, JV1, JV2, My83)
- Hilly to steep hilly ranges and strike ridges (Map units LK22, LK23, Mw33, Tb134)
- Flat to undulating terrain (Map units JV3, MJ1, Mt4, Mt5, My67, My70, My71, My72, My73, My74, My79, Wd11)
- Low to steep hills, ridges and cuestas with areas of bouldery outcrop (Map units JJ28, OO4)
- Floodplains and back plains, adjacent sideslopes and stony rises, levees, billabongs and channels (Map units Mb15, OO1, OO2, OO3, OO8)
- Flat to gently undulating plains with either narrow drainage or broad shallow valleys (Map units II5, II8)
- Seasonally flooded coastal plains and adjacent sand dunes (Map units Jw1, NN3, NN5)

LEGEND

- Catchment Boundary
- River
- Creek

NATIONAL LANDCARE PROGRAM

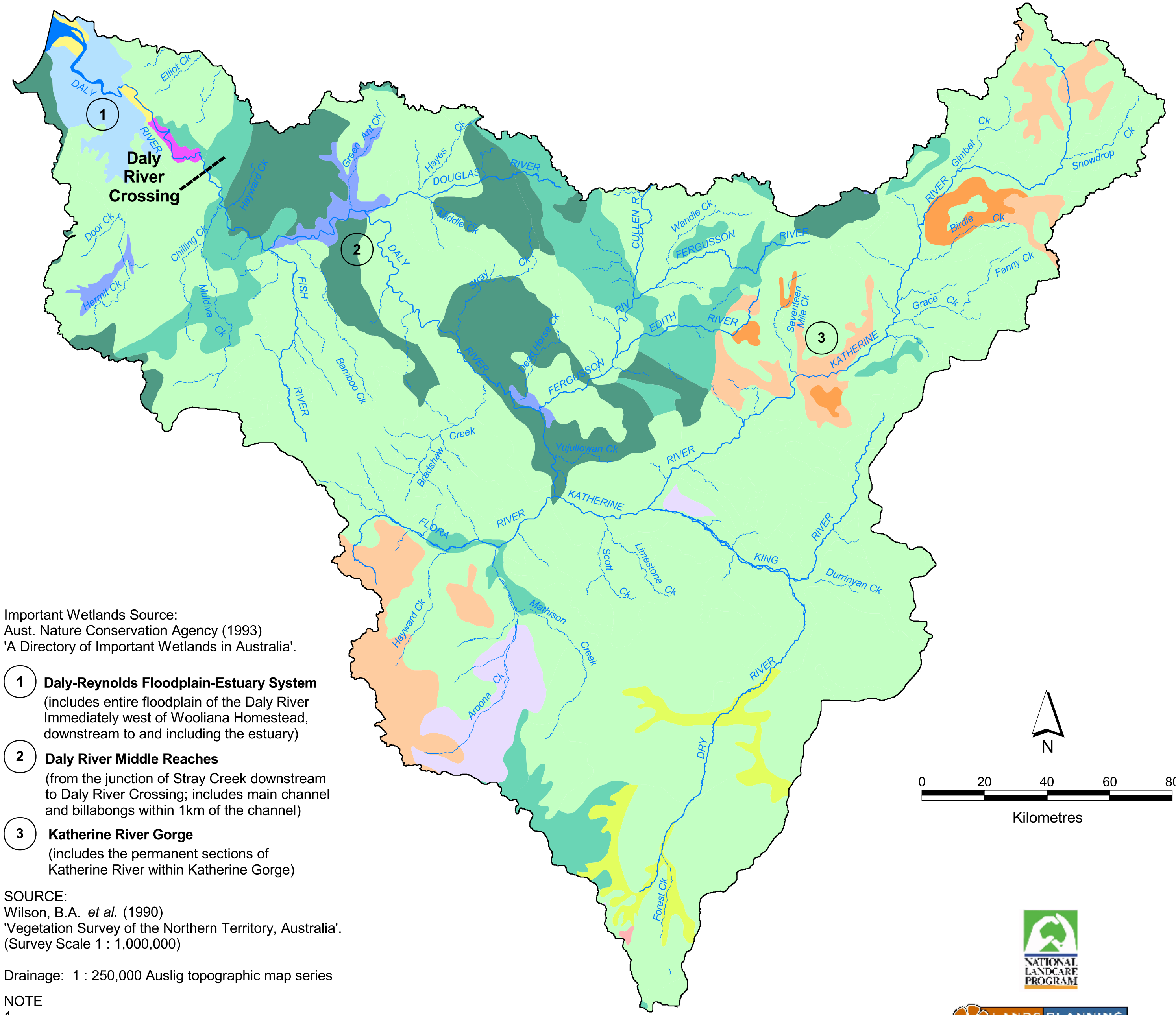
LANDS PLANNING ENVIRONMENT

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

LANDFORM
(Broad scale mapping)

Map 3



Important Wetlands Source:
Aust. Nature Conservation Agency (1993)
'A Directory of Important Wetlands in Australia'.

1 **Daly-Reynolds Floodplain-Estuary System**
(includes entire floodplain of the Daly River Immediately west of Wooliana Homestead, downstream to and including the estuary)

2 **Daly River Middle Reaches**
(from the junction of Stray Creek downstream to Daly River Crossing; includes main channel and billabongs within 1km of the channel)

3 **Katherine River Gorge**
(includes the permanent sections of Katherine River within Katherine Gorge)

SOURCE:
Wilson, B.A. *et al.* (1990)
'Vegetation Survey of the Northern Territory, Australia'.
(Survey Scale 1 : 1,000,000)

Drainage: 1 : 250,000 Auslig topographic map series

NOTE
1. Vegetation categories have been re-grouped
2. The vegetation survey does not fully align with the drainage due to the difference in original mapping scales

VEGETATION DESCRIPTION

CLOSED - FOREST
Mixed species closed-forest
(Monsoon vine forest thicket)

EUCALYPT WITH GRASS UNDERSTOREY

Open - Forest
E. miniata, E. tetradonta with *Sorghum* grassland understorey

Woodland
E. bleeseri, E. dichromophloia, E. ferruginea, E. latifolia, E. miniata, E. papuana, E. patellaris, E. polycarpa, E. tectifica, E. tetradonta, E. terminalis
Grassland understorey
Chrysopogon fallax, Sehima nervosum, Plectrachne pungens, Sorghum

Low Woodland
E. chlorophylla, E. dichromophloia, E. microtheca, E. terminalis, E. tintinnans, Excoecaria parvifolia, E. pruinosa
Grassland understorey
Eulalia aurea, Dichanthium, Chrysopogon fallax, Sehima nervosum, Plectrachne pungens, Sorghum

Low Open - Woodland
E. microtheca with *Eulalia aurea, Dichanthium* grassland understorey

EUCALYPT WITH HUMMOCK GRASS UNDERSTOREY

Low Woodland
E. phoenicia with *Plectrachne pungens* hummock grassland understorey

Low - Open Woodland
E. brevifolia, E. dichromophloia, E. miniata with *Plectrachne pungens* hummock grassland understorey

MIXED SPECIES LOW OPEN-WOODLAND WITH GRASS UNDERSTOREY
E. pruinosa, Lysiphyllum cunninghamii, Terminalia arostrata, with *Eulalia aurea, Dichanthium, Chrysopogon fallax, Sehima nervosum* grassland understorey

MELALEUCA
M. viridiflora, Eucalyptus low open - woodland with *Chrysopogon fallax* grassland understorey

FLOODPLAINS
Mixed closed - grassland / sedgeland (Seasonal Floodplain)

ACACIA WITH GRASS UNDERSTOREY
A. shirleyi open - forest with open - grassland *understorey*

LITTORAL
Mangal low - closed forest (Mangroves); saline tidal flats with scattered chenopod low shrubland

NATIONAL LANDCARE PROGRAM

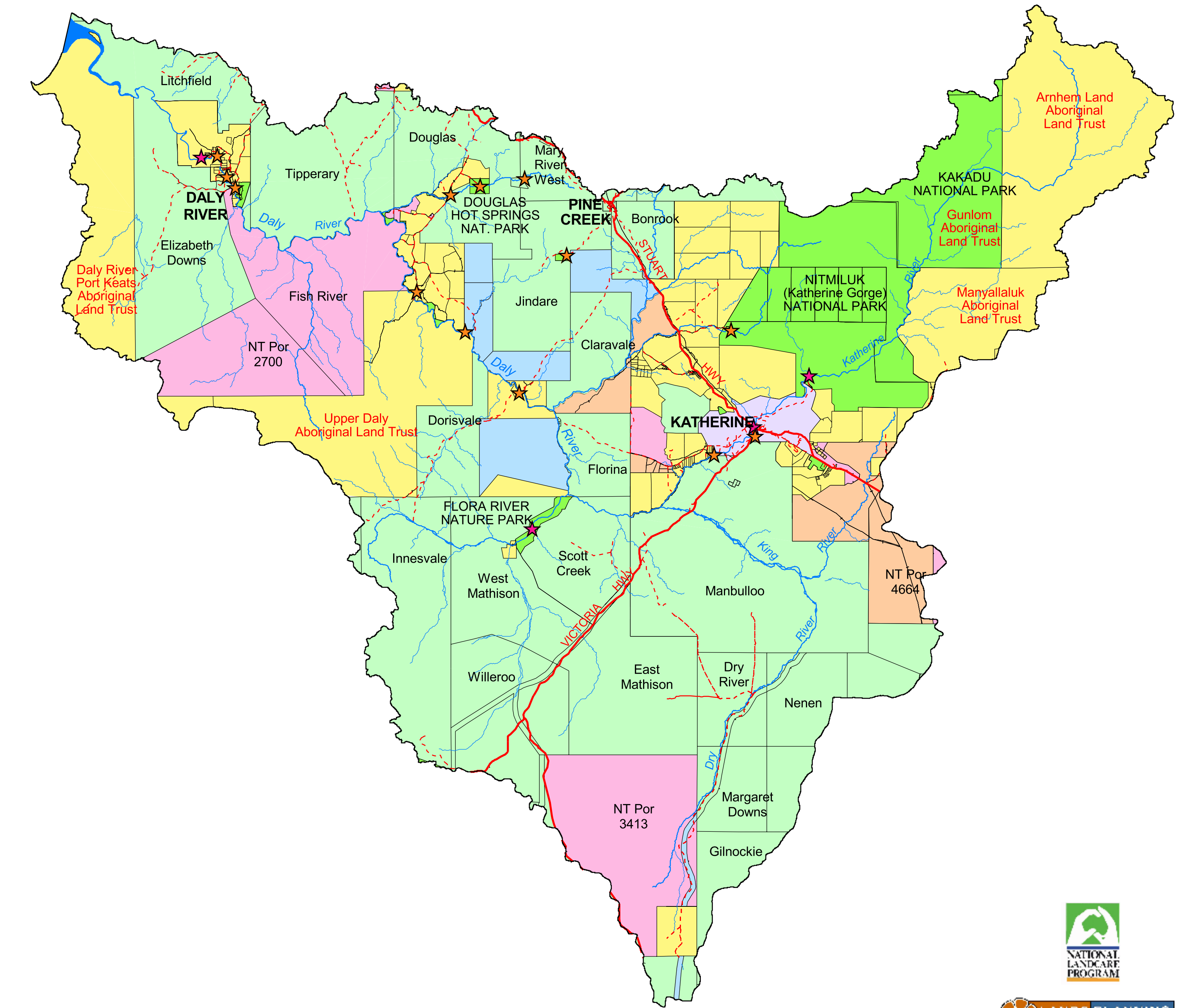
LANDS PLANNING ENVIRONMENT

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

VEGETATION AND IMPORTANT WETLANDS

(Broad scale mapping) Map 4



LAND CLASSIFICATION

- Katherine Municipal Boundary
- National Park or Reserve
- Pastoral Lease
- Vacant Crown Land
- Private Freehold
- Crown Lease Term
- Crown Lease Perpetual

LEGEND

- Public Recreation Area and Boat Ramp
- Public Recreation Area
- Catchment Boundary
- Cadastral Boundary
- Major Road
- Minor Road
- River
- Creek

NOTE

In general, where waterways form property boundaries the bed and banks of the waterway separating such properties is classified as Crown land. Where a waterway lies within a property the bed and banks of the waterway belong to the property owners but the water rights over such waterways belong to the Crown.

N

0 20 40 60 80

Kilometres

NATIONAL LANDCARE PROGRAM

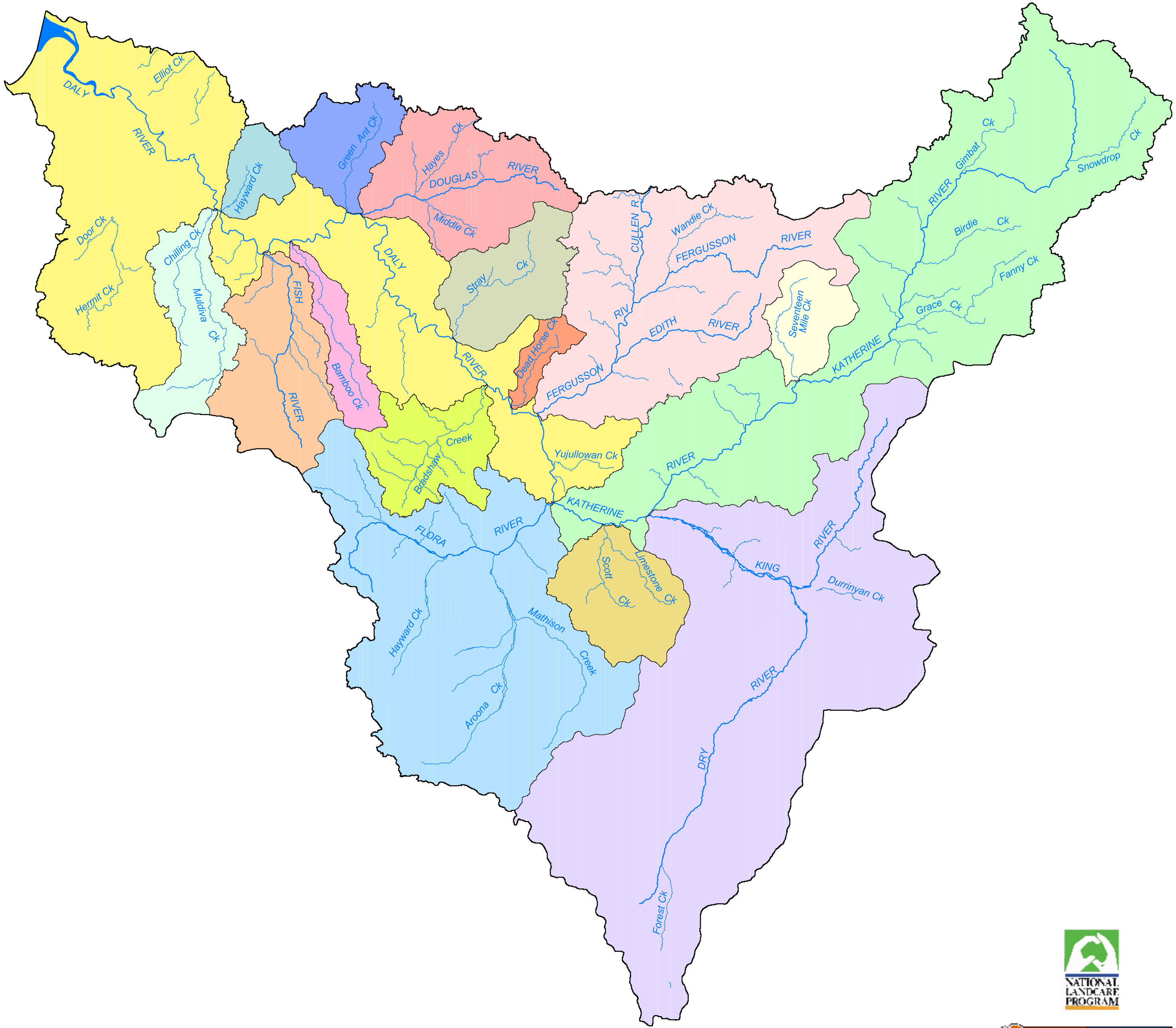
LANDS PLANNING ENVIRONMENT

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

LAND TENURE AND LAND USE

Map 5



MAJOR SUB-CATCHMENTS

- Daly River
- Chilling Creek
- Hayward Creek
- Fish River
- Bamboo (Moon Boon) Creek
- Green Ant Creek
- Douglas River
- Stray Creek
- Bradshaw Creek
- Dead Horse Creek
- Fergusson River
- Flora River
- Katherine River
- Limestone Creek
- King and Dry Rivers
- Seventeen Mile Creek

LEGEND

- Catchment Boundary
- Sub-catchment Boundary
- River
- Creek

N

0 20 40 60 80

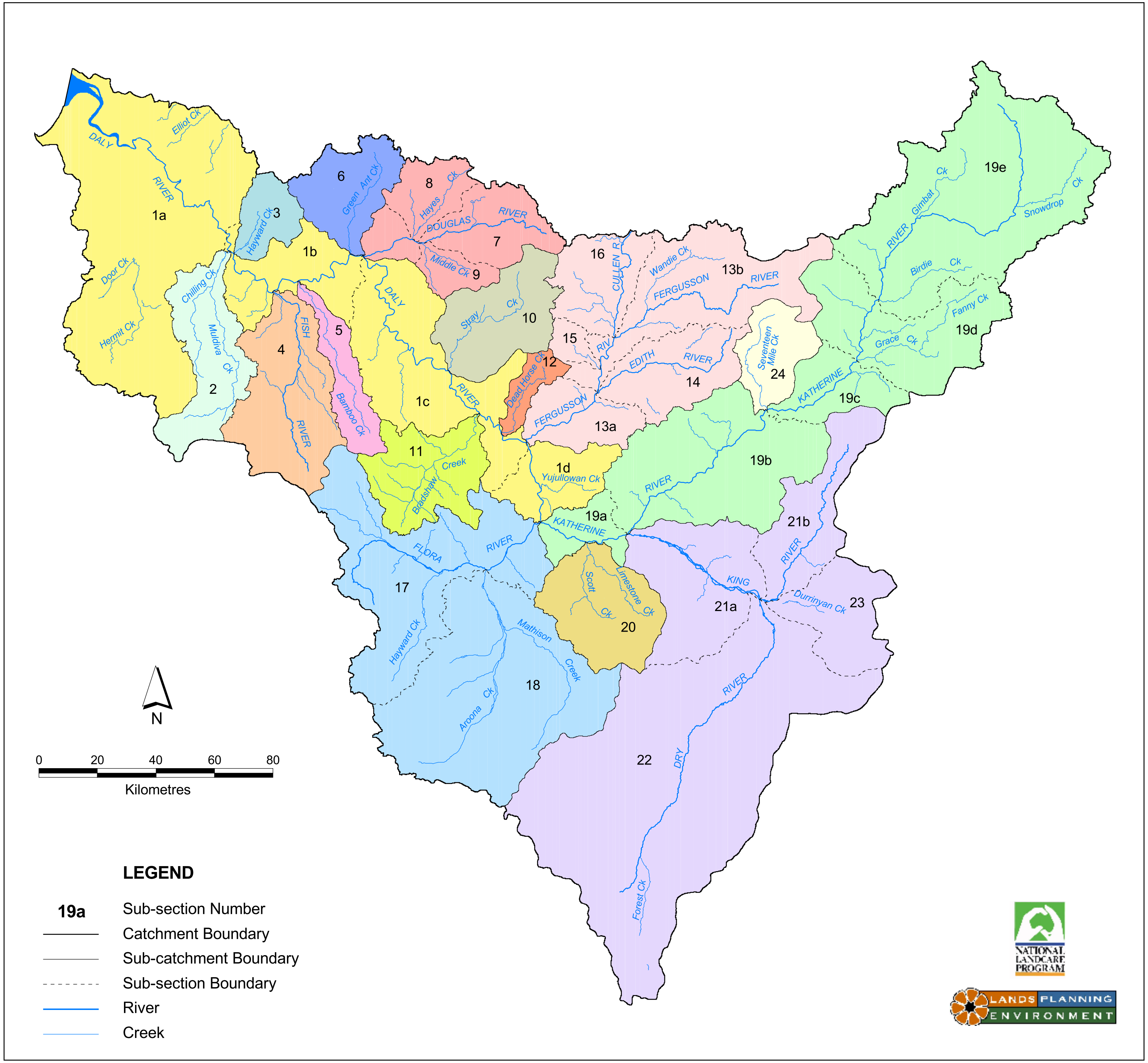
Kilometres

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

MAJOR SUB-CATCHMENTS

Map 6



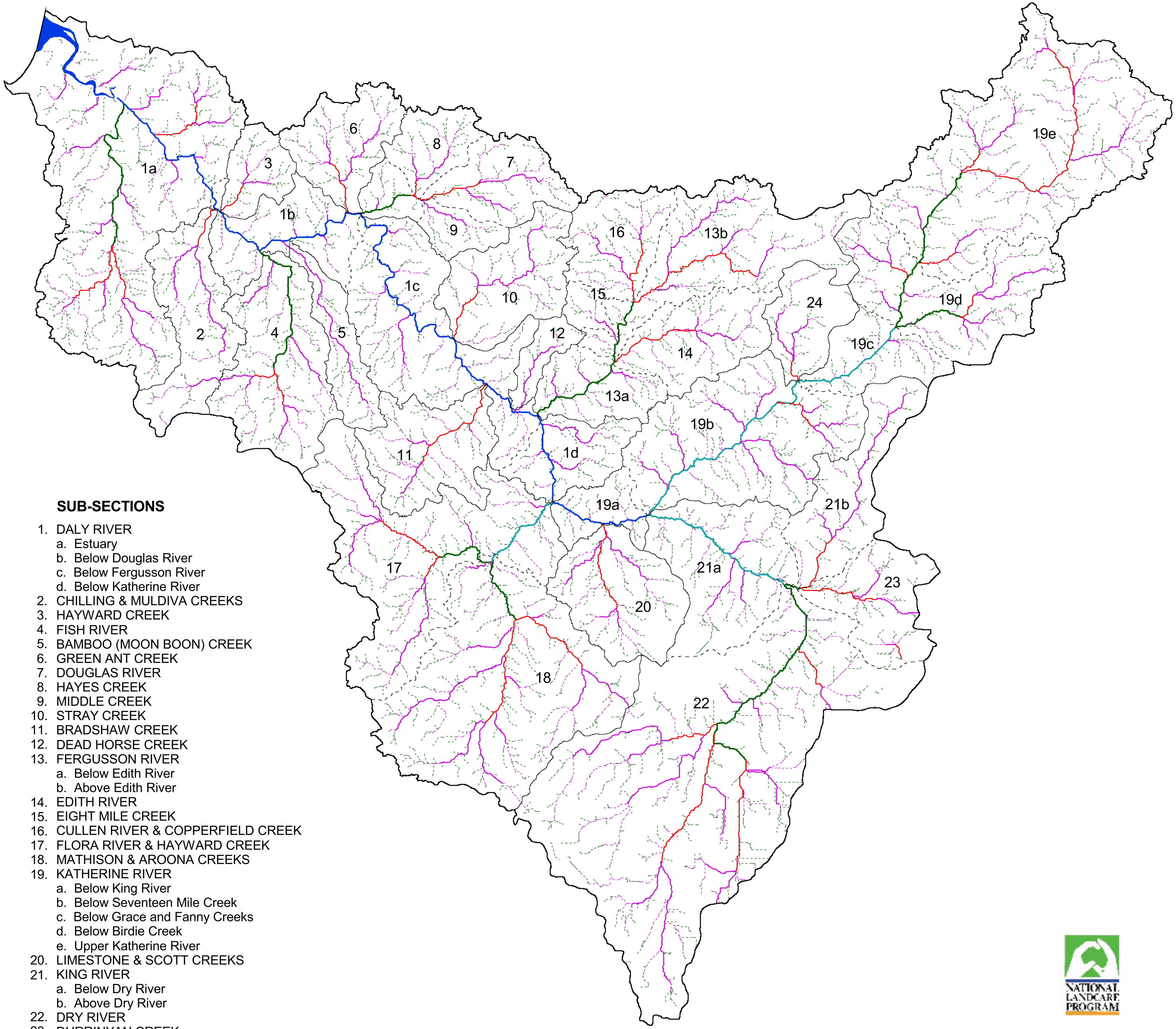
SUB SECTION NUMBER	AREA (km²)	SUB SECTION NAME
1.	8,884	DALY RIVER a. Estuary b. Below Douglas River c. Below Fergusson River d. Below Katherine River
2.	1,241	CHILLING & MULDIVA CREEKS
3.	472	HAYWARD CREEK
4.	1,748	FISH RIVER
5.	602	BAMBOO (MOON BOON) CREEK
6.	914	GREEN ANT CREEK
7.	1,116	DOUGLAS RIVER
8.	535	HAYES CREEK
9.	313	MIDDLE CREEK
10.	1,216	STRAY CREEK
11.	1,181	BRADSHAW CREEK
12.	278	DEAD HORSE CREEK
13.	2,672	FERGUSSON RIVER a. Below Edith River b. Above Edith River
14.	1,057	EDITH RIVER
15.	180	EIGHT MILE CREEK
16.	879	CULLEN RIVER & COPPERFIELD CK
17.	2,946	FLORA RIVER & HAYWARD CK
18.	3,790	MATHISON & AROONA CKS
19.	9,569	KATHERINE RIVER a. Below King River b. Below Seventeen Mile Creek c. Below Grace and Fanny Creeks d. Below Birdie Creek e. Upper Katherine River
20.	1,275	LIMESTONE & SCOTT CREEKS
21.	2,815	KING RIVER a. Below Dry River b. Above Dry River
22.	7,208	DRY RIVER
23.	989	DURRINYAN CREEK
24.	696	SEVENTEEN MILE CREEK
TOTAL	52,577	DALY RIVER CATCHMENT

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

SUB-SECTIONS

Map 7



SUB-SECTIONS

1. DALY RIVER
   a. Estuary
   b. Below Douglas River
   c. Below Fergusson River
   d. Below Katherine River
2. CHILLING & MULDIVA CREEKS
3. HAYWARD CREEK
4. FISH RIVER
5. BAMBOO (MOON BOON) CREEK
6. GREEN ANT CREEK
7. DOUGLAS RIVER
8. HAYES CREEK
9. MIDDLE CREEK
10. STRAY CREEK
11. BRADSHAW CREEK
12. DEAD HORSE CREEK
13. FERGUSSON RIVER
   a. Below Edith River
   b. Above Edith River
14. EDITH RIVER
15. EIGHT MILE CREEK
16. CULLEN RIVER & COPPERFIELD CREEK
17. FLORA RIVER & HAYWARD CREEK
18. MATHISON & AROONA CREEKS
19. KATHERINE RIVER
   a. Below King River
   b. Below Seventeen Mile Creek
   c. Below Grace and Fanny Creeks
   d. Below Birdie Creek
   e. Upper Katherine River
20. LIMESTONE & SCOTT CREEKS
21. KING RIVER
   a. Below Dry River
   b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

Stream Order	Stream Length (kms - approx)	No of sites
1	8,114	5
2	3,955	8
3	2,072	25
4	841	32
5	426	17
6	213	13
7	362	31

LEGEND

Catchment Boundary
Sub-catchment Boundary
Sub-section Boundary

NOTE

Stream orders were compiled using ArcGrid. The stream network was generated using a Digital Elevation Model (DEM) and was based on a 1:250,000 map scale.
Stream orders have been assigned to rivers and creeks using the Strahler system. Seven stream orders were recorded for Daly River Catchment.

- Minor streams = stream orders 1 and 2.
- Medium - sized streams = stream orders 3, 4 and 5.
- Major streams = stream orders 6 and 7.

N

0 20 40 60 80
Kilometres

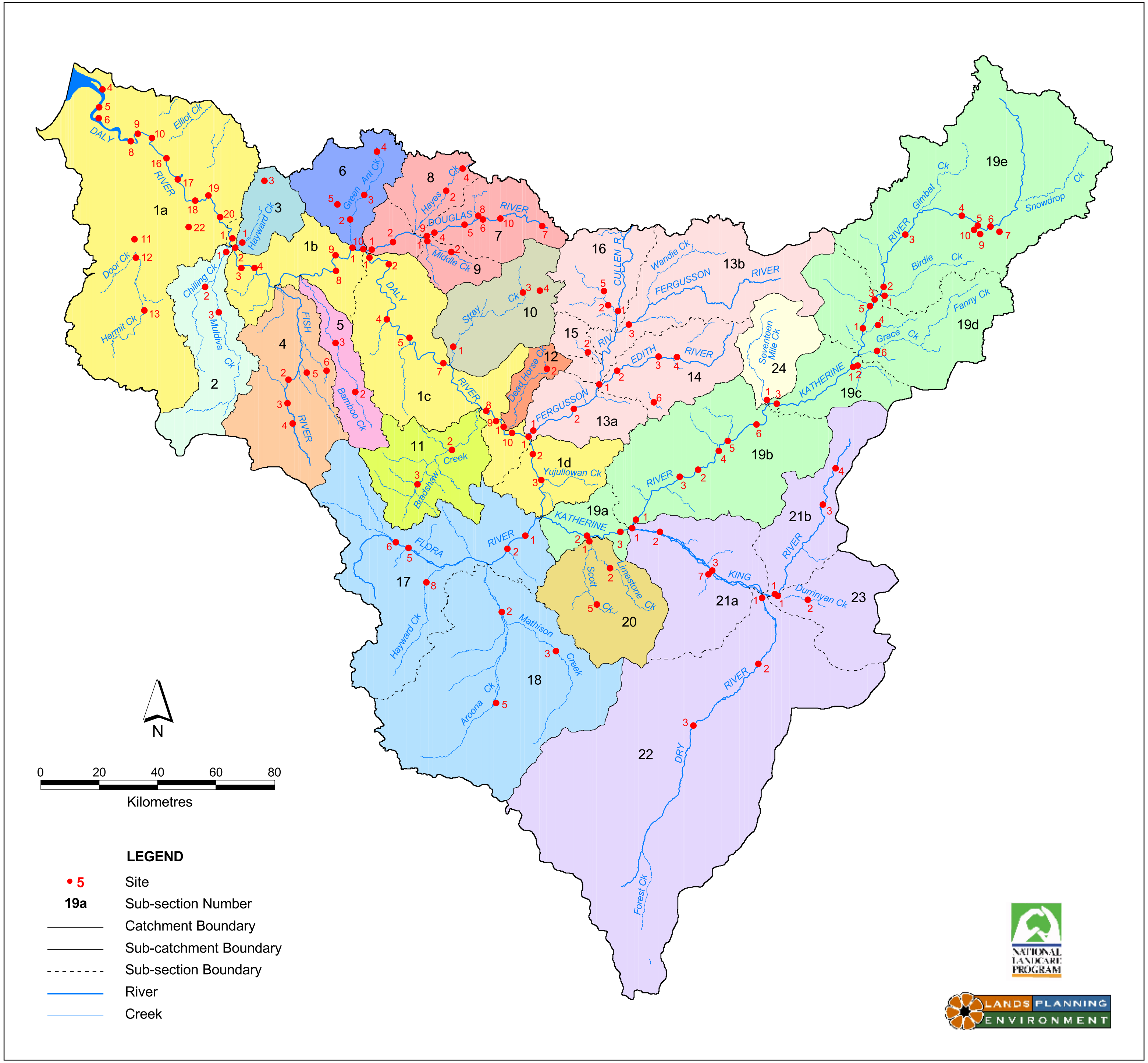
TOP END WATERWAYS PROJECT
DALY RIVER CATCHMENT

NATIONAL LANDCARE PROGRAM

LANDS PLANNING ENVIRONMENT

STREAM ORDERS

Map 8



SUB SECTION NUMBER	SUB SECTION NAME
1.	DALY RIVER
	a. Estuary
	b. Below Douglas River
	c. Below Fergusson River
	d. Below Katherine River
2.	CHILLING & MULDIVA CREEKS
3.	HAYWARD CREEK
4.	FISH RIVER
5.	BAMBOO (MOON BOON) CREEK
6.	GREEN ANT CREEK
7.	DOUGLAS RIVER
8.	HAYES CREEK
9.	MIDDLE CREEK
10.	STRAY CREEK
11.	BRADSHAW CREEK
12.	DEAD HORSE CREEK
13.	FERGUSSON RIVER
	a. Below Edith River
	b. Above Edith River
14.	EDITH RIVER
15.	EIGHT MILE CREEK
16.	CULLEN RIVER & COPPERFIELD CK
17.	FLORA RIVER & HAYWARD CK
18.	MATHISON & AROONA CKS
19.	KATHERINE RIVER
	a. Below King River
	b. Below Seventeen Mile Creek
	c. Below Grace and Fanny Creeks
	d. Below Birdie Creek
	e. Upper Katherine River
20.	LIMESTONE & SCOTT CREEKS
21.	KING RIVER
	a. Below Dry River
	b. Above Dry River
22.	DRY RIVER
23.	DURRINYAN CREEK
24.	SEVENTEEN MILE CREEK

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

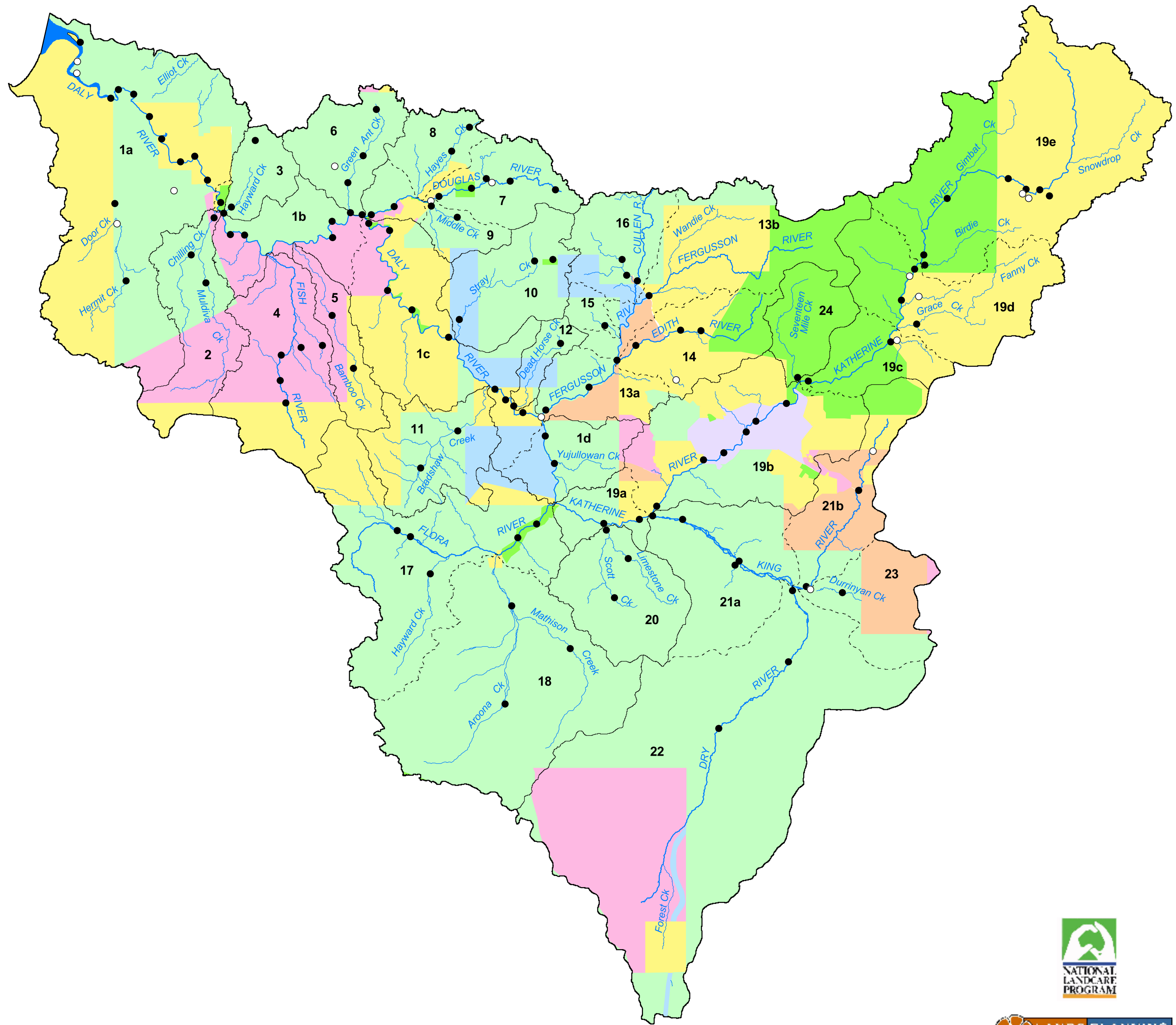
LOCATION OF SITES

Map 9

TOP END WATERWAYS PROJECT
DALY RIVER CATCHMENT

ASSESSMENT OF RIVERINE CONDITION
MAP SERIES

This document displays the following map series relating to the riverine condition as outlined in the report, *Daly River Catchment, Part 1 - An Assessment of the Physical and Ecological Condition of the Daly River and its Major Tributaries*



LAND CLASSIFICATION

- Katherine Municipal Boundary
- National Park or Reserve
- Pastoral Lease
- Vacant Crown Land
- Private Freehold
- Crown Lease Term
- Crown Lease Perpetual

LEGEND

- ● Surveyed Site
- ○ Site Not Assessed
- 19a Sub-section Number
- Catchment Boundary
- Sub-catchment Boundary
- Sub-section Boundary
- River
- Creek

NOTE

A summary of the land tenure along the reach environs is shown below:

Land Tenure Category	Percent of Sites (%)
Freehold/Leasehold	90
Urban Reserve	1
State Forest	0
Reserve/ Environmental Park	6
State Park	0
National Park	8

N

0 20 40 60 80

Kilometres

TOP END WATERWAYS PROJECT

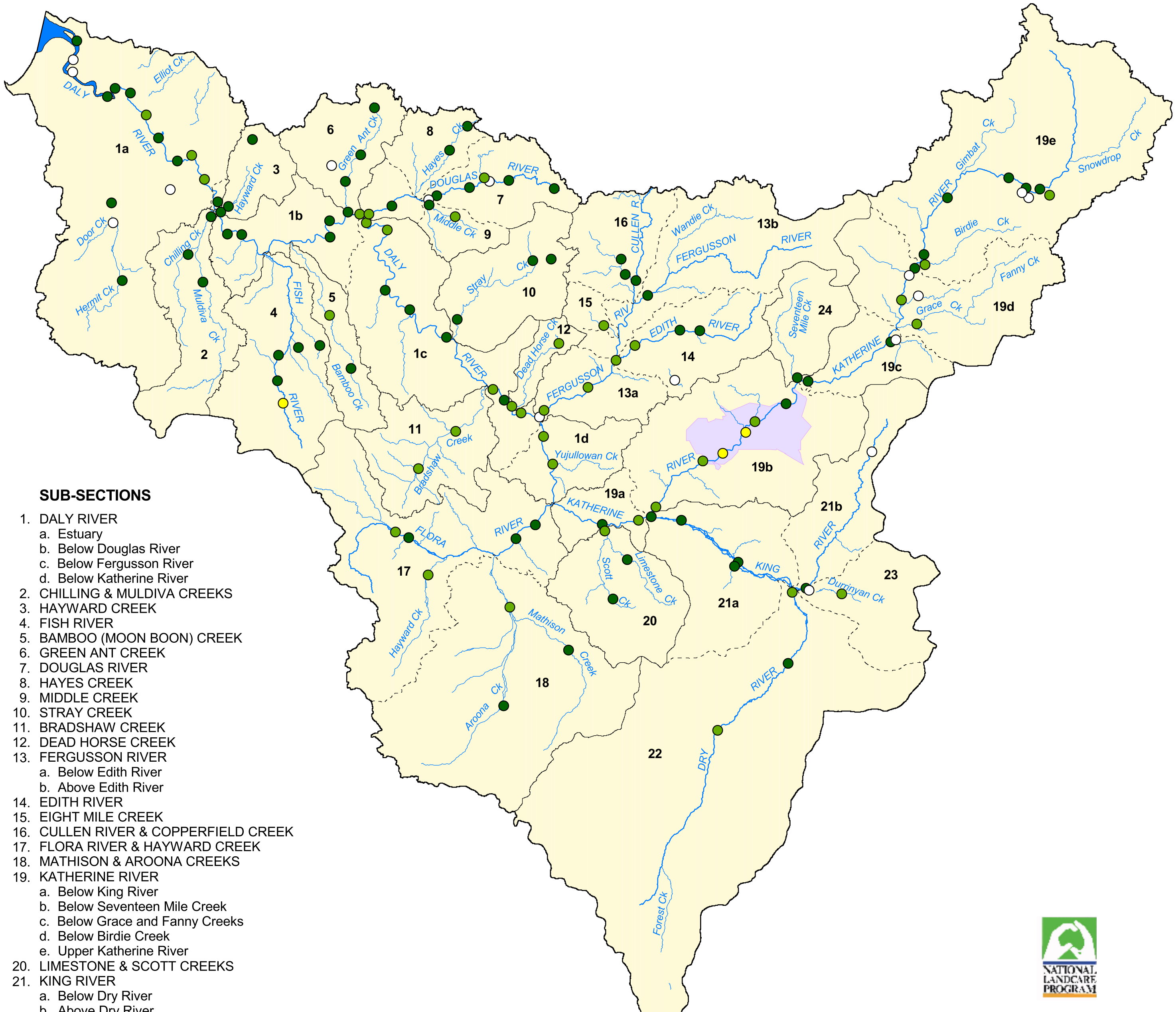
DALY RIVER CATCHMENT

NATIONAL LANDCARE PROGRAM

LANDS PLANNING ENVIRONMENT

LOCAL LAND TENURE

Map 10



SUB-SECTIONS

1. DALY RIVER
   a. Estuary
   b. Below Douglas River
   c. Below Fergusson River
   d. Below Katherine River
2. CHILLING & MULDIVA CREEKS
3. HAYWARD CREEK
4. FISH RIVER
5. BAMBOO (MOON BOON) CREEK
6. GREEN ANT CREEK
7. DOUGLAS RIVER
8. HAYES CREEK
9. MIDDLE CREEK
10. STRAY CREEK
11. BRADSHAW CREEK
12. DEAD HORSE CREEK
13. FERGUSSON RIVER
    a. Below Edith River
    b. Above Edith River
14. EDITH RIVER
15. EIGHT MILE CREEK
16. CULLEN RIVER & COPPERFIELD CREEK
17. FLORA RIVER & HAYWARD CREEK
18. MATHISON & AROONA CREEKS
19. KATHERINE RIVER
    a. Below King River
    b. Below Seventeen Mile Creek
    c. Below Grace and Fanny Creeks
    d. Below Birdie Creek
    e. Upper Katherine River
20. LIMESTONE & SCOTT CREEKS
21. KING RIVER
    a. Below Dry River
    b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

LEGEND

SITE LOCATION	REACH ENVIRONS CATEGORY	RATING (%)
● (red)	Extreme Modification	0 - 20
● (orange)	Major Modification	21- 40
● (yellow)	Moderate Modification	41- 60
● (light green)	Some Modification	61- 80
● (dark green)	Essentially Natural	81-100
○	Site Not Assessed	

19a	Sub-section Number
	Catchment Boundary
	Sub-catchment Boundary
	Sub-section Boundary
	River
	Creek
	Katherine Municipal Boundary

NOTE

State of the Reach Environs -
The rating is based on an assessment of the land corridor along the survey reach and on the floodplain adjacent to the reach. The rating takes into account local land use and local disturbances along the reach environs.

N

0 20 40 60 80

Kilometres

NATIONAL LANDCARE PROGRAM

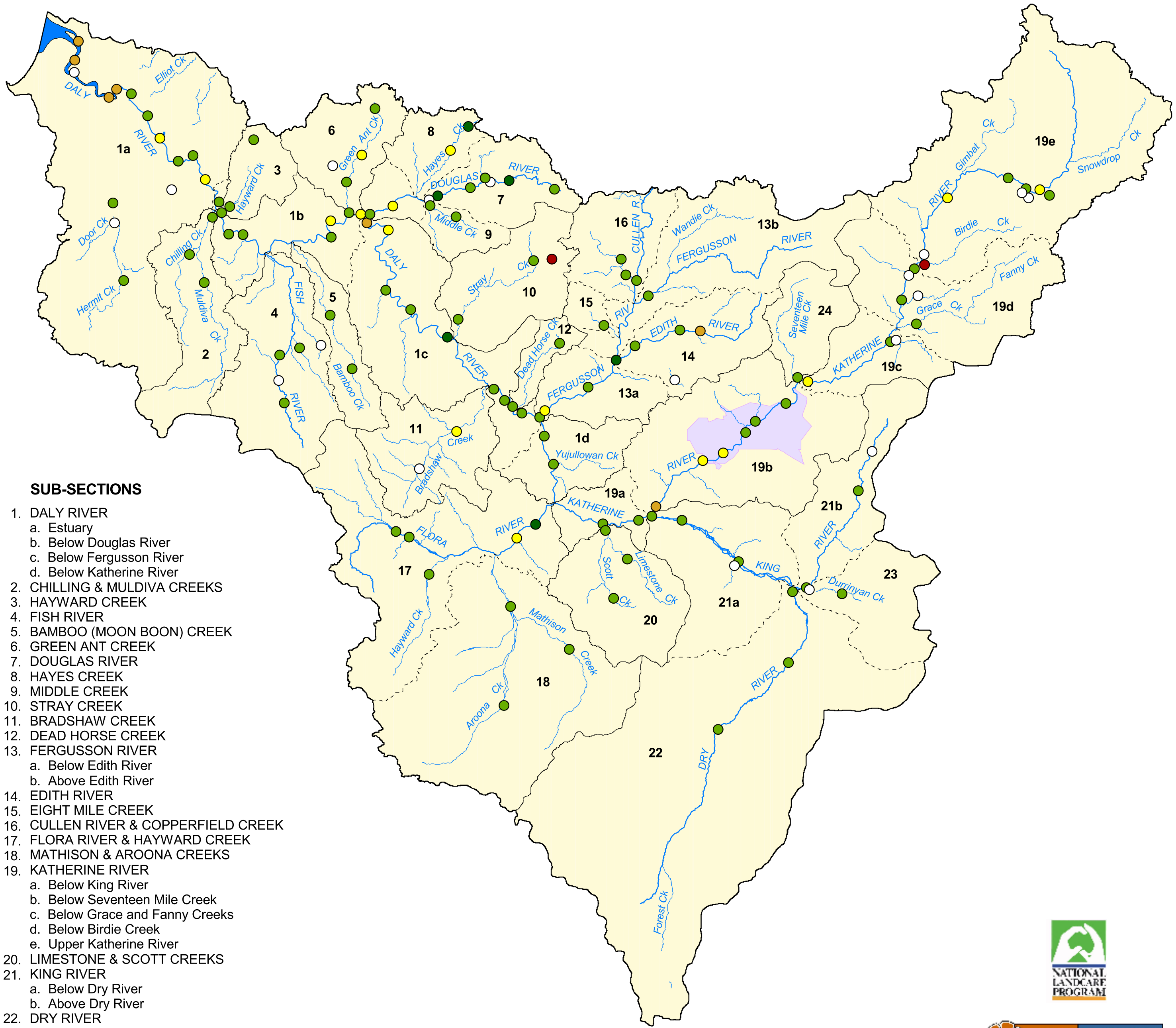
LANDS PLANNING ENVIRONMENT

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

STATE OF THE REACH ENVIRONS

Map 11



SUB-SECTIONS

1. DALY RIVER
   a. Estuary
   b. Below Douglas River
   c. Below Fergusson River
   d. Below Katherine River
2. CHILLING & MULDIVA CREEKS
3. HAYWARD CREEK
4. FISH RIVER
5. BAMBOO (MOON BOON) CREEK
6. GREEN ANT CREEK
7. DOUGLAS RIVER
8. HAYES CREEK
9. MIDDLE CREEK
10. STRAY CREEK
11. BRADSHAW CREEK
12. DEAD HORSE CREEK
13. FERGUSSON RIVER
    a. Below Edith River
    b. Above Edith River
14. EDITH RIVER
15. EIGHT MILE CREEK
16. CULLEN RIVER & COPPERFIELD CREEK
17. FLORA RIVER & HAYWARD CREEK
18. MATHISON & AROONA CREEKS
19. KATHERINE RIVER
    a. Below King River
    b. Below Seventeen Mile Creek
    c. Below Grace and Fanny Creeks
    d. Below Birdie Creek
    e. Upper Katherine River
20. LIMESTONE & SCOTT CREEKS
21. KING RIVER
    a. Below Dry River
    b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

NATIONAL LANDCARE PROGRAM

LANDS PLANNING ENVIRONMENT

LEGEND

SITE LOCATION	DIVERSITY CATEGORY	RATING (out of 10)
● (red)	Very Low Diversity	1 - 2
● (orange)	Low Diversity	3 - 4
● (yellow)	Moderate Diversity	5 - 6
● (green)	High Diversity	7 - 8
● (dark green)	Very High Diversity	9 - 10
○	Site Not Assessed	

19a	Sub-section Number
	Catchment Boundary
	Sub-catchment Boundary
	Sub-section Boundary
	River
	Creek
	Katherine Municipal Boundary

NOTE

Channel Type Diversity -
The diversity categories take into account the number of different channel habitat types present (cascades, glides, pools, rapids, riffles, runs, waterfalls) and the proportion of the reach occupied by pools versus other habitat types.

The derived ratings for this component are NOT used to produce the Overall Condition Rating for each site.

N

0 20 40 60 80

Kilometres

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

CHANNEL TYPE DIVERSITY

Map 12

SUB-SECTIONS

1. DALY RIVER
   a. Estuary
   b. Below Douglas River
   c. Below Fergusson River
   d. Below Katherine River
2. CHILLING & MULDIVA CREEKS
3. HAYWARD CREEK
4. FISH RIVER
5. BAMBOO (MOON BOON) CREEK
6. GREEN ANT CREEK
7. DOUGLAS RIVER
8. HAYES CREEK
9. MIDDLE CREEK
10. STRAY CREEK
11. BRADSHAW CREEK
12. DEAD HORSE CREEK
13. FERGUSSON RIVER
    a. Below Edith River
    b. Above Edith River
14. EDITH RIVER
15. EIGHT MILE CREEK
16. CULLEN RIVER & COPPERFIELD CREEK
17. FLORA RIVER & HAYWARD CREEK
18. MATHISON & AROONA CREEKS
19. KATHERINE RIVER
    a. Below King River
    b. Below Seventeen Mile Creek
    c. Below Grace and Fanny Creeks
    d. Below Birdie Creek
    e. Upper Katherine River
20. LIMESTONE & SCOTT CREEKS
21. KING RIVER
    a. Below Dry River
    b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

LEGEND

SITE LOCATION	STABILITY CATEGORY	RATING (%)
● (red)	Extreme Instability	0 - 20
● (orange)	Extensive Instability	21- 40
● (yellow)	Moderate Instability	41- 60
● (light green)	Limited Instability	61- 80
● (dark green)	Stable	81-100
○	Site Not Assessed	

DOMINANT PROCESS AT EACH SITE

A — Aggradation

Erosion (the dominant process at all sites assessed, other than those with an 'A', is erosion)

19a — Sub-section Number

Catchment Boundary

Sub-catchment Boundary

Sub-section Boundary

River

Creek

Katherine Municipal Boundary

NOTE

Bank Stability -
The ratings are determined from the recorded percentages of the banks on each side of the reach which are rated as stable. Upper banks are assigned a greater proportion of the score than lower banks. The dominant process at each site (erosion or aggradation) is recorded.

N

0 20 40 60 80

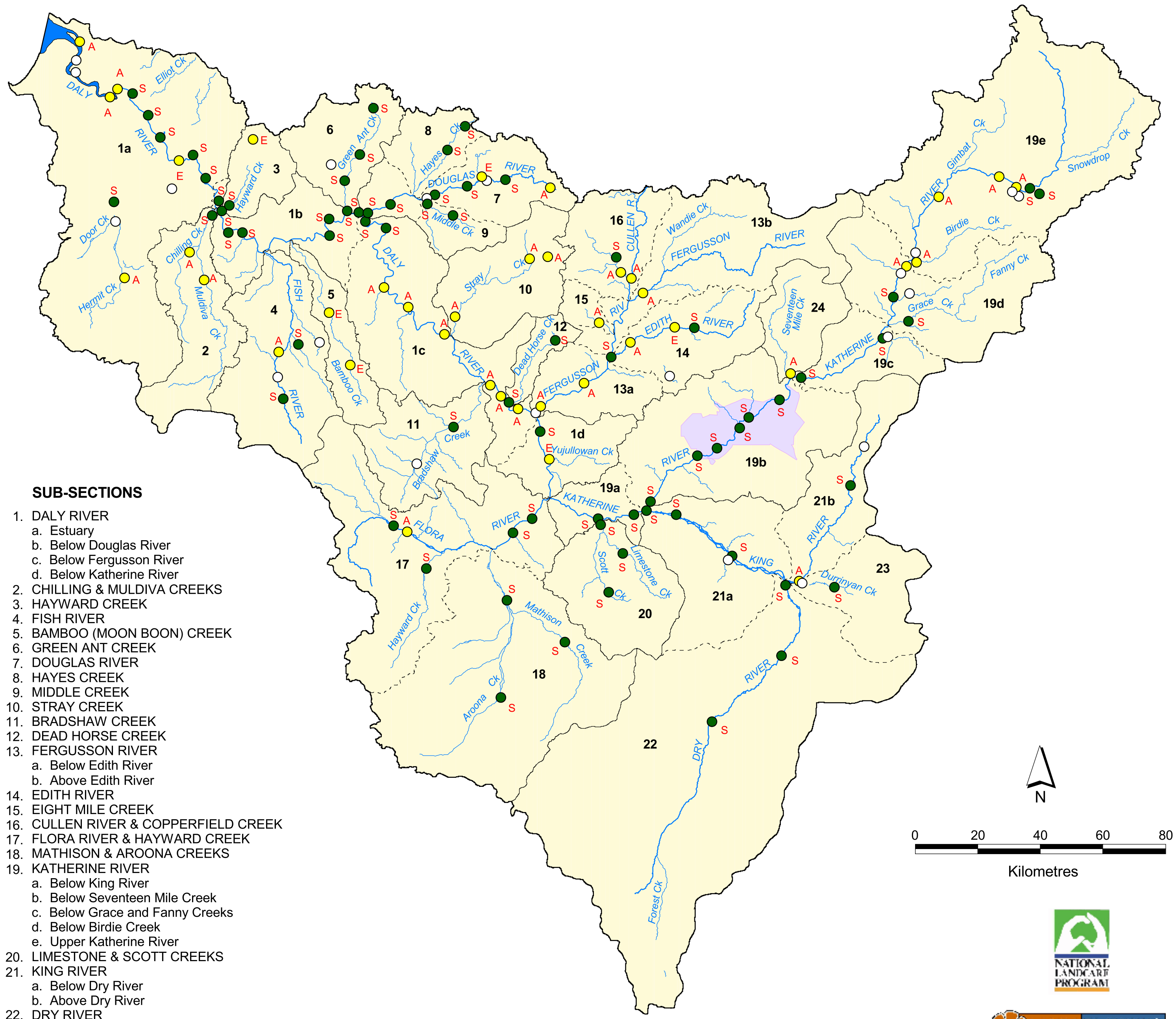
Kilometres

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

BANK STABILITY

Map 13



SUB-SECTIONS

1. DALY RIVER
   a. Estuary
   b. Below Douglas River
   c. Below Fergusson River
   d. Below Katherine River
2. CHILLING & MULDIVA CREEKS
3. HAYWARD CREEK
4. FISH RIVER
5. BAMBOO (MOON BOON) CREEK
6. GREEN ANT CREEK
7. DOUGLAS RIVER
8. HAYES CREEK
9. MIDDLE CREEK
10. STRAY CREEK
11. BRADSHAW CREEK
12. DEAD HORSE CREEK
13. FERGUSSON RIVER
    a. Below Edith River
    b. Above Edith River
14. EDITH RIVER
15. EIGHT MILE CREEK
16. CULLEN RIVER & COPPERFIELD CREEK
17. FLORA RIVER & HAYWARD CREEK
18. MATHISON & AROONA CREEKS
19. KATHERINE RIVER
    a. Below King River
    b. Below Seventeen Mile Creek
    c. Below Grace and Fanny Creeks
    d. Below Birdie Creek
    e. Upper Katherine River
20. LIMESTONE & SCOTT CREEKS
21. KING RIVER
    a. Below Dry River
    b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

LEGEND

SITE LOCATION	STABILITY CATEGORY	RATING (out of 10)
● (red)	Severe Erosion or Aggradation	2
● (yellow)	Moderate Erosion or Aggradation	6
● (green)	Stable	10
○	Site Not Assessed	

DOMINANT PROCESS AT EACH SITE

- A Aggradation
- E Erosion
- S Stable (No Process)

- 19a Sub-section Number
- Catchment Boundary
- Sub-catchment Boundary
- Sub-section Boundary
- River
- Creek
- Katherine Municipal Boundary

NOTE

Bed Stability -
The ratings are determined from a subjective assessment made in the field of whether the river bed is stable; moderately eroding or aggrading; or severely eroding or aggrading. That is,

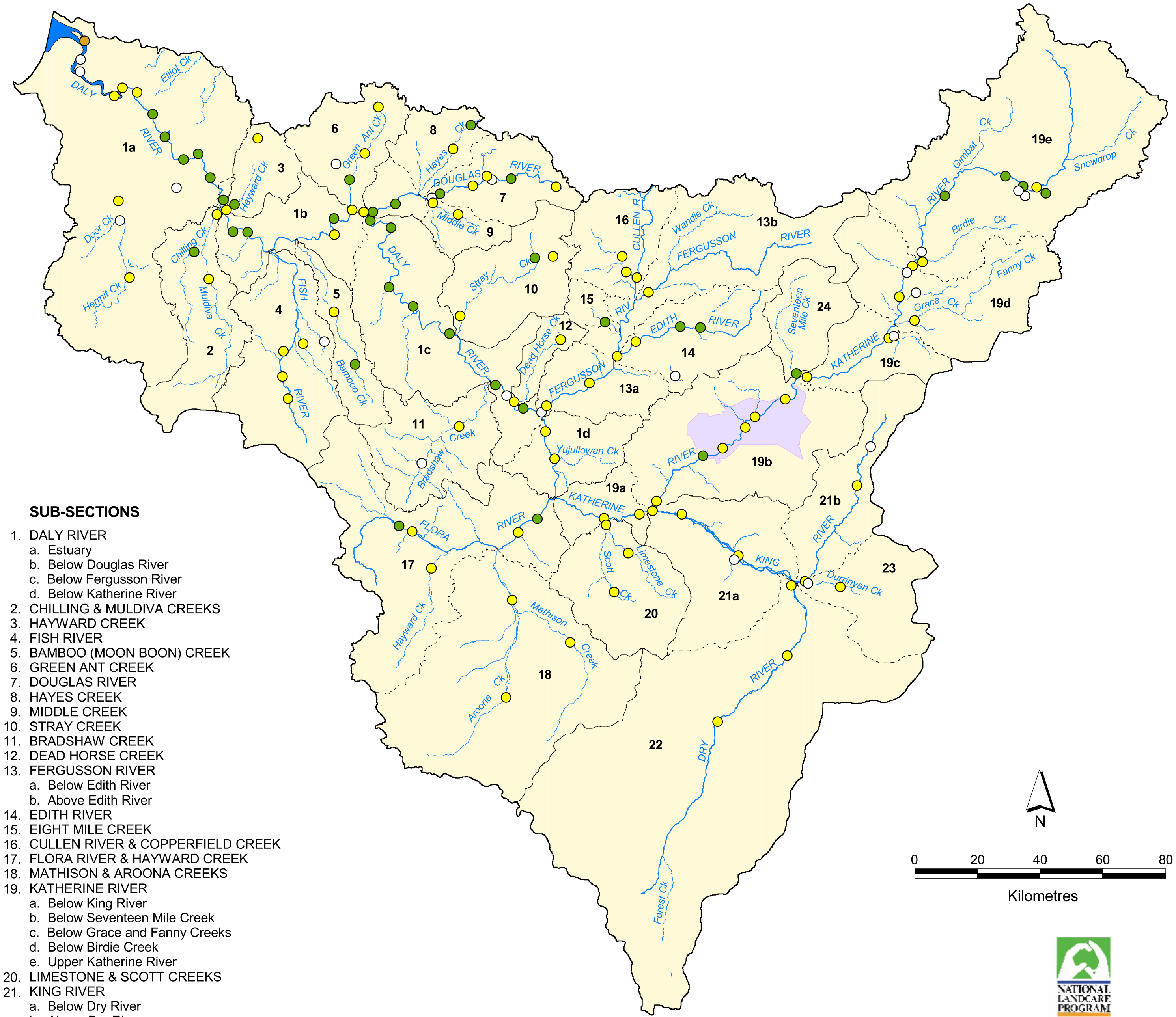
- Stable bed: The river bed is consolidated; bed and bar material is the same size; alluvium balanced; and banks stable.
- Moderate erosion: There is little alluvium; signs of deepening; eroded banks; bed deep, narrow and steep; unconsolidated.
- Moderate aggradation: There is moderate build-up at obstructions and bars; bed is flat, uniform, wide and shallow; some over-bank siltation.
- Severe erosion: The bed is scoured of sand; signs of deepening; bare eroded banks; erosion heads; erosion causes; and a steep bed.
- Severe aggradation: The bed is flat, wide but shallow and channel blocked; bars large, covering most of bed and bank; bed is loose and unconsolidated.

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

BED STABILITY

Map 14



SUB-SECTIONS

1. DALY RIVER
   a. Estuary
   b. Below Douglas River
   c. Below Fergusson River
   d. Below Katherine River
2. CHILLING & MULDIVA CREEKS
3. HAYWARD CREEK
4. FISH RIVER
5. BAMBOO (MOON BOON) CREEK
6. GREEN ANT CREEK
7. DOUGLAS RIVER
8. HAYES CREEK
9. MIDDLE CREEK
10. STRAY CREEK
11. BRADSHAW CREEK
12. DEAD HORSE CREEK
13. FERGUSSON RIVER
    a. Below Edith River
    b. Above Edith River
14. EDITH RIVER
15. EIGHT MILE CREEK
16. CULLEN RIVER & COPPERFIELD CREEK
17. FLORA RIVER & HAYWARD CREEK
18. MATHISON & AROONA CREEKS
19. KATHERINE RIVER
    a. Below King River
    b. Below Seventeen Mile Creek
    c. Below Grace and Fanny Creeks
    d. Below Birdie Creek
    e. Upper Katherine River
20. LIMESTONE & SCOTT CREEKS
21. KING RIVER
    a. Below Dry River
    b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

LEGEND

SITE LOCATION	RIPARIAN VEGETATION CATEGORY	RATING (out ot 10)
● (red)	Very Low Cover/Diversity	1- 2
● (orange)	Low Cover/Diversity	3- 4
● (yellow)	Moderate Cover/Diversity	5- 6
● (light green)	High Cover/Diversity	7- 8
● (dark green)	Very High Cover/Diversity	9-10
○	Site Not Assessed	

19a	Sub-section Number
——	Catchment Boundary
——	Sub-catchment Boundary
- - - -	Sub-section Boundary
——	River
——	Creek
▭	Katherine Municipal Boundary

NOTE

Cover and Structural Diversity of the Riparian Vegetation - The ratings take into account:

a. The foliage cover or density provided by the overstorey, understorey and ground cover vegetation types or growth forms . The distinction between these three vegetation layers is -
   - overstorey vegetation includes large trees (>30m tall), medium-sized trees (10-30m tall) and palms;
   - understorey vegetation includes small trees (2-10m tall), regenerating trees (<2m tall), mangroves and woody shrubs (<2m tall);
   - ground cover vegetation includes vines, rushes/sedges, forbs, salt marsh, ferns, grasses and Phragmites.

   Both native and exotic vegetation species are included when calculating the covers. The extent of bare ground along the river banks within the riparian zone reduce the ratings.
b. The structural diversity or number of different growth forms present (eg trees of different height classes, palms, shrubs, vines, forbs, grasses, ferns, *etc*).

NATIONAL LANDCARE PROGRAM

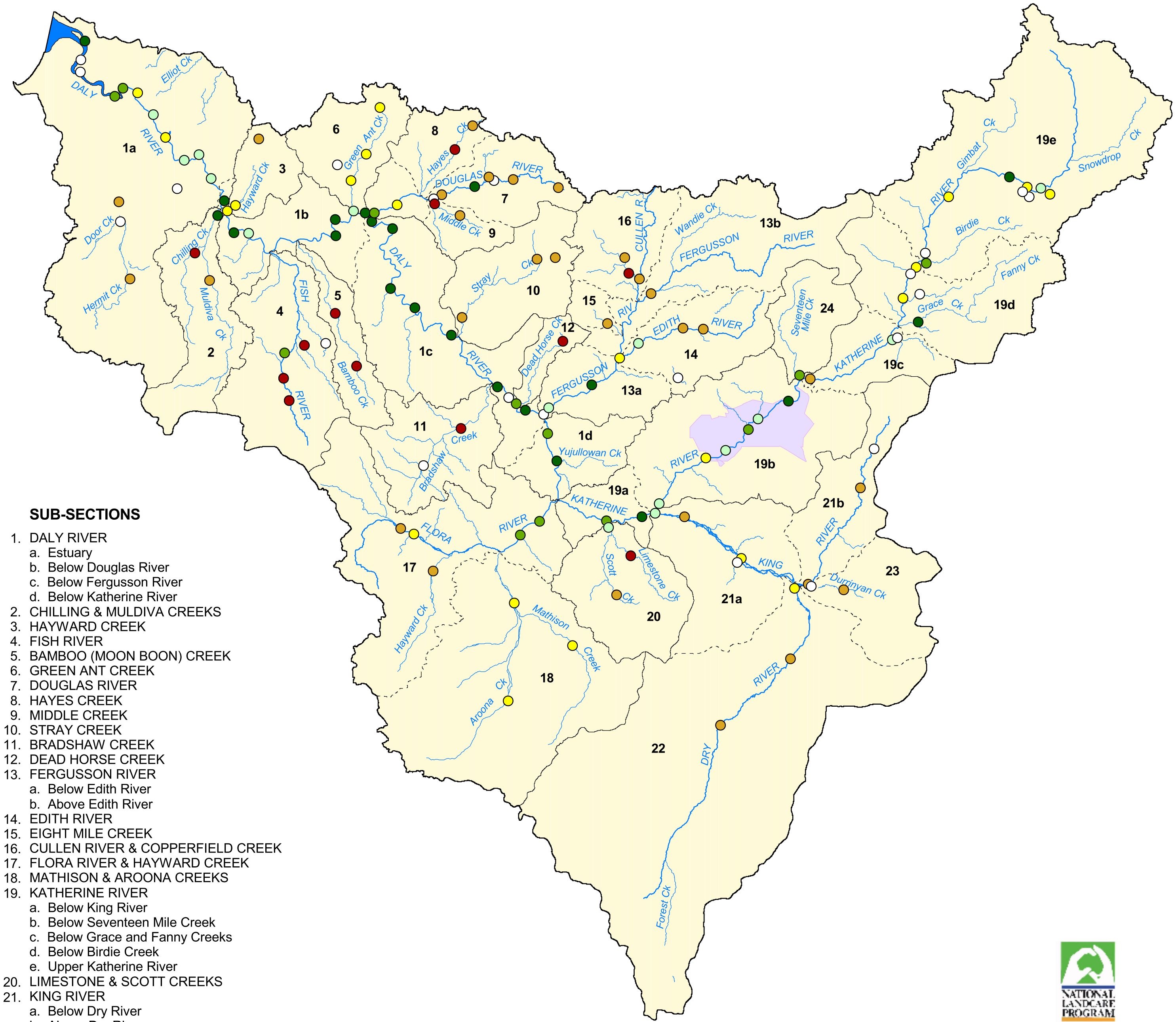
LANDS PLANNING ENVIRONMENT

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

COVER AND STRUCTURAL DIVERSITY OF RIPARIAN VEGETATION

Map 15



SUB-SECTIONS

1. DALY RIVER
   a. Estuary
   b. Below Douglas River
   c. Below Fergusson River
   d. Below Katherine River
2. CHILLING & MULDIVA CREEKS
3. HAYWARD CREEK
4. FISH RIVER
5. BAMBOO (MOON BOON) CREEK
6. GREEN ANT CREEK
7. DOUGLAS RIVER
8. HAYES CREEK
9. MIDDLE CREEK
10. STRAY CREEK
11. BRADSHAW CREEK
12. DEAD HORSE CREEK
13. FERGUSSON RIVER
    a. Below Edith River
    b. Above Edith River
14. EDITH RIVER
15. EIGHT MILE CREEK
16. CULLEN RIVER & COPPERFIELD CREEK
17. FLORA RIVER & HAYWARD CREEK
18. MATHISON & AROONA CREEKS
19. KATHERINE RIVER
    a. Below King River
    b. Below Seventeen Mile Creek
    c. Below Grace and Fanny Creeks
    d. Below Birdie Creek
    e. Upper Katherine River
20. LIMESTONE & SCOTT CREEKS
21. KING RIVER
    a. Below Dry River
    b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

NATIONAL LANDCARE PROGRAM

LANDS PLANNING ENVIRONMENT

LEGEND

SITE LOCATION	RIPARIAN VEGETATION WIDTH CATEGORY (m)
● (red)	< 5
● (orange)	5 - 10
● (yellow)	11 - 20
● (light green)	21 - 30
● (green)	31 - 40
● (dark green)	> 40
○	Site Not Assessed

19a	Sub-section Number
	Catchment Boundary
	Sub-catchment Boundary
	Sub-section Boundary
	River
	Creek
	Katherine Municipal Boundary

NOTE

The width of the riparian vegetation is averaged for both river banks at a site before being assigned a width category.

N

0 20 40 60 80

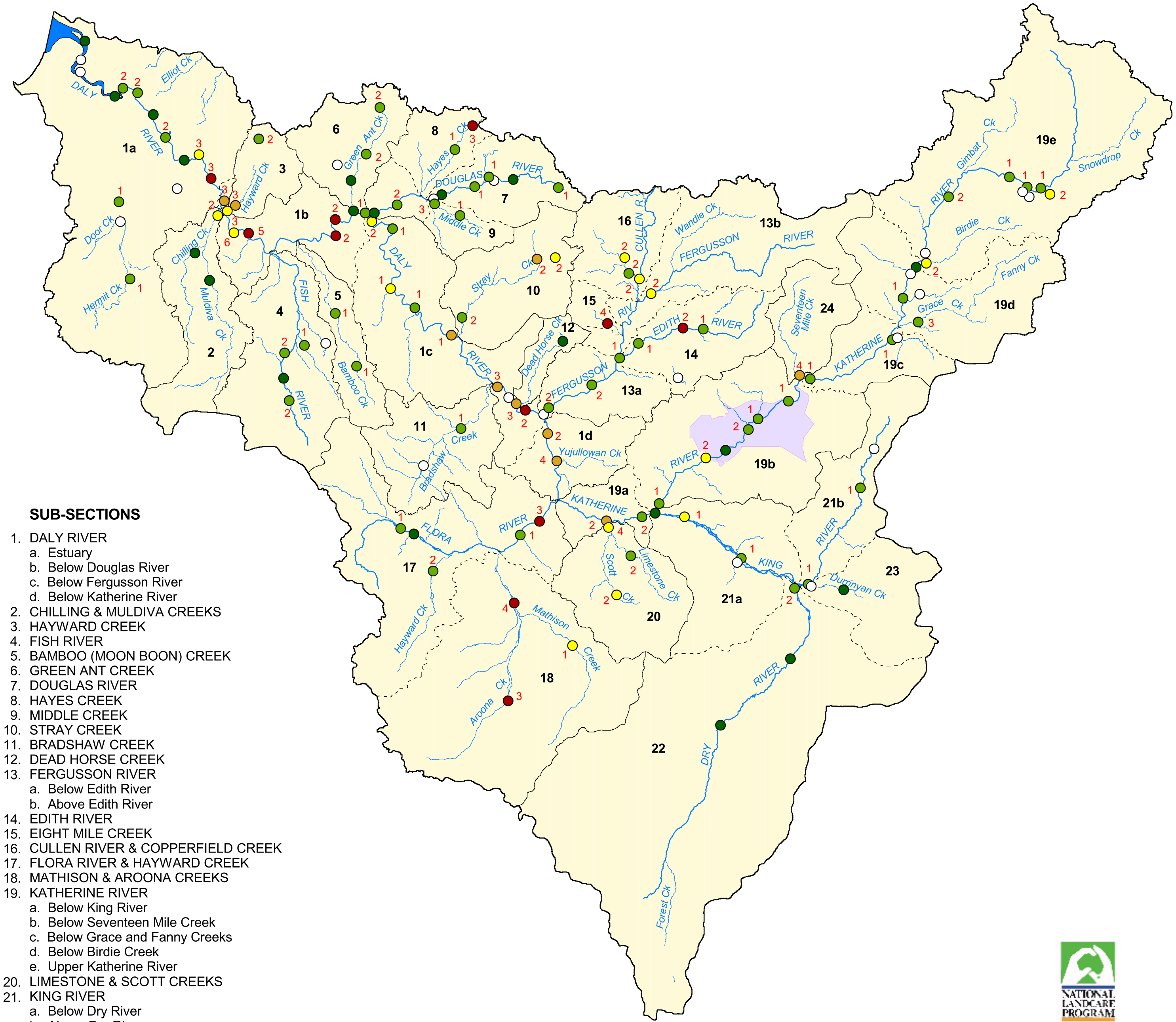
Kilometres

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

WIDTH OF RIPARIAN VEGETATION

Map 16



SUB-SECTIONS

1. DALY RIVER
   a. Estuary
   b. Below Douglas River
   c. Below Fergusson River
   d. Below Katherine River
2. CHILLING & MULDIVA CREEKS
3. HAYWARD CREEK
4. FISH RIVER
5. BAMBOO (MOON BOON) CREEK
6. GREEN ANT CREEK
7. DOUGLAS RIVER
8. HAYES CREEK
9. MIDDLE CREEK
10. STRAY CREEK
11. BRADSHAW CREEK
12. DEAD HORSE CREEK
13. FERGUSSON RIVER
    a. Below Edith River
    b. Above Edith River
14. EDITH RIVER
15. EIGHT MILE CREEK
16. CULLEN RIVER & COPPERFIELD CREEK
17. FLORA RIVER & HAYWARD CREEK
18. MATHISON & AROONA CREEKS
19. KATHERINE RIVER
    a. Below King River
    b. Below Seventeen Mile Creek
    c. Below Grace and Fanny Creeks
    d. Below Birdie Creek
    e. Upper Katherine River
20. LIMESTONE & SCOTT CREEKS
21. KING RIVER
    a. Below Dry River
    b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

LEGEND

SITE LOCATION	% COVER CATEGORY	RATING (out of 10)
● (red)	16-32*	2
● (orange)	11-15	4
● (yellow)	6-10	6
● (light green)	1-5	8
● (dark green)	0	10
○	Site Not Assessed	

NUMBER OF TYPES OF EXOTIC SPECIES

1 - 6 The number of different types of exotic species recorded at a site, if present.

19a Sub-section Number

Catchment Boundary

Sub-catchment Boundary

Sub-section Boundary

River

Creek

Katherine Municipal Boundary

NOTE

Cover of Exotic Riparian Vegetation -
The ratings take into account the percentage cover recorded for exotic species within the riparian zone, averaged for both river banks at a site. The higher the percentage cover recorded for exotic species, or the higher the degree of invasion, the lower the rating. The number of different types of exotic species recorded at a site, if present, is shown.

* The maximum percentage cover recorded for exotic riparian vegetation was 32%.

N

0 20 40 60 80

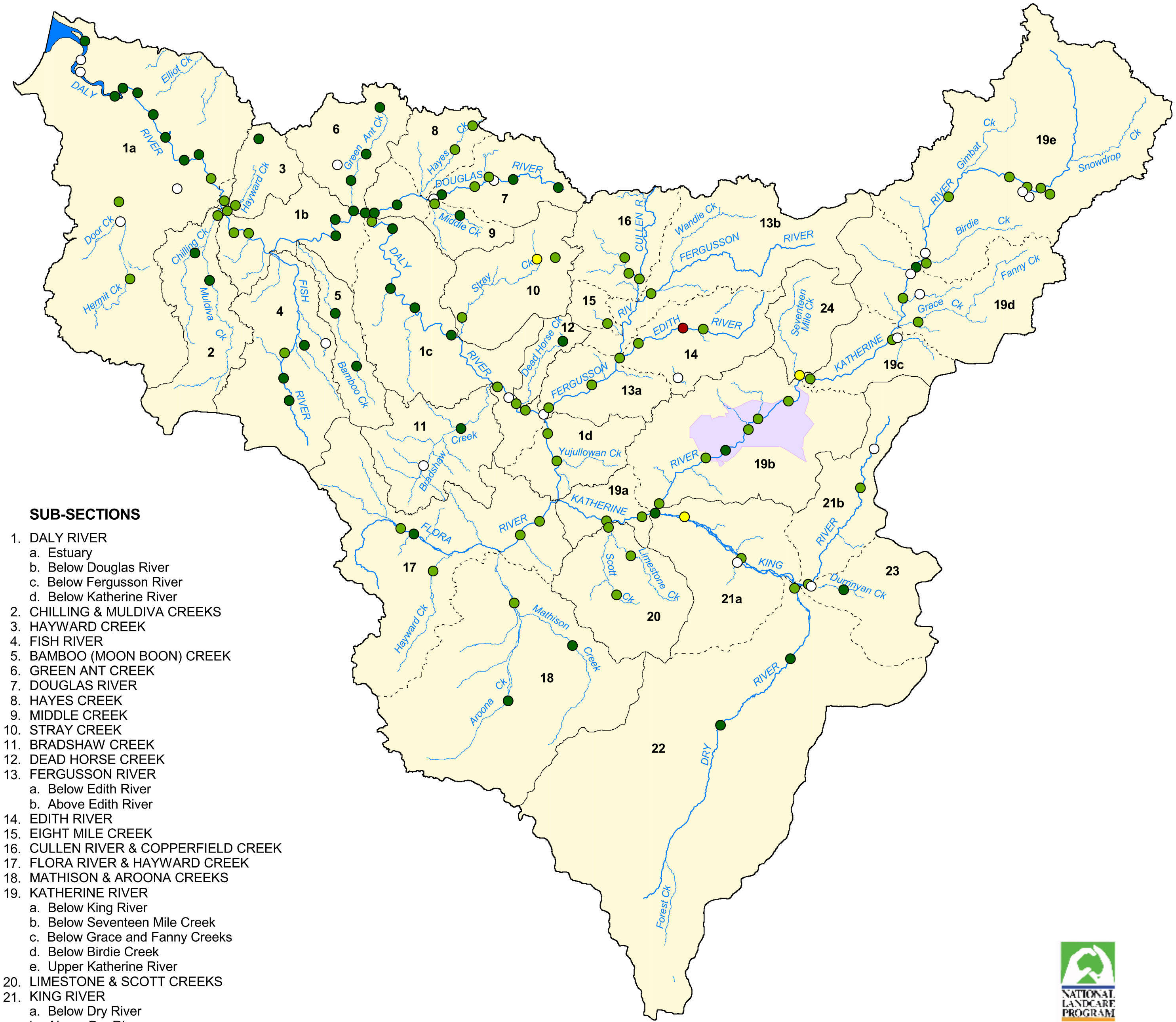
Kilometres

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

COVER OF EXOTIC RIPARIAN VEGETATION

Map 17



SUB-SECTIONS

1. DALY RIVER
   a. Estuary
   b. Below Douglas River
   c. Below Fergusson River
   d. Below Katherine River
2. CHILLING & MULDIVA CREEKS
3. HAYWARD CREEK
4. FISH RIVER
5. BAMBOO (MOON BOON) CREEK
6. GREEN ANT CREEK
7. DOUGLAS RIVER
8. HAYES CREEK
9. MIDDLE CREEK
10. STRAY CREEK
11. BRADSHAW CREEK
12. DEAD HORSE CREEK
13. FERGUSSON RIVER
    a. Below Edith River
    b. Above Edith River
14. EDITH RIVER
15. EIGHT MILE CREEK
16. CULLEN RIVER & COPPERFIELD CREEK
17. FLORA RIVER & HAYWARD CREEK
18. MATHISON & AROONA CREEKS
19. KATHERINE RIVER
    a. Below King River
    b. Below Seventeen Mile Creek
    c. Below Grace and Fanny Creeks
    d. Below Birdie Creek
    e. Upper Katherine River
20. LIMESTONE & SCOTT CREEKS
21. KING RIVER
    a. Below Dry River
    b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

LEGEND

SITE LOCATION	% COVER CATEGORY
● (red)	16-20*
● (orange)	11-15
● (yellow)	6-10
● (light green)	1-5
● (dark green)	0
○	Site Not Assessed

19a	Sub-section Number
	Catchment Boundary
	Sub-catchment Boundary
	Sub-section Boundary
	River
	Creek
	Katherine Municipal Boundary

NOTE

Passiflora foetida, a naturalised vine, was the major exotic species recorded throughout the catchment. Its distribution and the percentage cover recorded are shown. Percentage covers are averaged if the species is recorded for both river banks at a site.

* The maximum percentage cover recorded for *Passiflora foetida* was 20%.

N

0 20 40 60 80

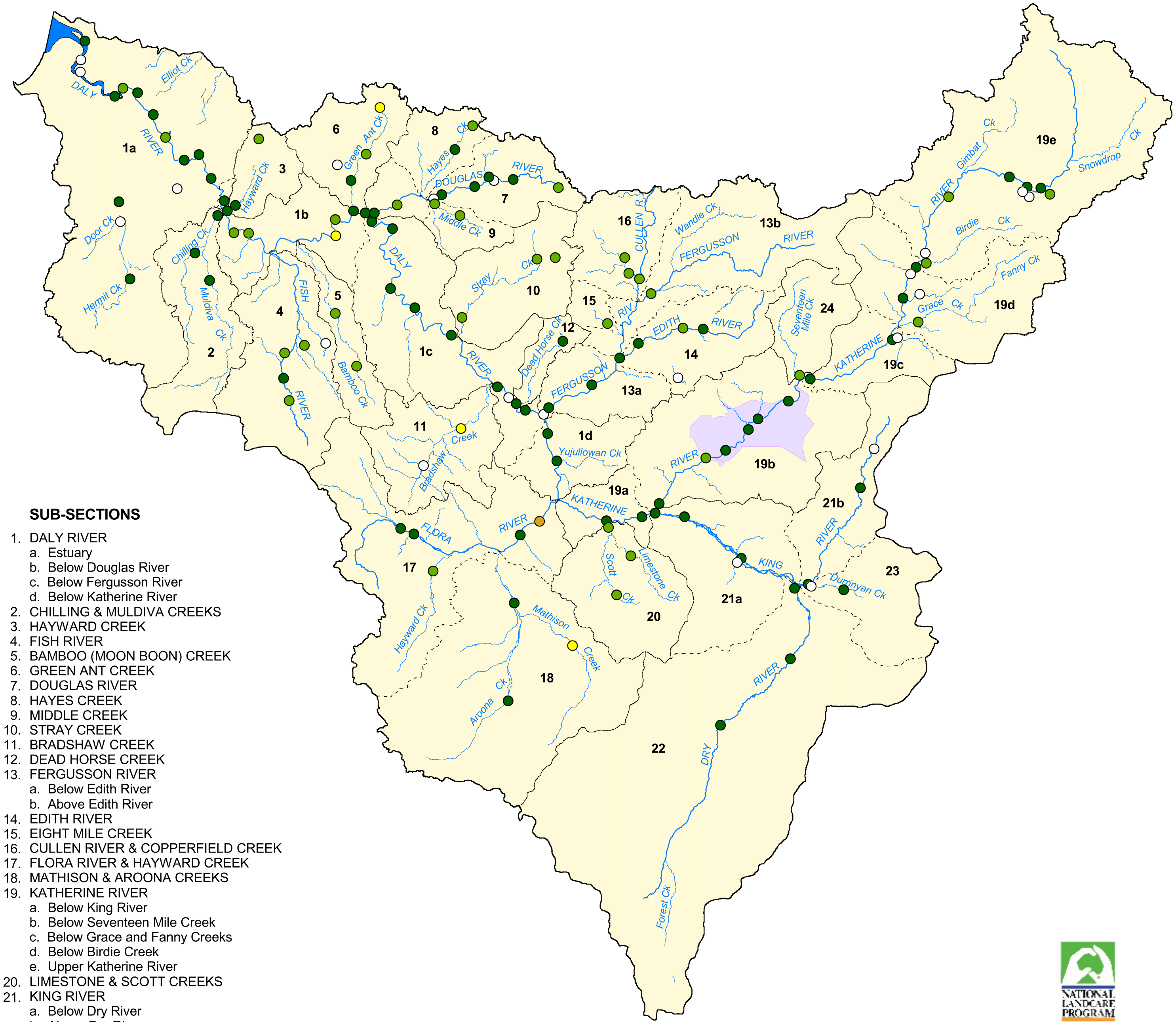
Kilometres

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

COVER AND DISTRIBUTION OF *Passiflora foetida*

Map 18



SUB-SECTIONS

1. DALY RIVER
   a. Estuary
   b. Below Douglas River
   c. Below Fergusson River
   d. Below Katherine River
2. CHILLING & MULDIVA CREEKS
3. HAYWARD CREEK
4. FISH RIVER
5. BAMBOO (MOON BOON) CREEK
6. GREEN ANT CREEK
7. DOUGLAS RIVER
8. HAYES CREEK
9. MIDDLE CREEK
10. STRAY CREEK
11. BRADSHAW CREEK
12. DEAD HORSE CREEK
13. FERGUSSON RIVER
    a. Below Edith River
    b. Above Edith River
14. EDITH RIVER
15. EIGHT MILE CREEK
16. CULLEN RIVER & COPPERFIELD CREEK
17. FLORA RIVER & HAYWARD CREEK
18. MATHISON & AROONA CREEKS
19. KATHERINE RIVER
    a. Below King River
    b. Below Seventeen Mile Creek
    c. Below Grace and Fanny Creeks
    d. Below Birdie Creek
    e. Upper Katherine River
20. LIMESTONE & SCOTT CREEKS
21. KING RIVER
    a. Below Dry River
    b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

LEGEND

SITE LOCATION	% COVER CATEGORY *
● (red)	> 15
● (orange)	11-15
● (yellow)	6-10
● (light green)	1-5
● (dark green)	0
○	Site Not Assessed

19a	Sub-section Number
	Catchment Boundary
	Sub-catchment Boundary
	Sub-section Boundary
	River
	Creek
	Katherine Municipal Boundary

NOTE

Hyptis suaveolens, a forb, was the second major exotic species recorded throughout the catchment. Its distribution and the percentage cover recorded are shown. Percentage covers are averaged if the species is recorded for both river banks at a site.

* The maximum percentage cover recorded for *Hyptis suaveolens* was 11%.

N

0 20 40 60 80

Kilometres

NATIONAL LANDCARE PROGRAM

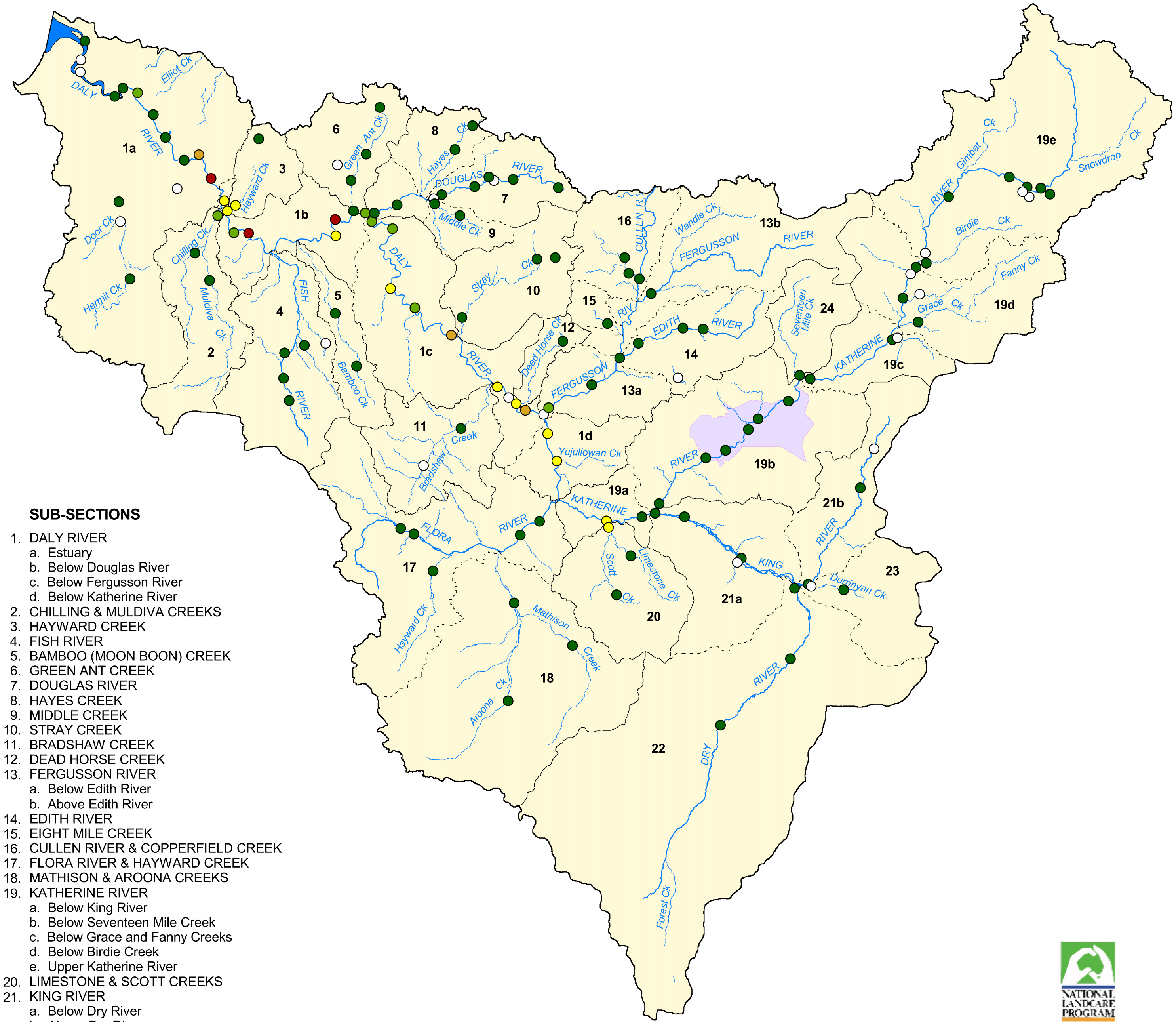
LANDS PLANNING ENVIRONMENT

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

COVER AND DISTRIBUTION OF *Hyptis suaveolens*

Map 19



SUB-SECTIONS

1. DALY RIVER
   a. Estuary
   b. Below Douglas River
   c. Below Fergusson River
   d. Below Katherine River
2. CHILLING & MULDIVA CREEKS
3. HAYWARD CREEK
4. FISH RIVER
5. BAMBOO (MOON BOON) CREEK
6. GREEN ANT CREEK
7. DOUGLAS RIVER
8. HAYES CREEK
9. MIDDLE CREEK
10. STRAY CREEK
11. BRADSHAW CREEK
12. DEAD HORSE CREEK
13. FERGUSSON RIVER
    a. Below Edith River
    b. Above Edith River
14. EDITH RIVER
15. EIGHT MILE CREEK
16. CULLEN RIVER & COPPERFIELD CREEK
17. FLORA RIVER & HAYWARD CREEK
18. MATHISON & AROONA CREEKS
19. KATHERINE RIVER
    a. Below King River
    b. Below Seventeen Mile Creek
    c. Below Grace and Fanny Creeks
    d. Below Birdie Creek
    e. Upper Katherine River
20. LIMESTONE & SCOTT CREEKS
21. KING RIVER
    a. Below Dry River
    b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

LEGEND

SITE LOCATION	% COVER CATEGORY
●	16-28*
●	11-15
●	6-10
●	1-5
●	0
○	Site Not Assessed

19a	Sub-section Number
	Catchment Boundary
	Sub-catchment Boundary
	Sub-section Boundary
	River
	Creek
	Katherine Municipal Boundary

NOTE

Xanthium occidentale (Noogoora Burr), a forb or sub-shrub, was the third major exotic species recorded throughout the catchment. Its distribution and the percentage cover recorded are shown. Percentage covers are averaged if the species is recorded for both river banks at a site.

* The maximum percentage cover for *Xanthium occidentale* was 28%.

N

0 20 40 60 80

Kilometres

NATIONAL LANDCARE PROGRAM

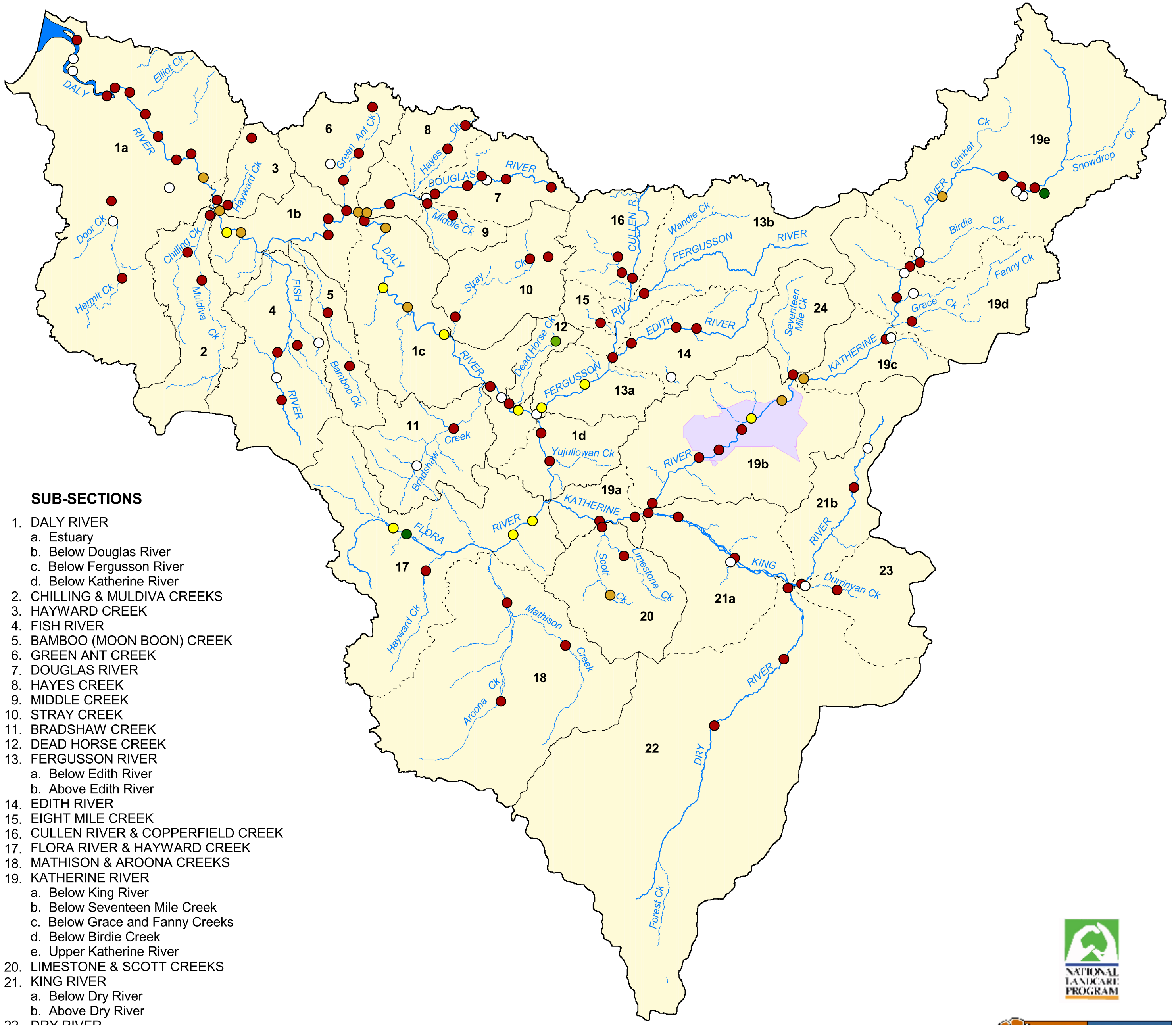
LANDS PLANNING ENVIRONMENT

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

COVER AND DISTRIBUTION OF *Xanthium occidentale*

(Noogoora Burr) **Map 20**



SUB-SECTIONS

1. DALY RIVER
   a. Estuary
   b. Below Douglas River
   c. Below Fergusson River
   d. Below Katherine River
2. CHILLING & MULDIVA CREEKS
3. HAYWARD CREEK
4. FISH RIVER
5. BAMBOO (MOON BOON) CREEK
6. GREEN ANT CREEK
7. DOUGLAS RIVER
8. HAYES CREEK
9. MIDDLE CREEK
10. STRAY CREEK
11. BRADSHAW CREEK
12. DEAD HORSE CREEK
13. FERGUSSON RIVER
    a. Below Edith River
    b. Above Edith River
14. EDITH RIVER
15. EIGHT MILE CREEK
16. CULLEN RIVER & COPPERFIELD CREEK
17. FLORA RIVER & HAYWARD CREEK
18. MATHISON & AROONA CREEKS
19. KATHERINE RIVER
    a. Below King River
    b. Below Seventeen Mile Creek
    c. Below Grace and Fanny Creeks
    d. Below Birdie Creek
    e. Upper Katherine River
20. LIMESTONE & SCOTT CREEKS
21. KING RIVER
    a. Below Dry River
    b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

LEGEND

SITE LOCATION	% COVER CATEGORY
● (dark red)	0
● (orange)	1-5
● (yellow)	6-10
● (light green)	11-15
● (dark green)	16-25*
○	Site Not Assessed

19a	Sub-section Number
	Catchment Boundary
	Sub-catchment Boundary
	Sub-section Boundary
	River
	Creek
	Katherine Municipal Boundary

NOTE

Cover and Distribution of Submerged Aquatic Vegetation - The categories where covers were recorded include filamentous algae, Chara/Nitella, Vallisneria and Myriophyllum. No exotic species were recorded.

* The maximum percentage cover recorded for submerged aquatic vegetation was 25%.

N

0 20 40 60 80

Kilometres

NATIONAL LANDCARE PROGRAM

LANDS PLANNING ENVIRONMENT

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

COVER AND DISTRIBUTION OF SUBMERGED AQUATIC VEGETATION

Map 21

SUB-SECTIONS

1. DALY RIVER
   a. Estuary
   b. Below Douglas River
   c. Below Fergusson River
   d. Below Katherine River
2. CHILLING & MULDIVA CREEKS
3. HAYWARD CREEK
4. FISH RIVER
5. BAMBOO (MOON BOON) CREEK
6. GREEN ANT CREEK
7. DOUGLAS RIVER
8. HAYES CREEK
9. MIDDLE CREEK
10. STRAY CREEK
11. BRADSHAW CREEK
12. DEAD HORSE CREEK
13. FERGUSSON RIVER
    a. Below Edith River
    b. Above Edith River
14. EDITH RIVER
15. EIGHT MILE CREEK
16. CULLEN RIVER & COPPERFIELD CREEK
17. FLORA RIVER & HAYWARD CREEK
18. MATHISON & AROONA CREEKS
19. KATHERINE RIVER
    a. Below King River
    b. Below Seventeen Mile Creek
    c. Below Grace and Fanny Creeks
    d. Below Birdie Creek
    e. Upper Katherine River
20. LIMESTONE & SCOTT CREEKS
21. KING RIVER
    a. Below Dry River
    b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

LEGEND

SITE LOCATION	% COVER CATEGORY
● (red)	0
● (orange)	1-5
● (yellow)	6-10
● (light green)	11-15
● (dark green)	16-45*
○	Site Not Assessed

19a	Sub-section Number
	Catchment Boundary
	Sub-catchment Boundary
	Sub-section Boundary
	River
	Creek
	Katherine Municipal Boundary

NOTE

Cover and Distribution of Emergent Aquatic Vegetation - The categories where covers were recorded include Phragmites, rushes/sedges, Pandanus, Melaleuca, other shrubs/trees and ground covers. No exotic species were recorded.

* The maximum percentage cover recorded for emergent aquatic vegetation was 45%.

N

0 20 40 60 80

Kilometres

NATIONAL LANDCARE PROGRAM

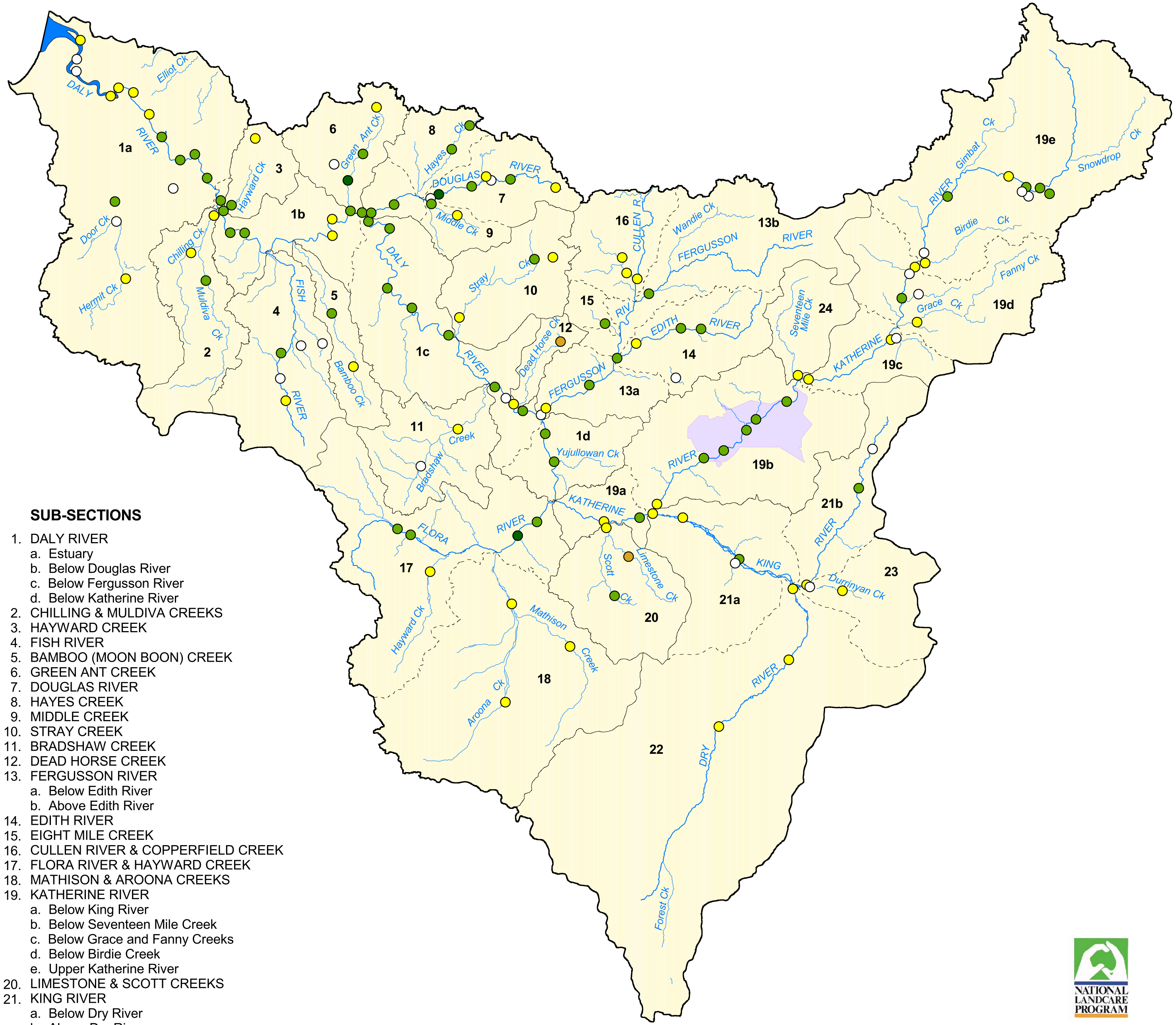
LANDS PLANNING ENVIRONMENT

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

COVER AND DISTRIBUTION OF EMERGENT AQUATIC VEGETATION

Map 22



SUB-SECTIONS

1. DALY RIVER
   a. Estuary
   b. Below Douglas River
   c. Below Fergusson River
   d. Below Katherine River
2. CHILLING & MULDIVA CREEKS
3. HAYWARD CREEK
4. FISH RIVER
5. BAMBOO (MOON BOON) CREEK
6. GREEN ANT CREEK
7. DOUGLAS RIVER
8. HAYES CREEK
9. MIDDLE CREEK
10. STRAY CREEK
11. BRADSHAW CREEK
12. DEAD HORSE CREEK
13. FERGUSSON RIVER
    a. Below Edith River
    b. Above Edith River
14. EDITH RIVER
15. EIGHT MILE CREEK
16. CULLEN RIVER & COPPERFIELD CREEK
17. FLORA RIVER & HAYWARD CREEK
18. MATHISON & AROONA CREEKS
19. KATHERINE RIVER
    a. Below King River
    b. Below Seventeen Mile Creek
    c. Below Grace and Fanny Creeks
    d. Below Birdie Creek
    e. Upper Katherine River
20. LIMESTONE & SCOTT CREEKS
21. KING RIVER
    a. Below Dry River
    b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

LEGEND

SITE LOCATION	INSTREAM / BANK HABITAT CATEGORY	RATING (%)
● (red)	Very Low Cover/Diversity	0 - 20
● (orange)	Low Cover/Diversity	21- 40
● (yellow)	Moderate Cover/Diversity	41- 60
● (green)	High Cover/Diversity	61- 80
● (dark green)	Very High Cover/Diversity	81-100
○	Site Not Assessed	
19a	Sub-section Number	
	Catchment Boundary	
	Sub-catchment Boundary	
	Sub-section Boundary	
	River	
	Creek	
	Katherine Municipal Boundary	

NOTE

Cover and Diversity of Instream and Bank Habitats - The ratings are based on a combination of the cover and diversity provided by instream organic debris (logs, branches, leaves/twigs, *etc*), aquatic vegetation and other habitat types (such as rock, permanent pools) on the bed, as well as the cover and diversity provided by the canopy and other habitats (low vegetation, roots, bank overhang) along the river banks.

NATIONAL LANDCARE PROGRAM

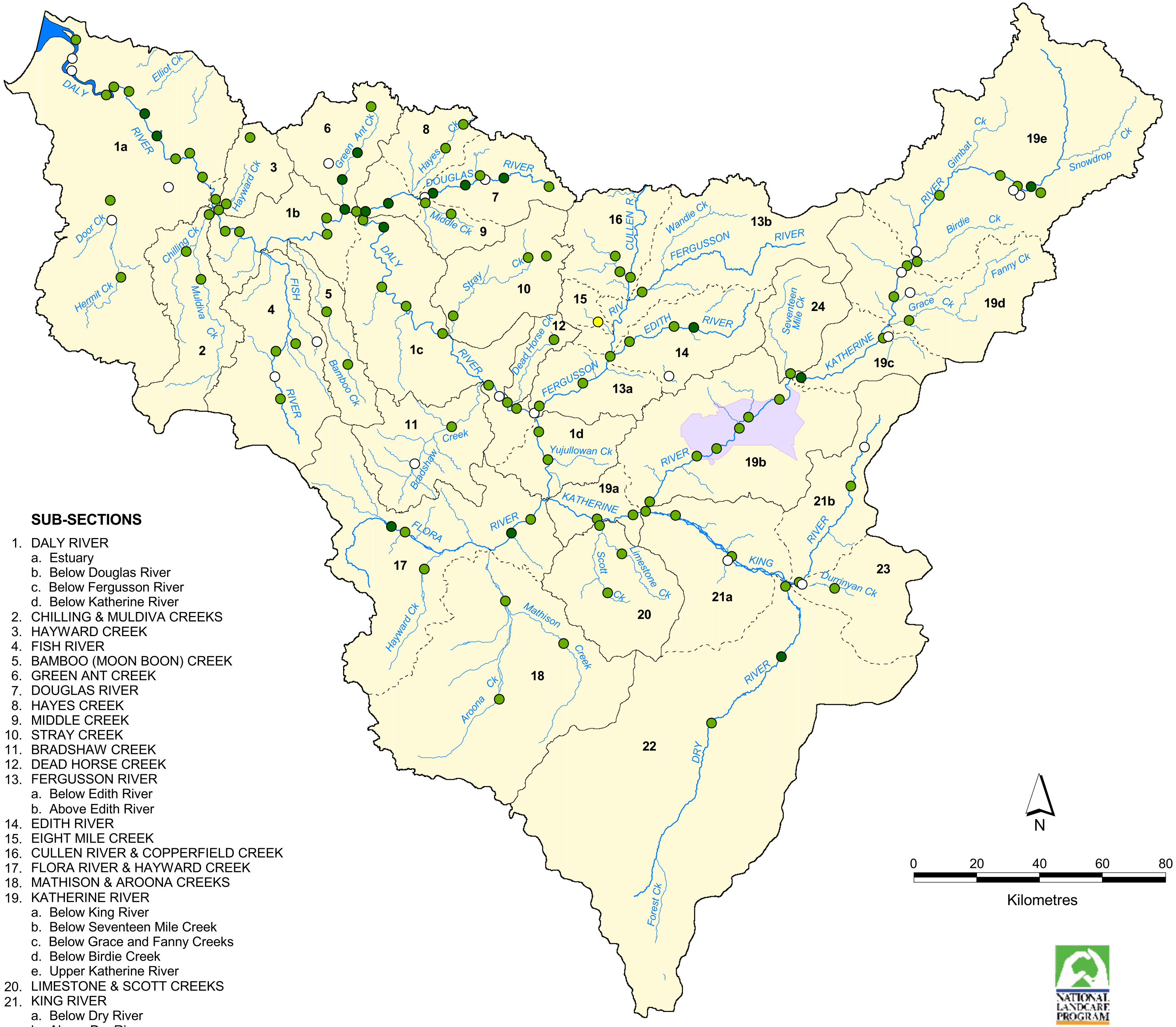
LANDS PLANNING ENVIRONMENT

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

COVER AND DIVERSITY OF INSTREAM AND BANK HABITATS

Map 23



SUB-SECTIONS

1. DALY RIVER
   a. Estuary
   b. Below Douglas River
   c. Below Fergusson River
   d. Below Katherine River
2. CHILLING & MULDIVA CREEKS
3. HAYWARD CREEK
4. FISH RIVER
5. BAMBOO (MOON BOON) CREEK
6. GREEN ANT CREEK
7. DOUGLAS RIVER
8. HAYES CREEK
9. MIDDLE CREEK
10. STRAY CREEK
11. BRADSHAW CREEK
12. DEAD HORSE CREEK
13. FERGUSSON RIVER
    a. Below Edith River
    b. Above Edith River
14. EDITH RIVER
15. EIGHT MILE CREEK
16. CULLEN RIVER & COPPERFIELD CREEK
17. FLORA RIVER & HAYWARD CREEK
18. MATHISON & AROONA CREEKS
19. KATHERINE RIVER
    a. Below King River
    b. Below Seventeen Mile Creek
    c. Below Grace and Fanny Creeks
    d. Below Birdie Creek
    e. Upper Katherine River
20. LIMESTONE & SCOTT CREEKS
21. KING RIVER
    a. Below Dry River
    b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

LEGEND

SITE LOCATION	OVERALL CONDITION CATEGORY	RATING (%)
● (red)	Extreme Modification/ Instability, Very Low Cover/ Diversity or Very High Cover for Exotics	0 - 20
● (orange)		21-40
● (yellow)		41 - 60
● (light green)		61 - 80
● (dark green)	Essentially Natural/ Stable, Very High Cover/ Diversity or Exotics Absent/Negligible	81 - 100
○	Site Not Assessed	
19a	Sub-section Number	
	Catchment Boundary	
	Sub-catchment Boundary	
	Sub-section Boundary	
	River	
	Creek	
	Katherine Municipal Boundary	

NOTE

Overall Condition -
Provides an indication of the overall condition of the sites based on the following six components that were assessed:

- state of the reach environs
- bank stability
- bed stability
- cover and structural diversity of riparian vegetation
- cover of exotic riparian vegetation
- cover and diversity of instream and bank habitats

The rating for each component is combined equally to produce an Overall Condition Rating for each site.

NATIONAL LANDCARE PROGRAM

LANDS PLANNING ENVIRONMENT

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

OVERALL CONDITION

Map 24

OPEN FLOW GAUGE STATIONS

Station	Tributary	Location	Years Recording
G8140003	Daly River	At Police Station	1952-present
G8140040	Daly River	At Mt Nancar	1969-present
G8140042	Daly River	2km d/s Beeboom Crossing	1981-present
G8140067	Daly River	U/s Dorisvale Crossing	1960-present
G8140063	Douglas Riv	D/s old Douglas Homestead	1957-present
G8140011	Dry River	At Manbulloo bdy	1967-present
G8140152	Edith River	At dam site	1962-present
G8140008	Fergusson Riv	At old railway bridge	1957-present
G8140044	Flora River	U/s Kathleen Falls	1966-present
G8140161	Green Ant Ck	At Tipperary	1966-present
G8140001	Katherine Riv	At railway bridge	1960-present
G8140023	Katherine Riv	At Gorge Caravan Park	1972-present
G8140218	Katherine Riv	At Mt Epsworth	1966-present
G8140219	Katherine Riv	D/s Birdie Ck	1997-present
G8140158	McAdden Ck	At dam site	1962-present
G8140159	Seventeen Mile Ck	At waterfall view	1962-present

CLOSED FLOW GAUGE STATIONS

Station	Tributary	Location	Years Recording
G8140234	Bradshaw Ck	At Wambungi Rd Crossing	1965-1981
G8140062	Copperfield Ck	Chinamans Camp	1972-1987
G8140041	Daly River	At Gourley	1959-1981
G8140266	Daly River	U/s of Moon Billabong	1967-1986
G8140166	Fish River	At Gorge	1963-1987
G8140005	Flora River	Upper and Picker Pocket	1967-1986
G8140019	Katherine Riv	At Katherine Gorge	1954-1987
G8140068	King River	D/s Victoria Hwy	1958-1986
G8140086	King River	D/s Stuart Hwy	1964-1987
G8140151	Mathison Ck	At Victoria Hwy	1961-1987
G8140214	Scott Creek	At Victoria Hwy	1963-1987

NOTE

Refer Table 4.36 in report for a summary of stream flow information.

N

0 20 40 60 80

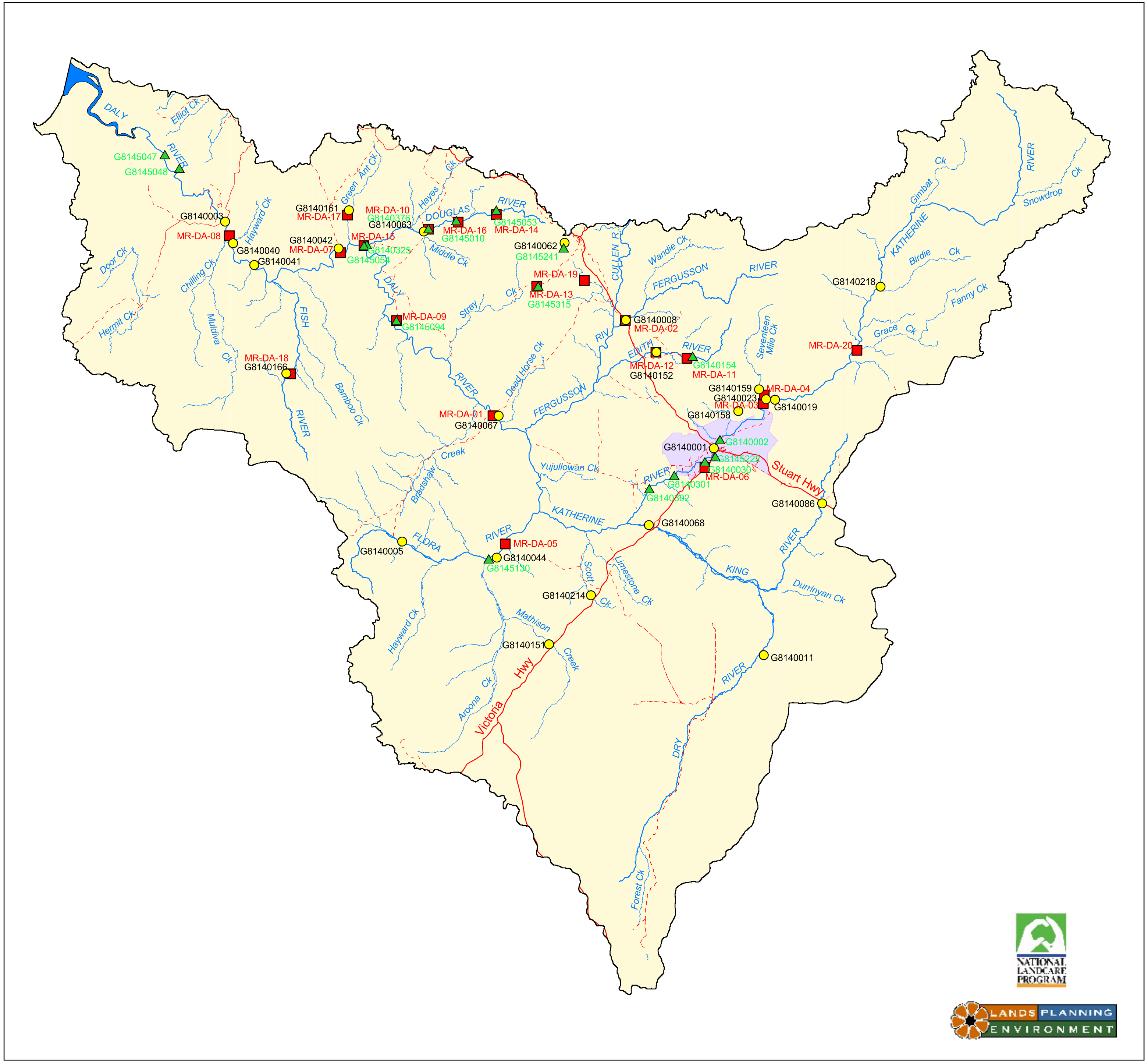
Kilometres

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

FLOW GAUGE STATIONS, MONITORING BORES AND SPRINGS

Map 25



LEGEND

19a	Sub-section Number
	Catchment Boundary
	River
	Creek
	Road
	Katherine Municipal Boundary
G8140040	Water Quality Sampling Point located at a Flow Gauge Station. Parameters tested include 1, 2, 4 - 7 * (Refer Table 4.37 in report for a summary of the results).
G8145010	Water Quality Sampling Point NOT located at a Flow Gauge Station and where >10 results for a parameter and/or results >1985. Parameters tested include 1, 2, 4 - 7 * (Refer Table 4.38 in report for a summary of the results).
MR-DA-20	Water Quality Sampling Point located at an 'Ausrivas' Project Site (previously known as a 'Monitoring River Health 'Site') Parameters tested include 1, 3 - 7 * (Refer Table 4.39 in report for a summary of the results).

*** WATER QUALITY PARAMETERS**

1. Electrical Conductivity (Lab)
2. Turbidity (Lab)
3. Turbidity (Field)
4. Water Temperature (Field)
5. pH (Lab)
6. Total Alkalinity (Lab)
7. Total Phosphorus (Lab)

N

0 20 40 60 80

Kilometres

TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

WATER QUALITY SAMPLING POINTS

Map 26

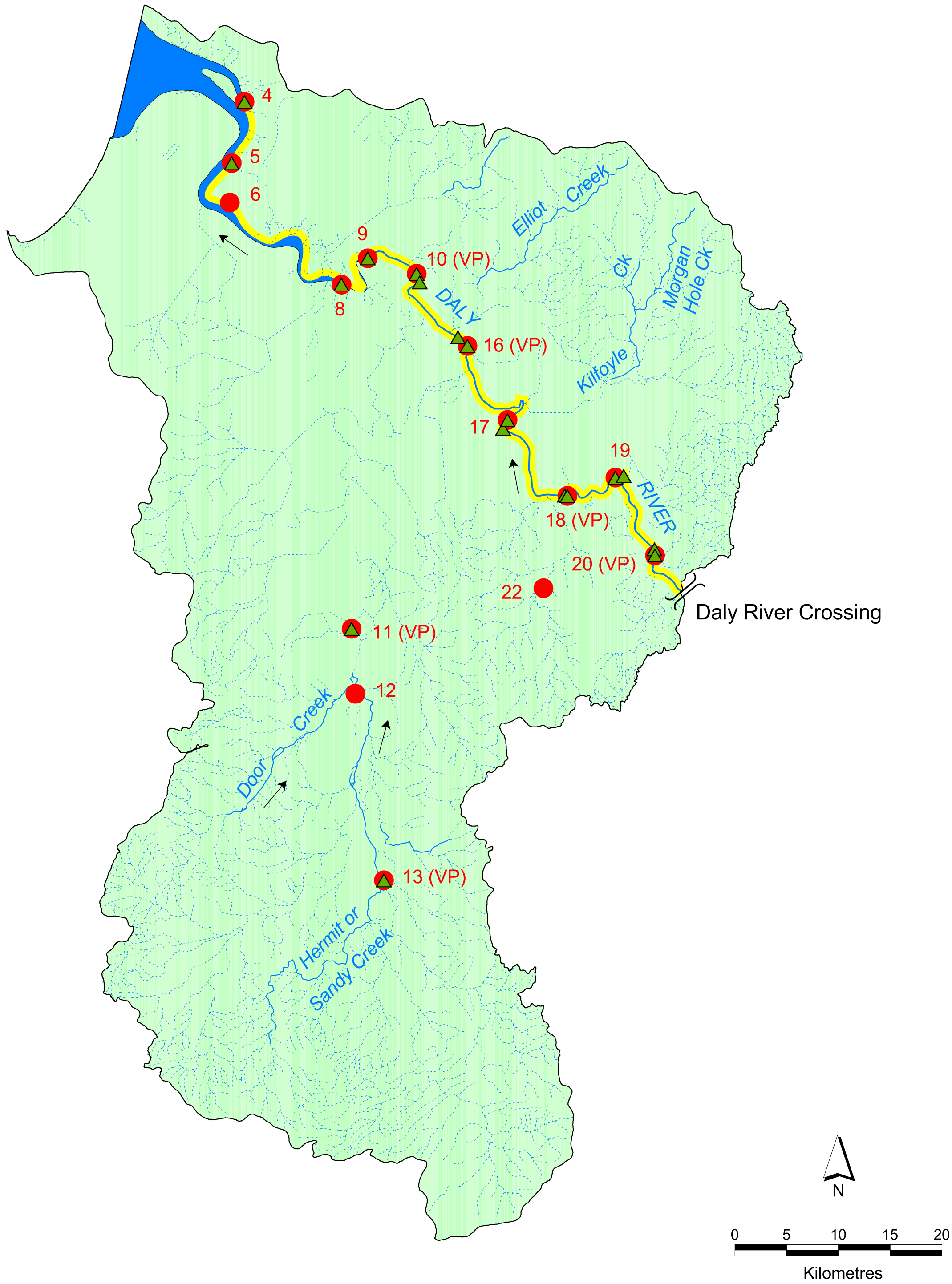
TOP END WATERWAYS PROJECT
DALY RIVER CATCHMENT

DALY RIVER SUB-CATCHMENTS

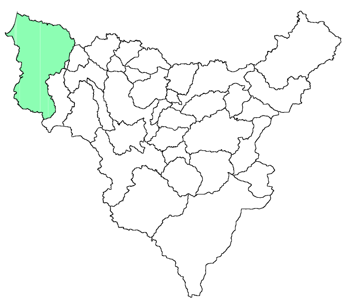
MAP SERIES

This document displays the following map series for the report,
Daly River Catchment, Part 2 –
Accompanying Sub-catchment Information

Sub-catchment	Sub-section	Tributary Name
1	a.	Daly River - Estuary
	b.	Daly River - Below Douglas River
	c.	Daly River - Below Fergusson River
	d.	Daly River - Below Katherine River
2		Chilling and Muldiva Creeks
3		Hayward Creek
4		Fish River
5		Bamboo (Moon Boon) Creek
6		Green Ant Creek
7		Douglas Creek
8		Hayes Creek
9		Middle Creek
10		Stray Creek
11		Bradshaw Creek
12		Dead Horse Creek
13	a.	Fergusson River – Below Edith River
	b.	Fergusson River – Above Edith River
14		Edith River
15		Eight Mile Creek
16		Cullen River and Copperfield Creek
17		Flora River and Hayward Creek
18		Mathison and Aroona Creeks
19	a.	Katherine River – Below King River
	b.	Katherine River – Below Seventeen Mile Creek
	c.	Katherine River – Below Grace and Fanny Creeks
	d.	Katherine River – Below Birdie Creek
	e.	Katherine River – Upper Katherine River
20		Limestone and Scott Creeks
21	a.	King River – Below Dry River
	b.	King River – Above Dry River
22		Dry River
23		Durriyan Creek
24		Seventeen Mile Creek



Area - 4,945 km^2



LOCATION OF SUB-SECTION

LEGEND

5	Site
	Sample Point
(VP)	Vegetation Profile
	Longitudinal Profile Survey
	River
	Creek
	Flow direction

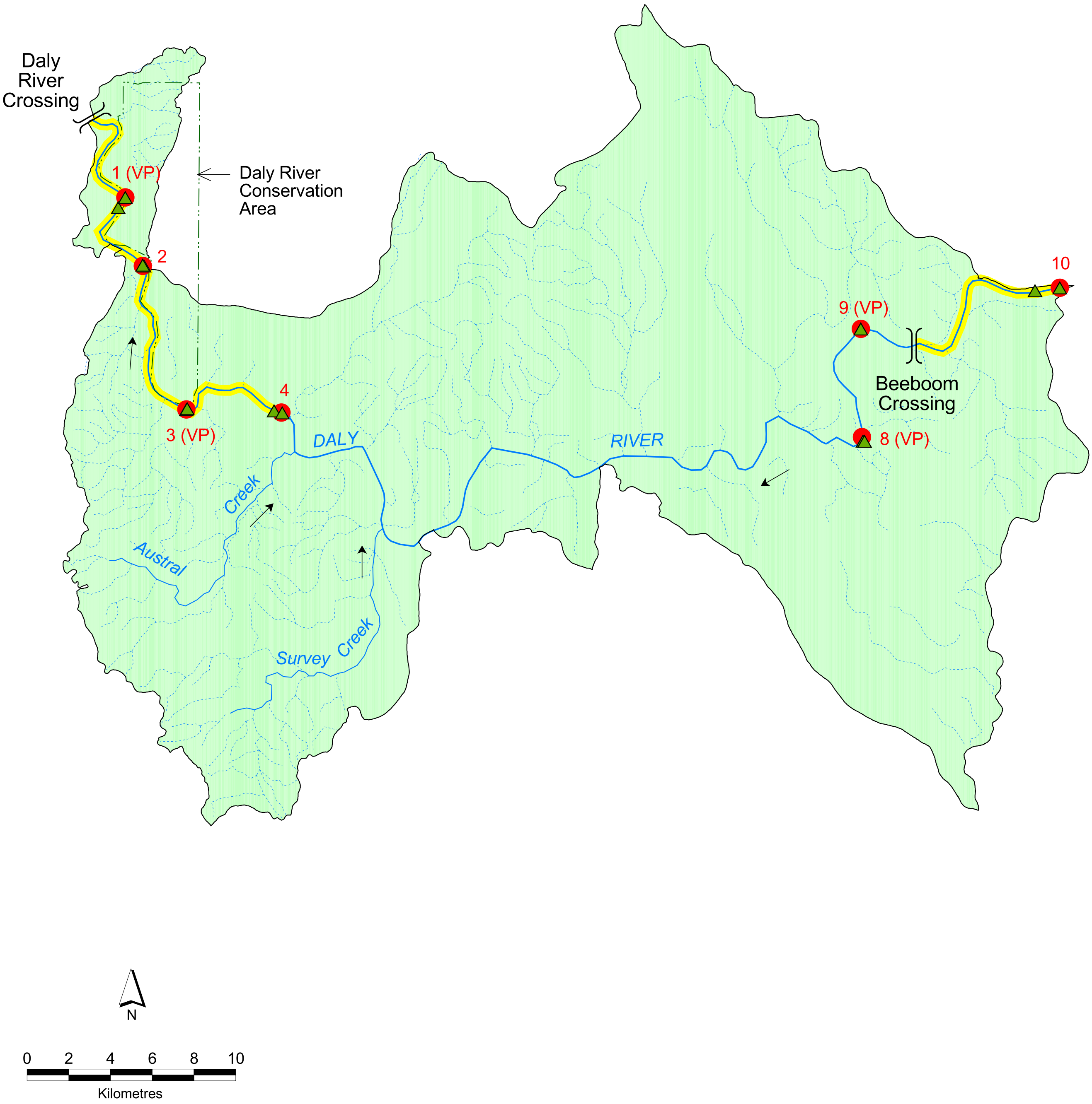
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

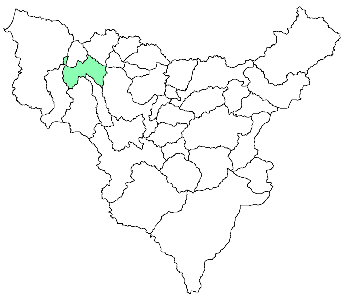
DALY RIVER Estuary

SUB-SECTION 1a

Map 27



Area - 1,012 km^2



LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

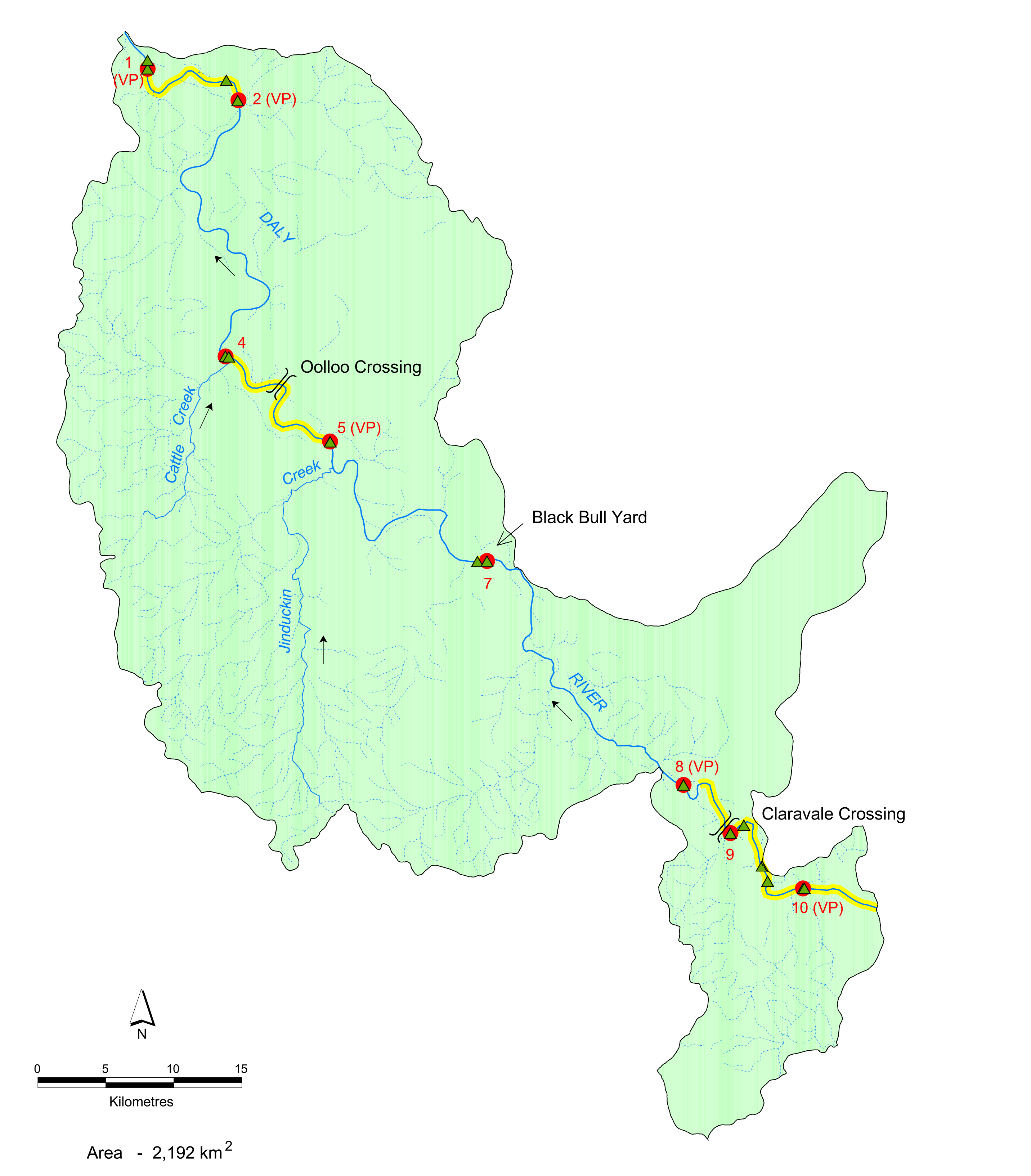
TOP END WATERWAYS PROJECT

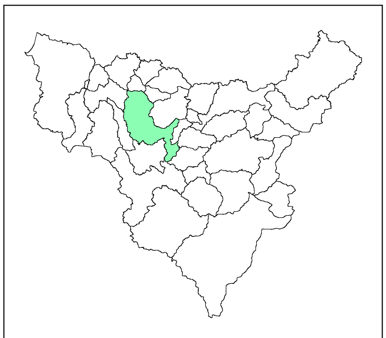
DALY RIVER CATCHMENT

DALY RIVER
Below Douglas River

SUB-SECTION 1b

Map 28





LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

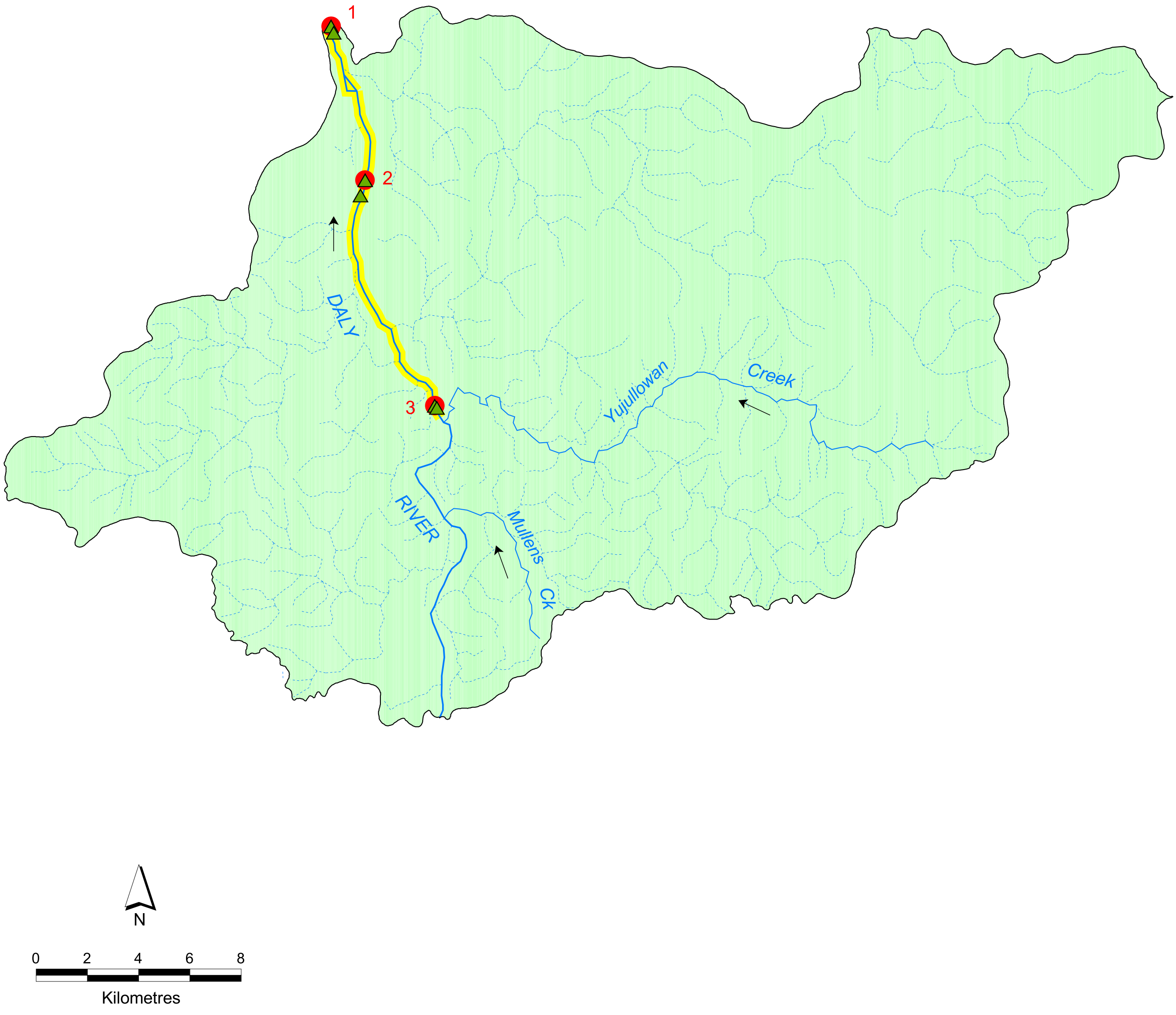
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

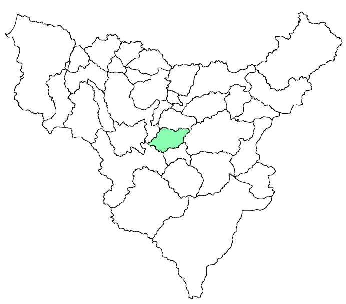
DALY RIVER Below Fergusson River

SUB-SECTION 1c

Map 29



Area - 734 km^2



LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

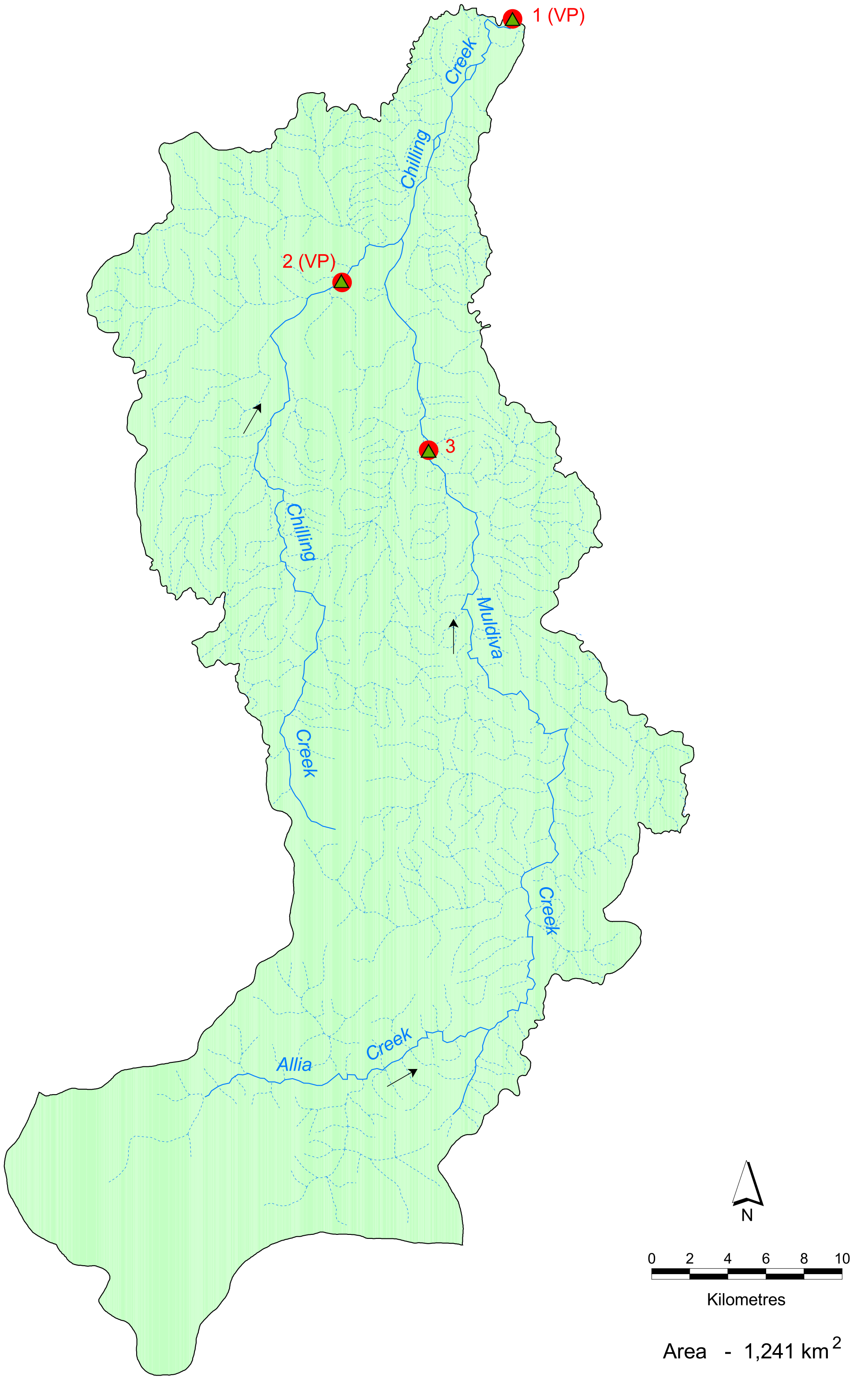
TOP END WATERWAYS PROJECT

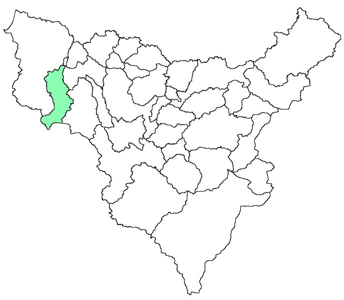
DALY RIVER CATCHMENT

DALY RIVER
Below Katherine River

SUB-SECTION 1d

Map 30





LOCATION OF SUB-SECTION

LEGEND

- 5 — Site
- Sample Point
- (VP) — Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

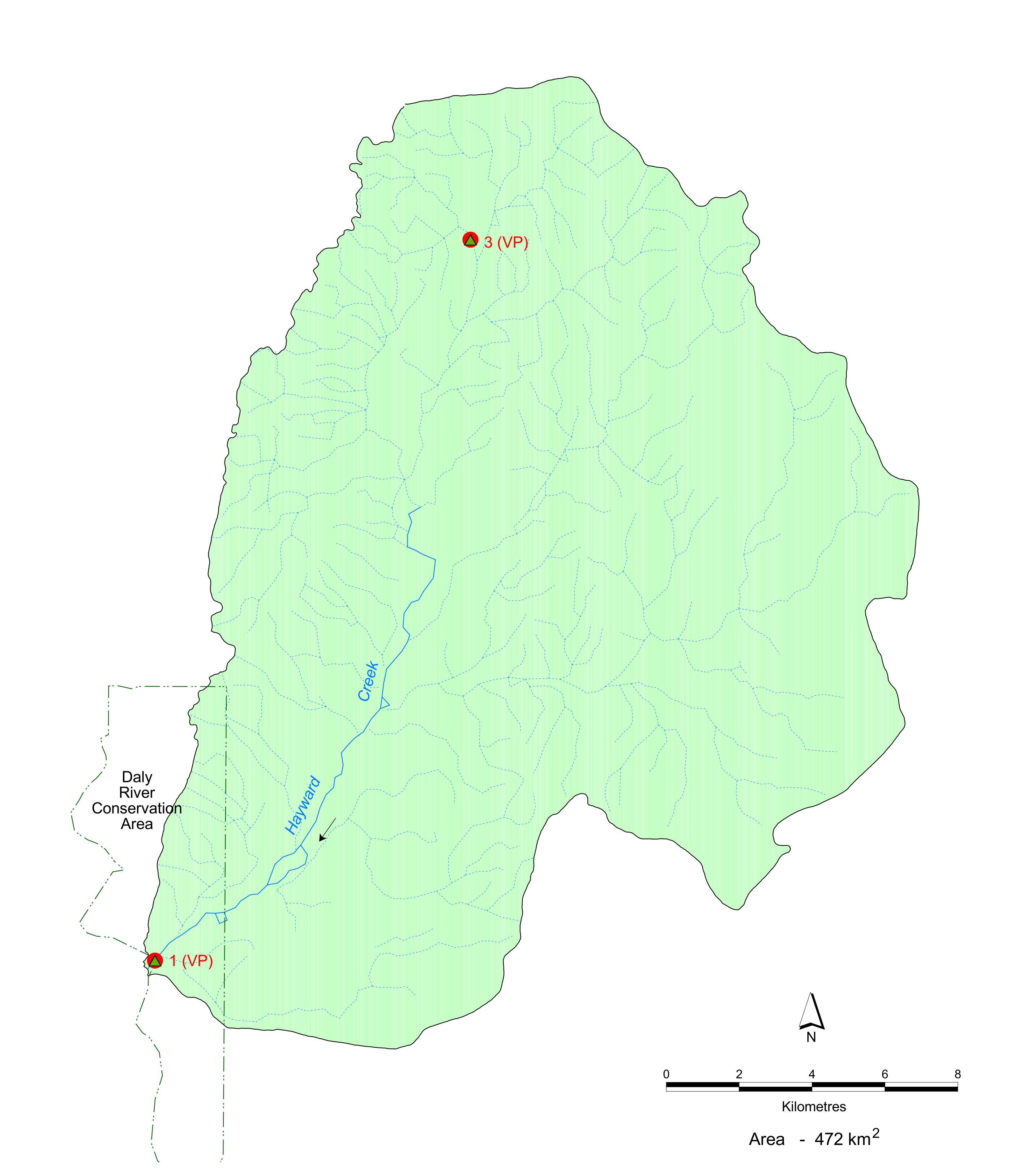
TOP END WATERWAYS PROJECT

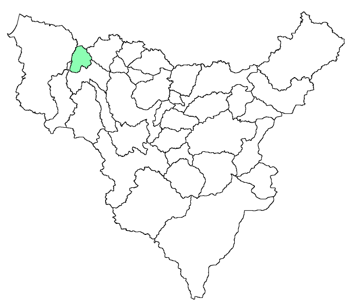
DALY RIVER CATCHMENT

CHILLING AND MULDIVA CREEKS

SUB-SECTION 2

Map 31





LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

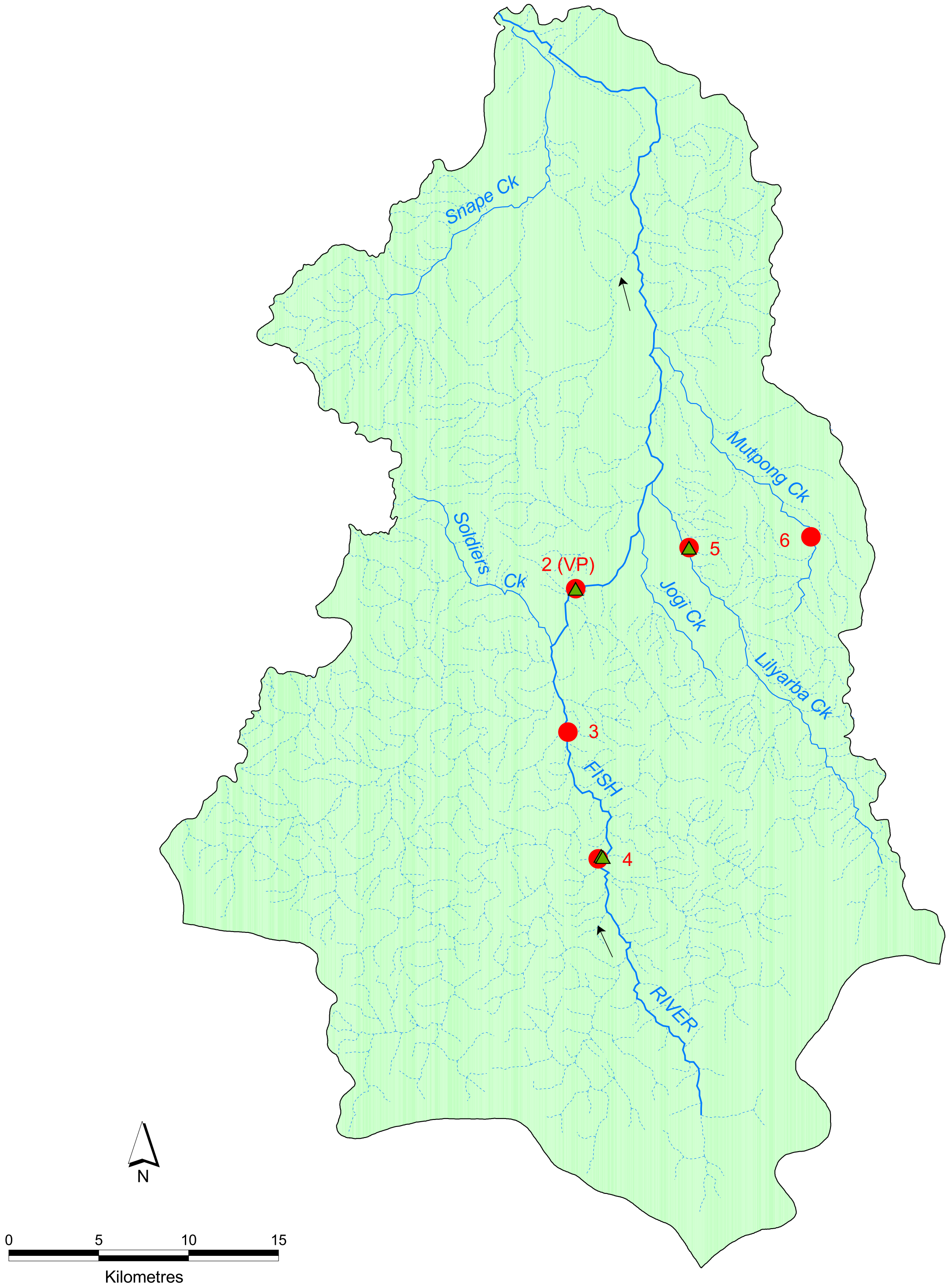
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

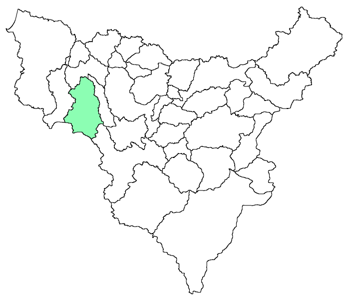
HAYWARD CREEK

SUB-SECTION 3

Map 32



Area - 1,748 km ^{2}



LOCATION OF SUB-SECTION

LEGEND

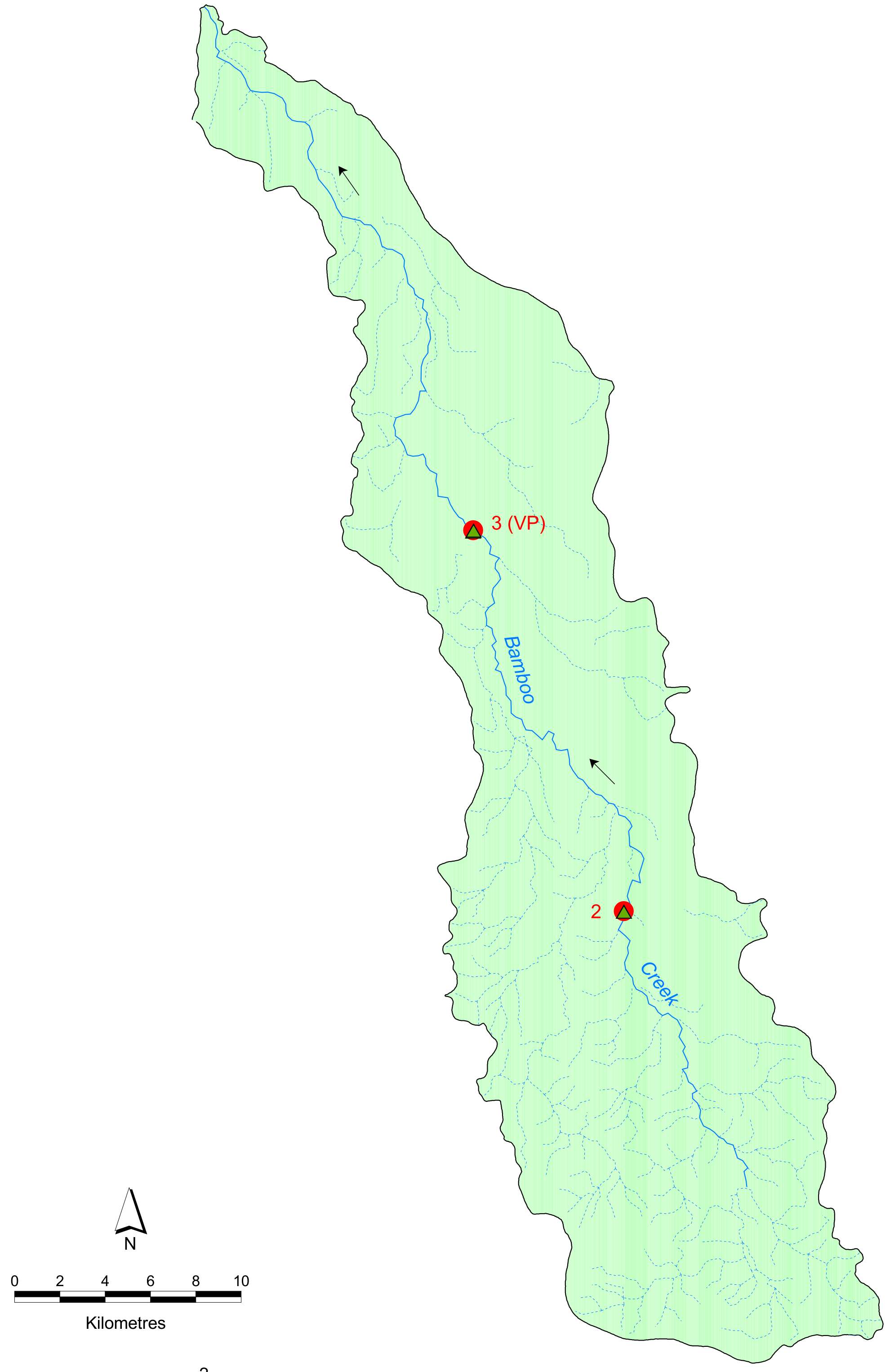
- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

TOP END WATERWAYS PROJECT
DALY RIVER CATCHMENT

FISH RIVER

SUB-SECTION 4

Map 33



Area - 602 km^2

LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

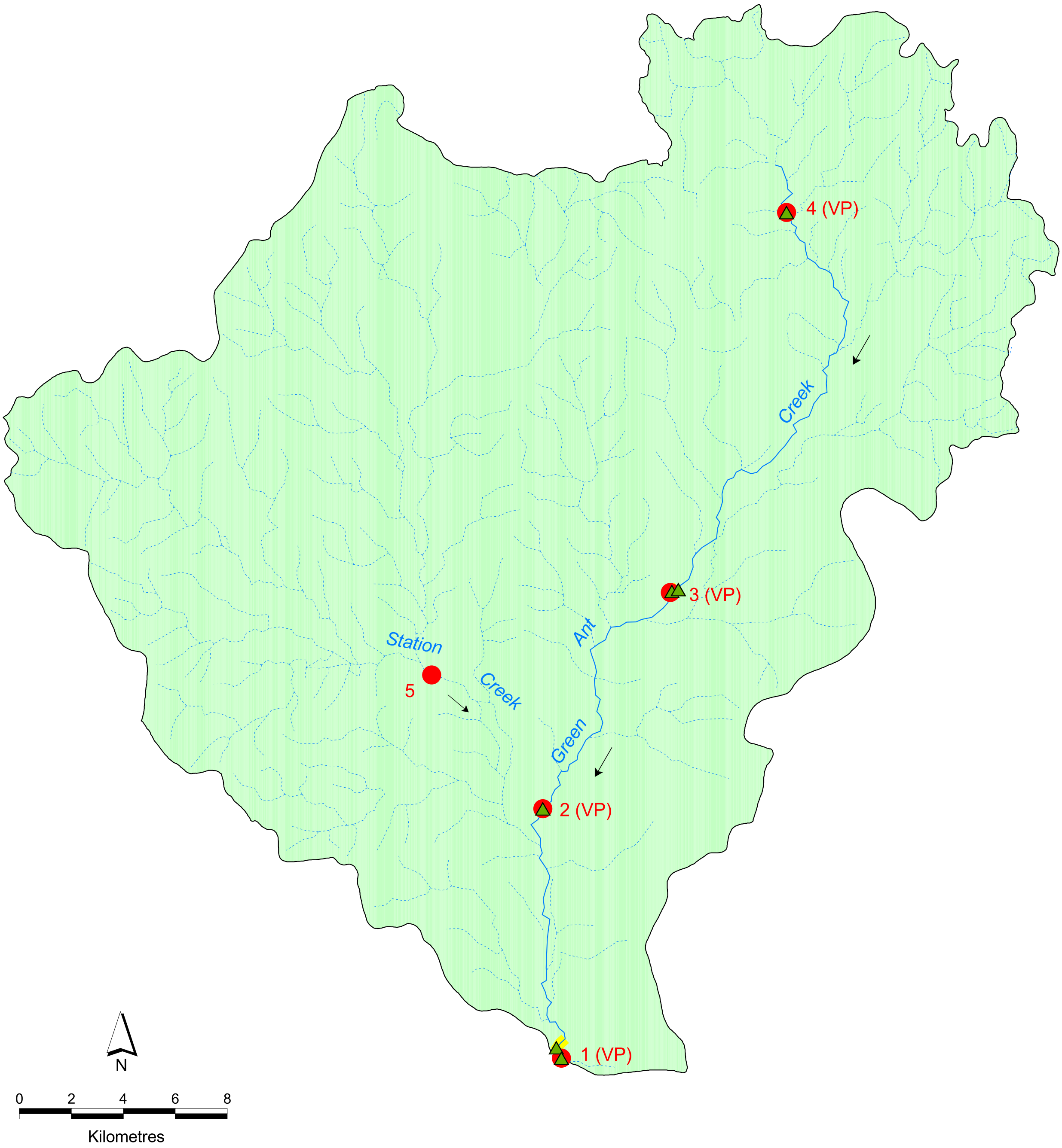
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

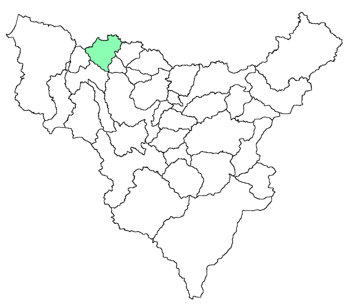
BAMBOO (MOON BOON) CREEK

SUB-SECTION 5

Map 34



Area - 914 km^2



LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

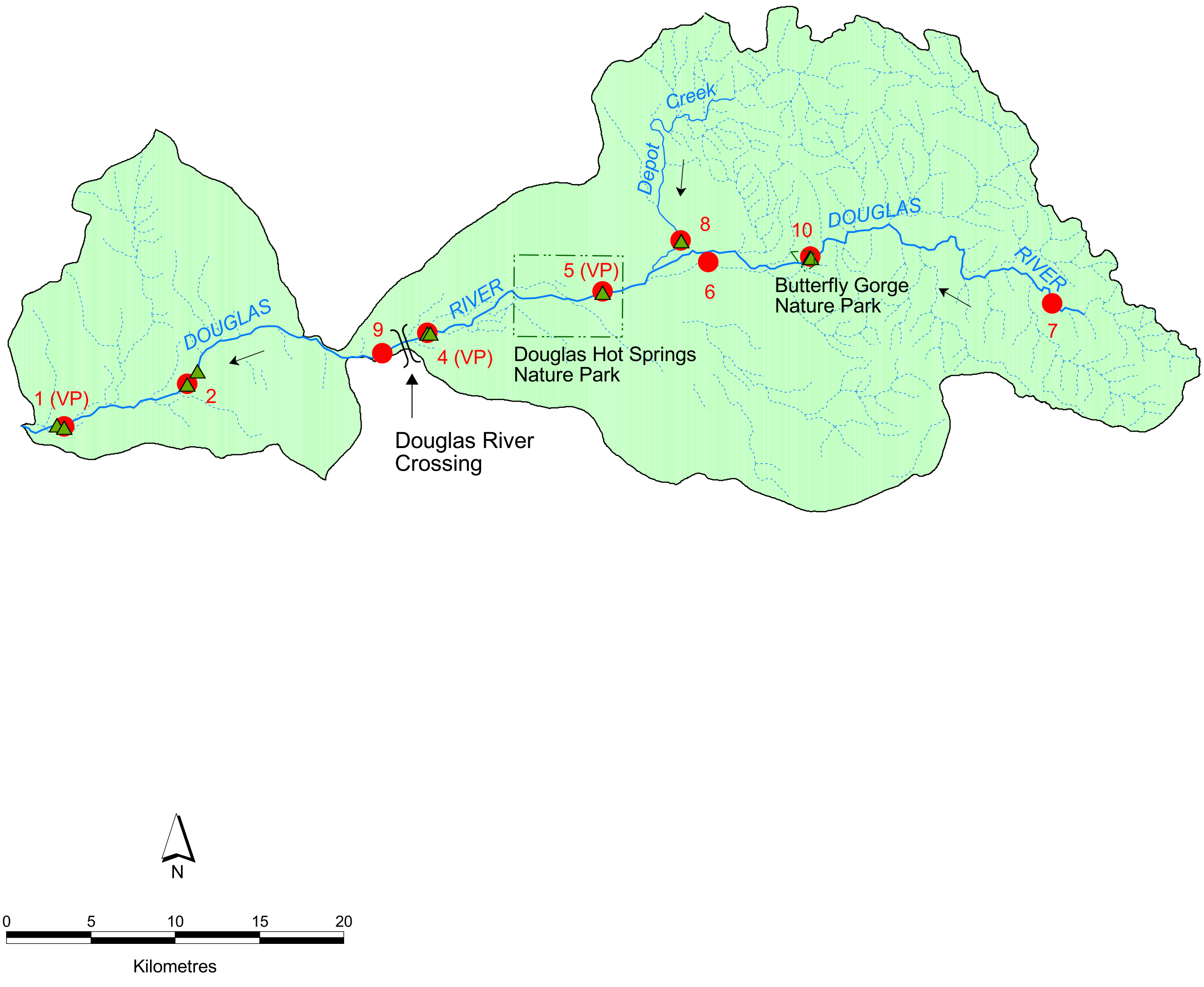
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

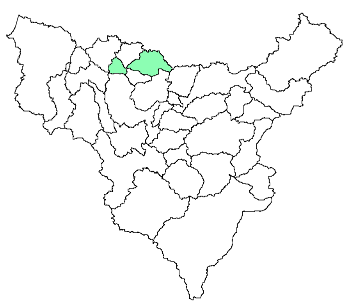
GREEN ANT CREEK

SUB-SECTION 6

Map 35



Area - 1,116 km^2



LOCATION OF SUB-SECTION

LEGEND

5 Site

Sample Point

(VP) Vegetation Profile

Longitudinal Profile Survey

River

Creek

Flow direction

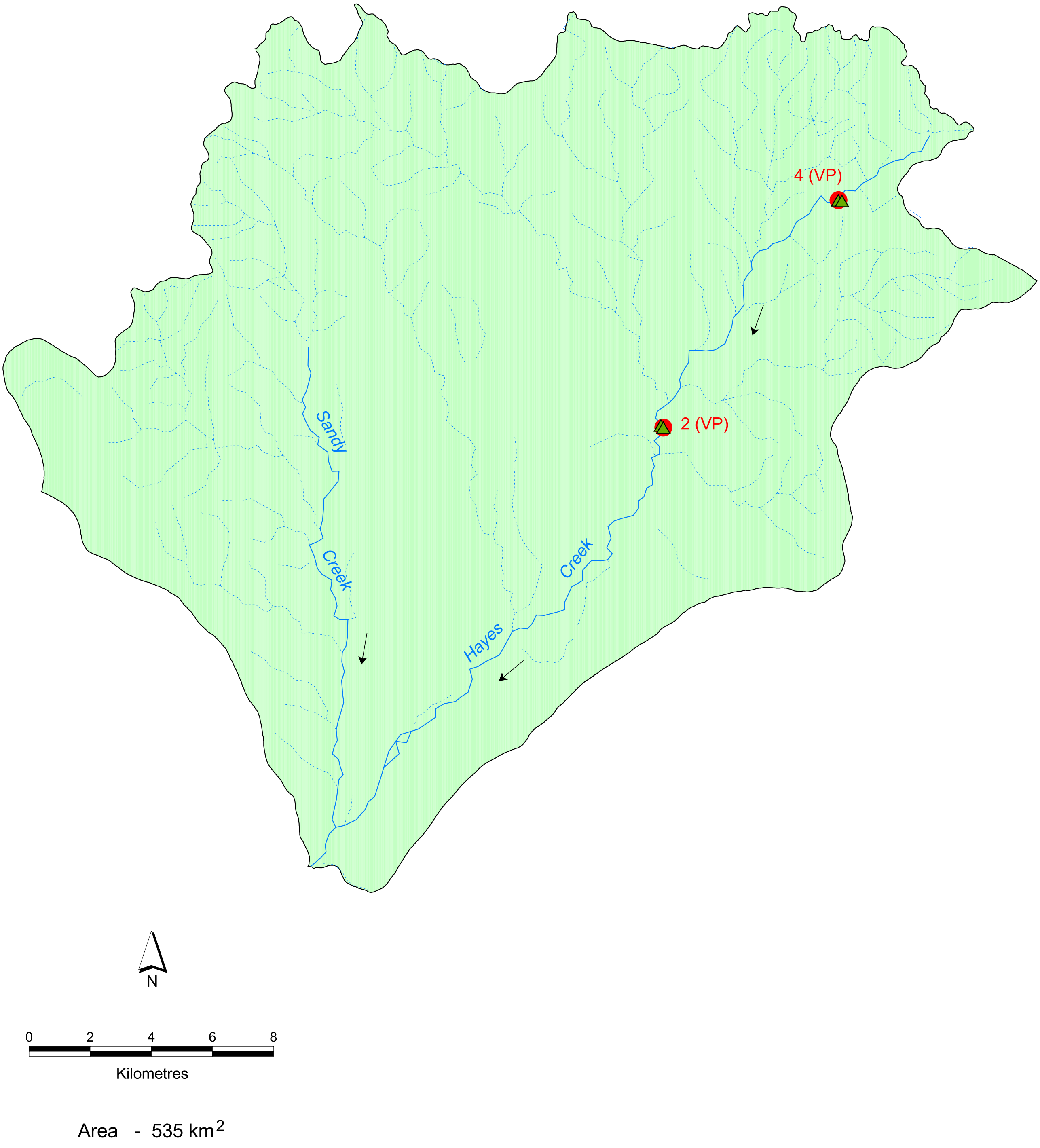
TOP END WATERWAYS PROJECT

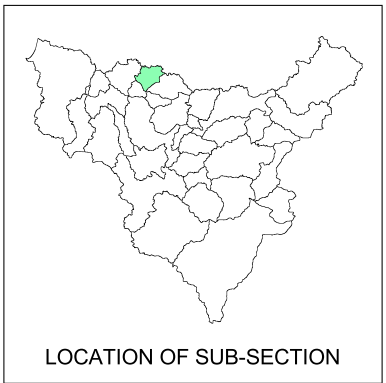
DALY RIVER CATCHMENT

DOUGLAS RIVER

SUB-SECTION 7

Map 36





LEGEND

5	Site
	Sample Point
(VP)	Vegetation Profile
	Longitudinal Profile Survey
	River
	Creek
	Flow direction

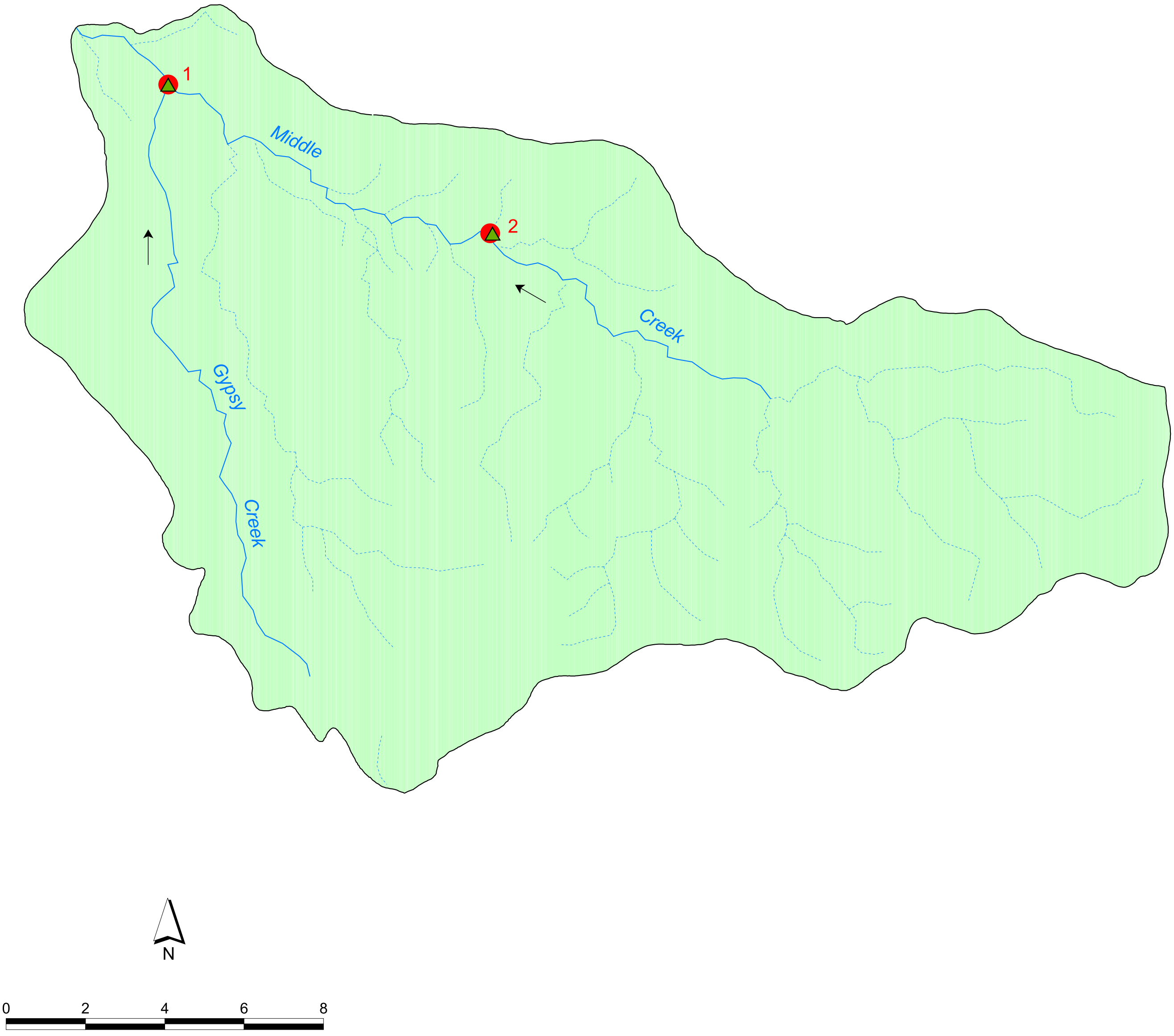
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

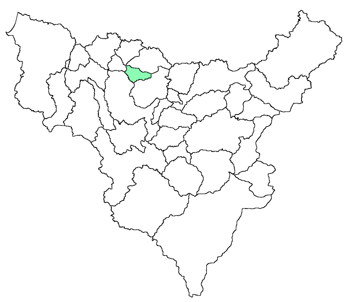
HAYES CREEK

SUB-SECTION 8

Map 37



Area - 313 km^2



LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

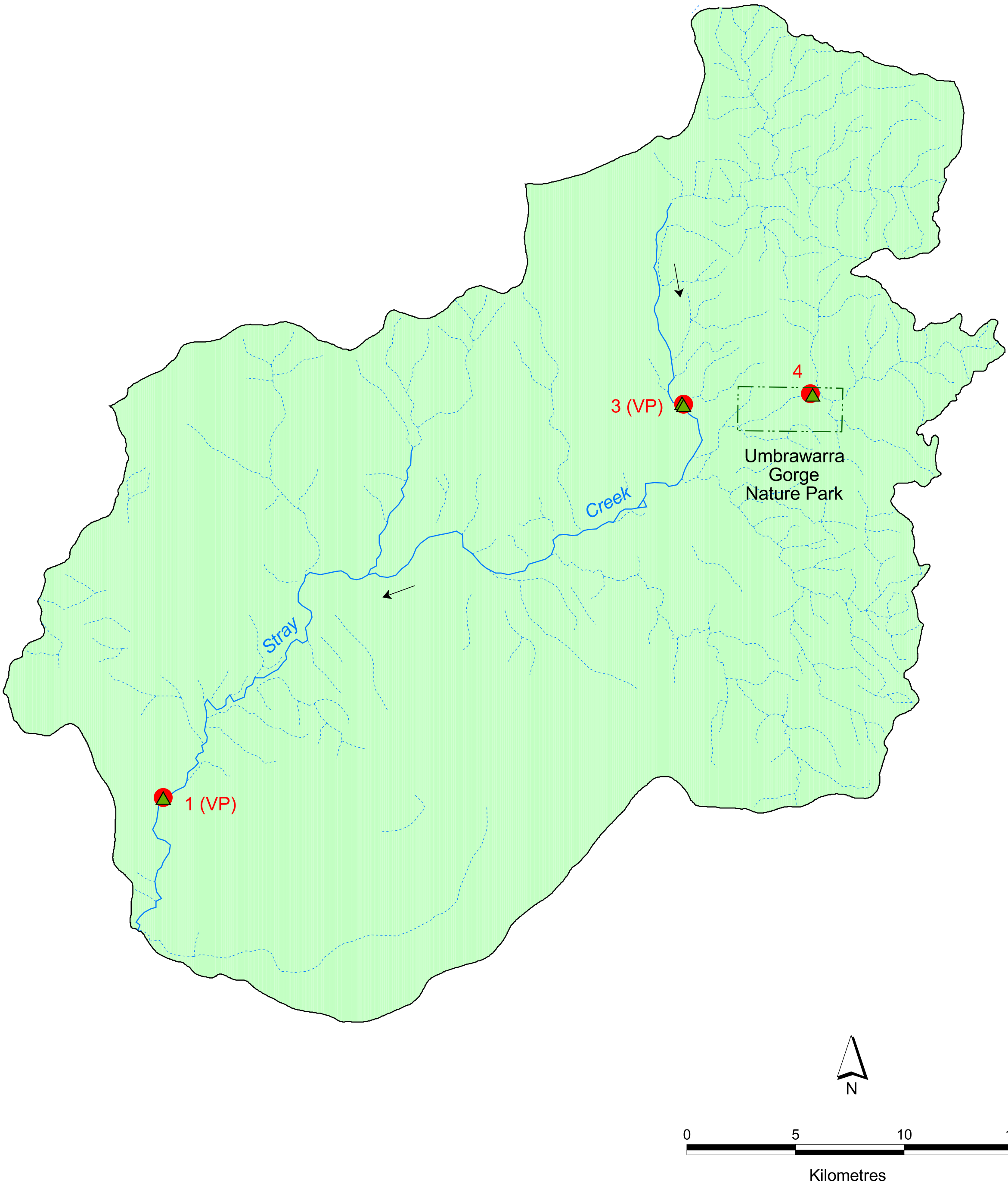
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

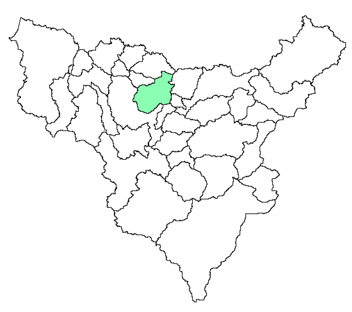
MIDDLE CREEK

SUB-SECTION 9

Map 38



Area - 1,216 km^2



LEGEND

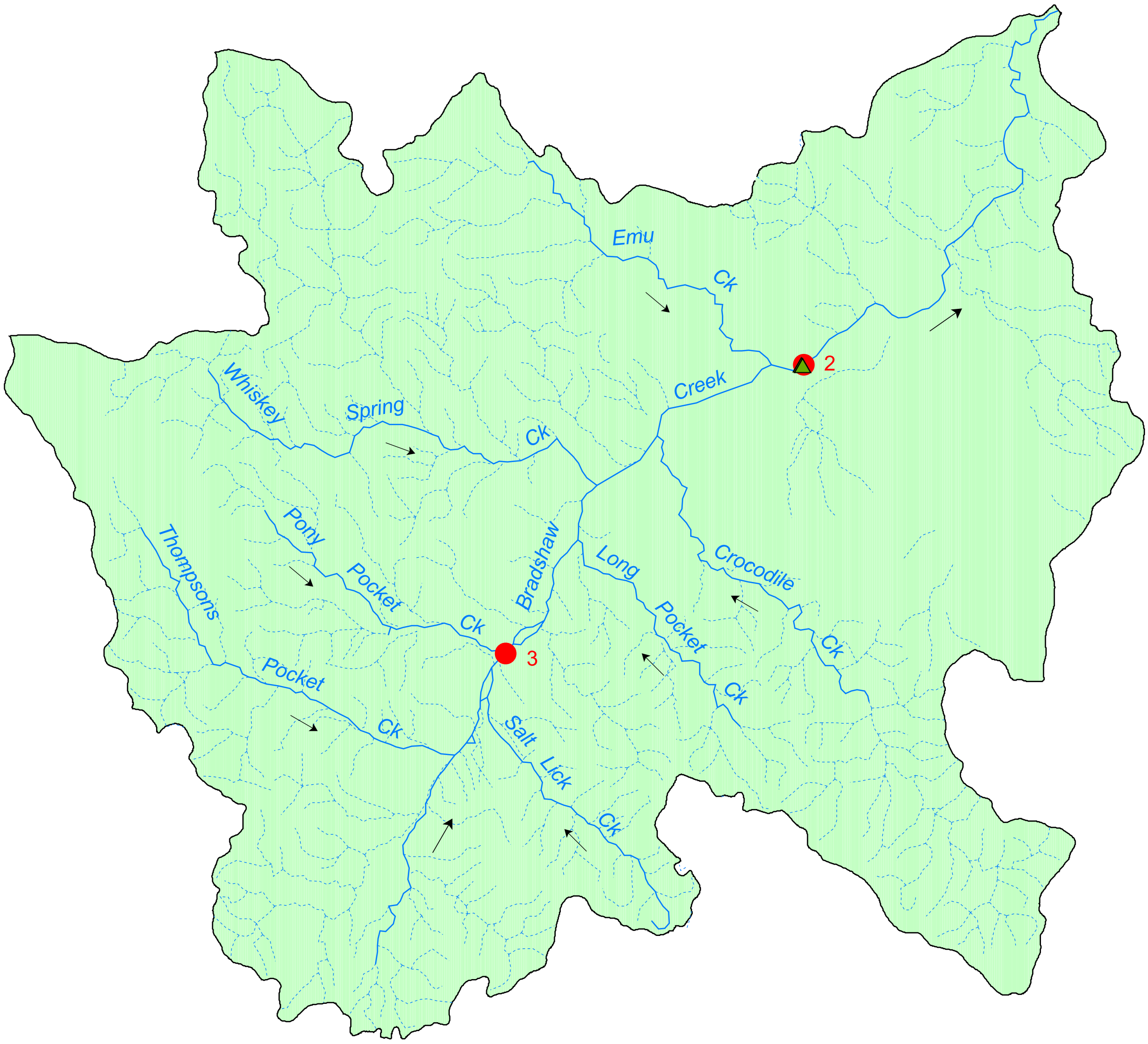
- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

TOP END WATERWAYS PROJECT
DALY RIVER CATCHMENT

STRAY CREEK

SUB-SECTION 10

Map 39

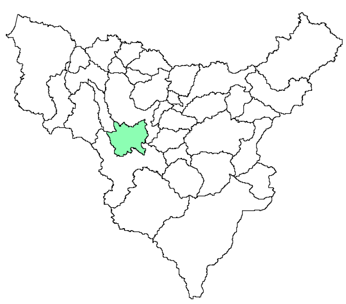


N

0 5 10 15

Kilometres

Area - 1,181 km^2



LOCATION OF SUB-SECTION

LEGEND

5	Site
	Sample Point
(VP)	Vegetation Profile
	Longitudinal Profile Survey
	River
	Creek
	Flow direction

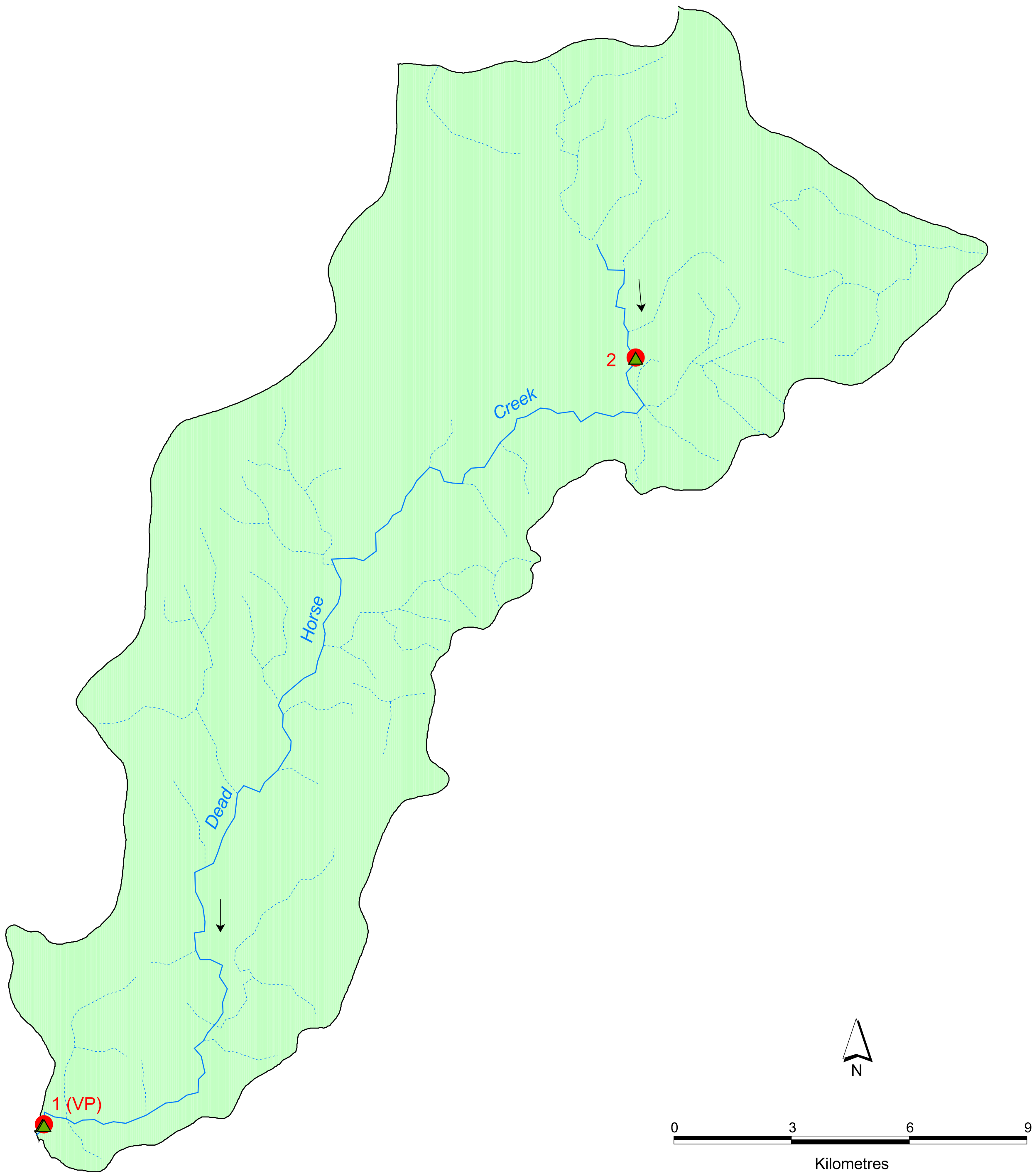
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

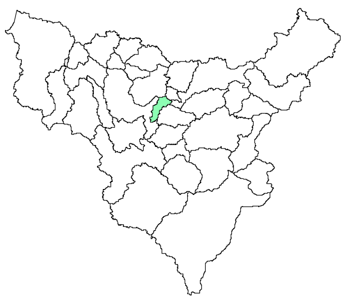
BRADSHAW CREEK

SUB-SECTION 11

Map 40



Area - 278 km ^{2}



LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

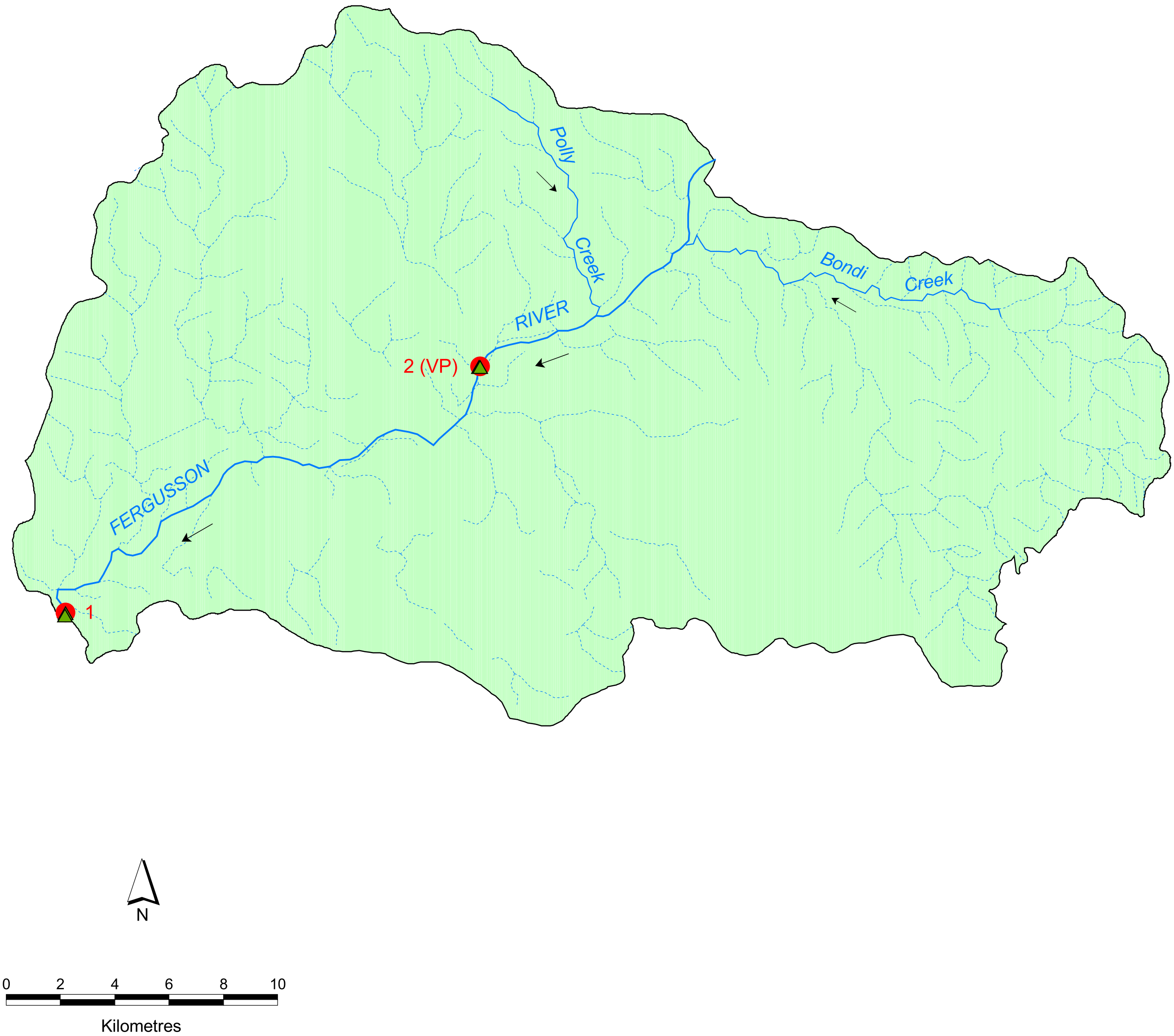
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

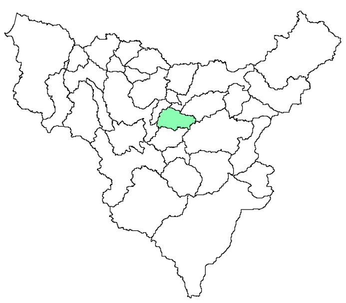
DEAD HORSE CREEK

SUB-SECTION 12

Map 41



Area - 711 km^2



LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

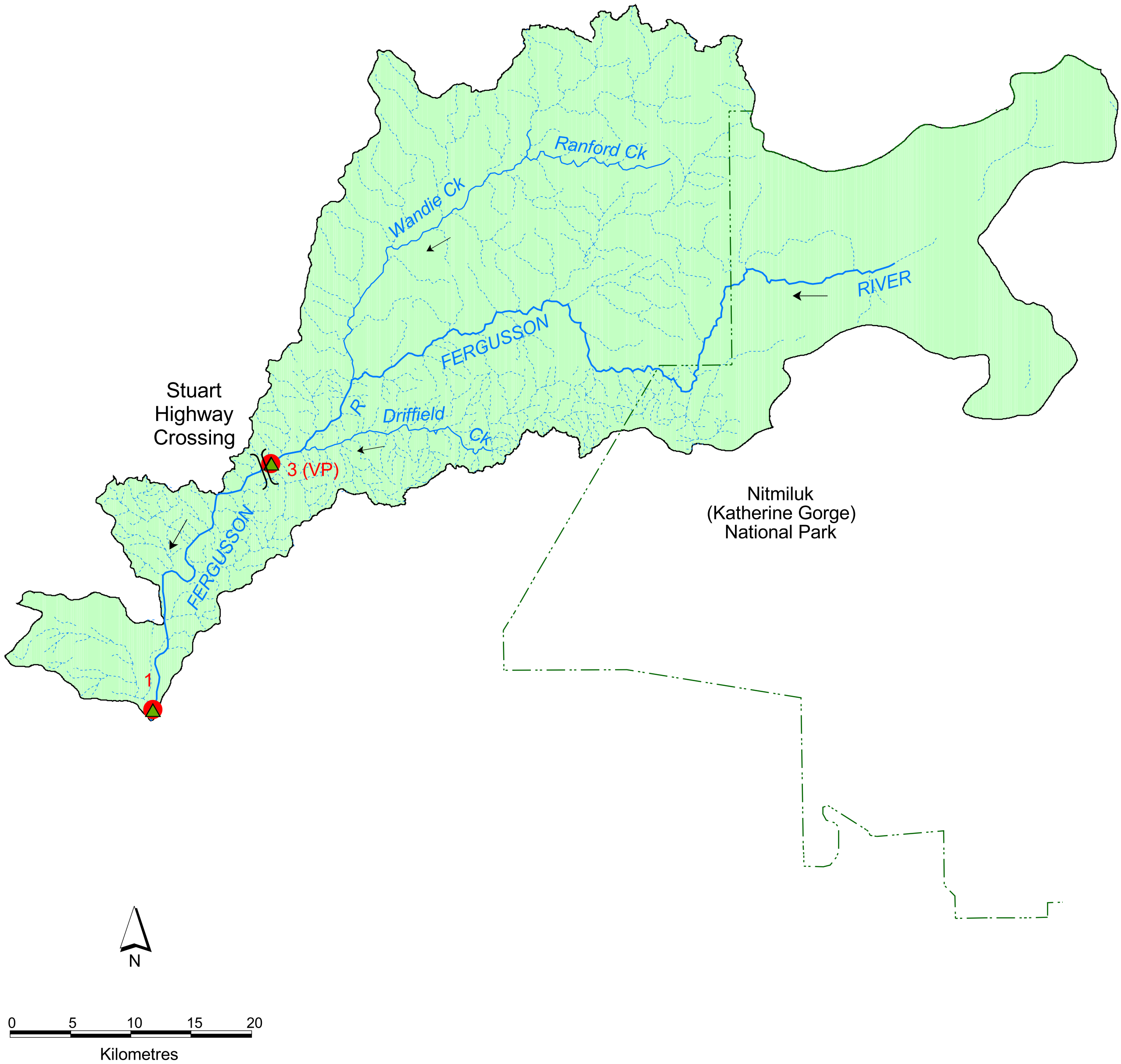
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

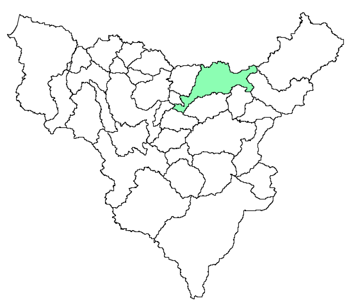
FERGUSSON RIVER
Below Edith River

SUB-SECTION 13a

Map 42



Area - 1,961 km^2



LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

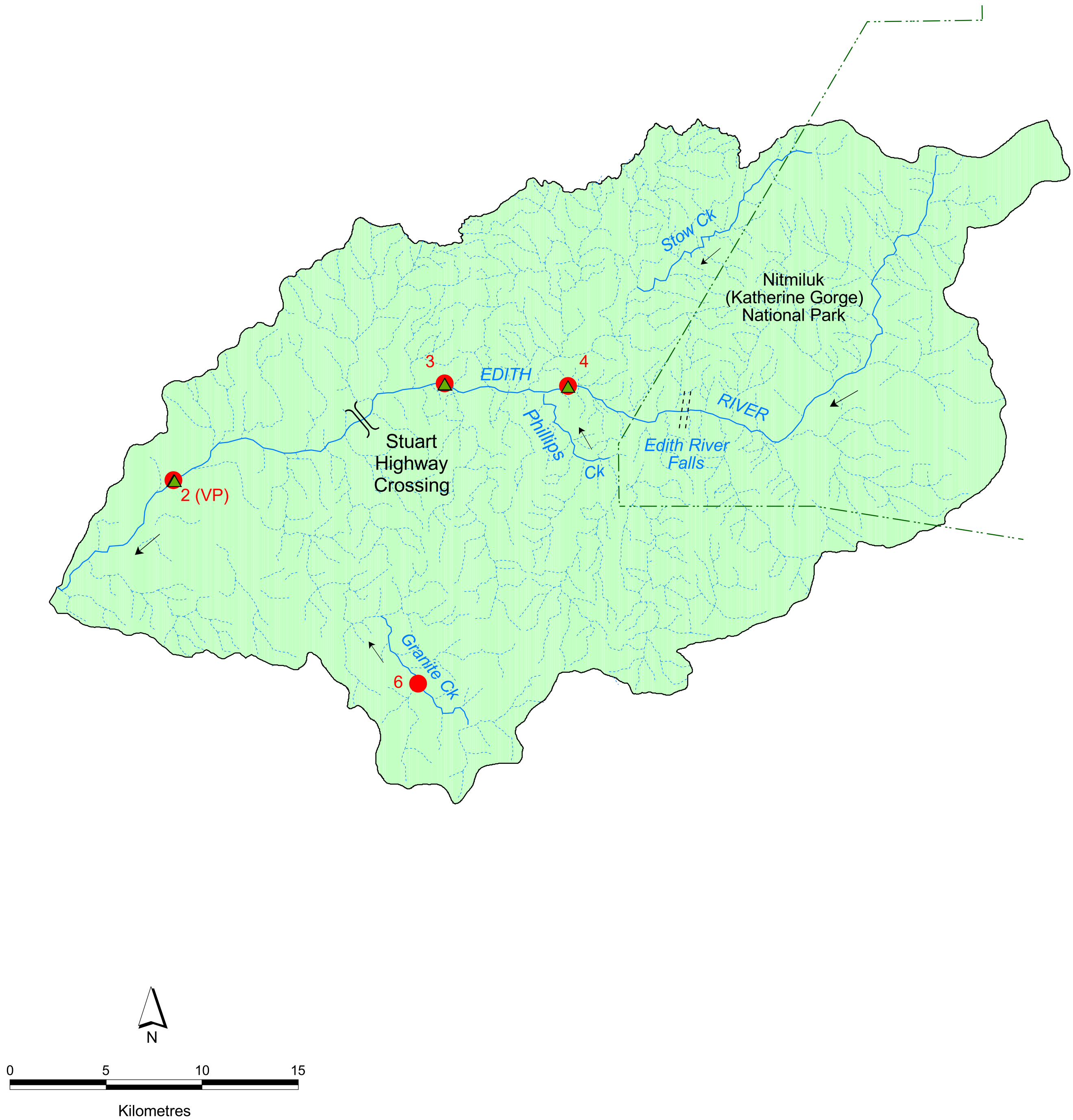
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

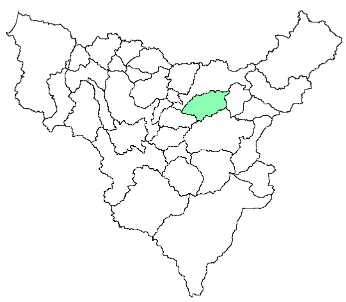
FERGUSSON RIVER Above Edith River

SUB-SECTION 13b

Map 43



Area - 1,057 km^2



LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

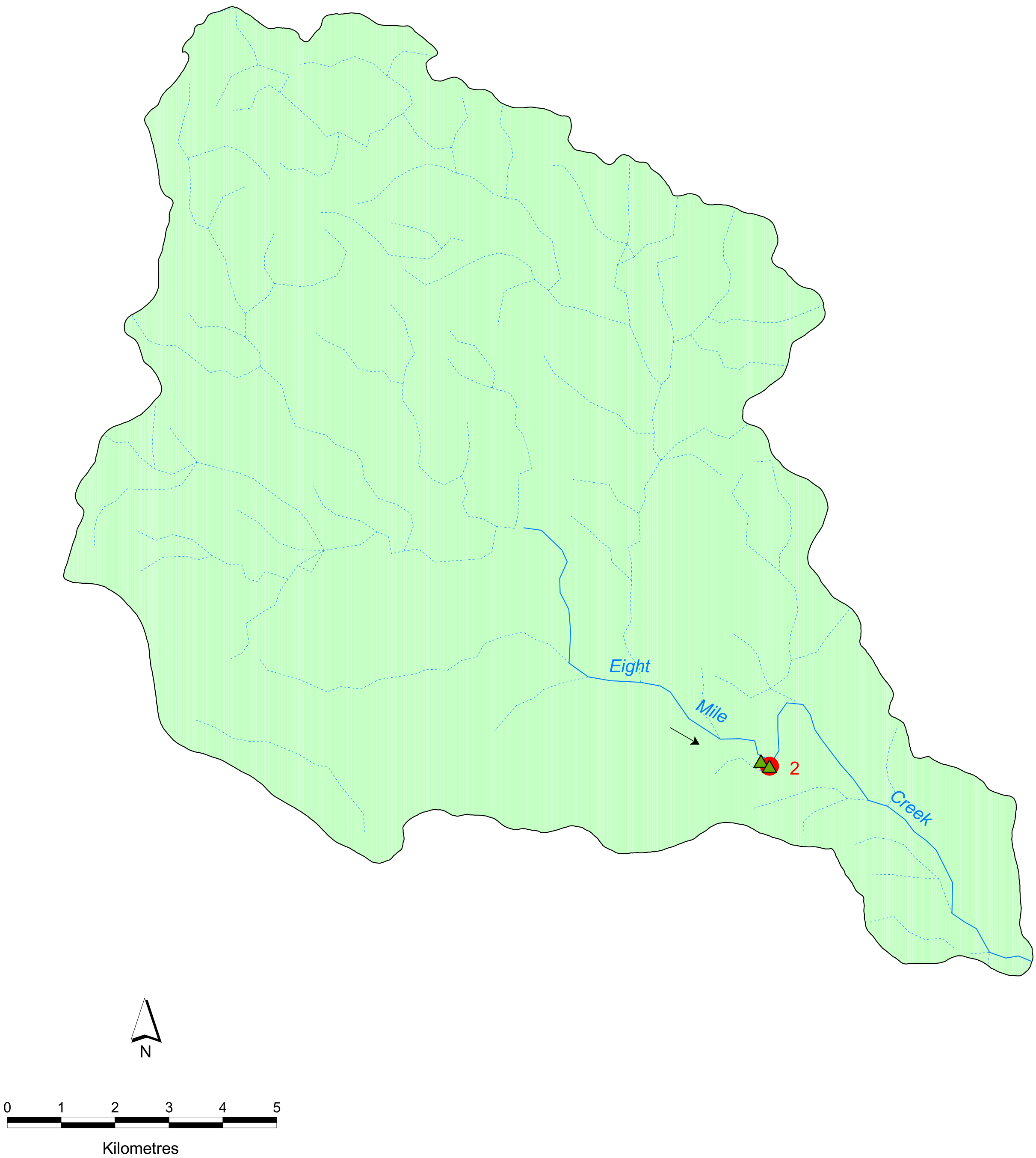
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

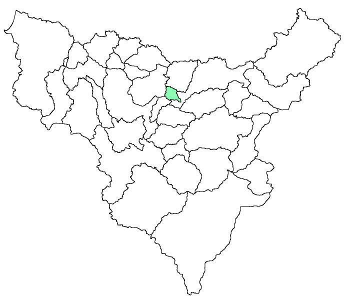
EDITH RIVER

SUB-SECTION 14

Map 44



Area - 180 km ^{2}



LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

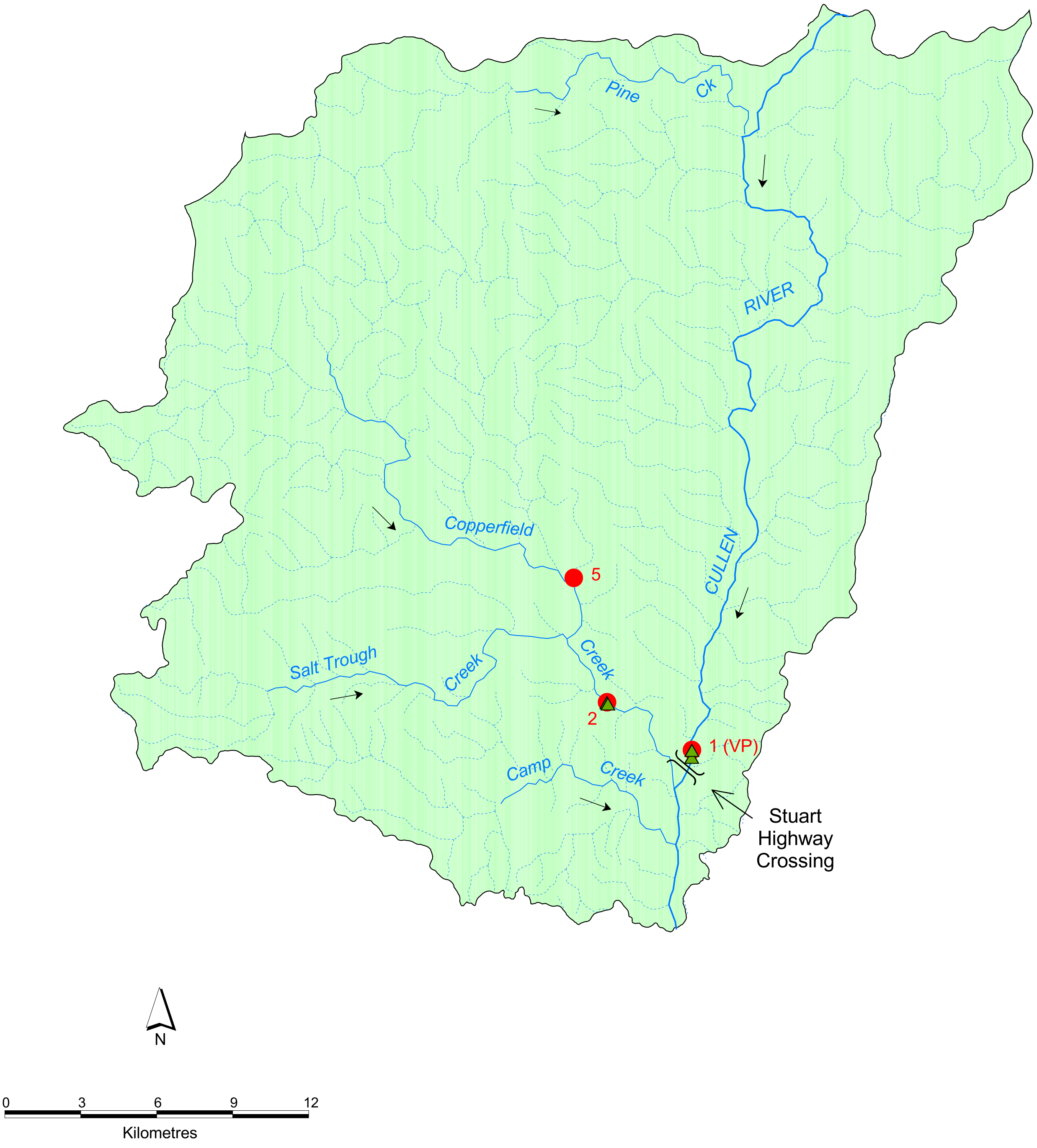
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

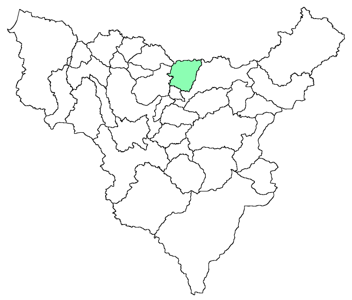
EIGHT MILE CREEK

SUB-SECTION 15

Map 45



Area - 879 km ^{2}



LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

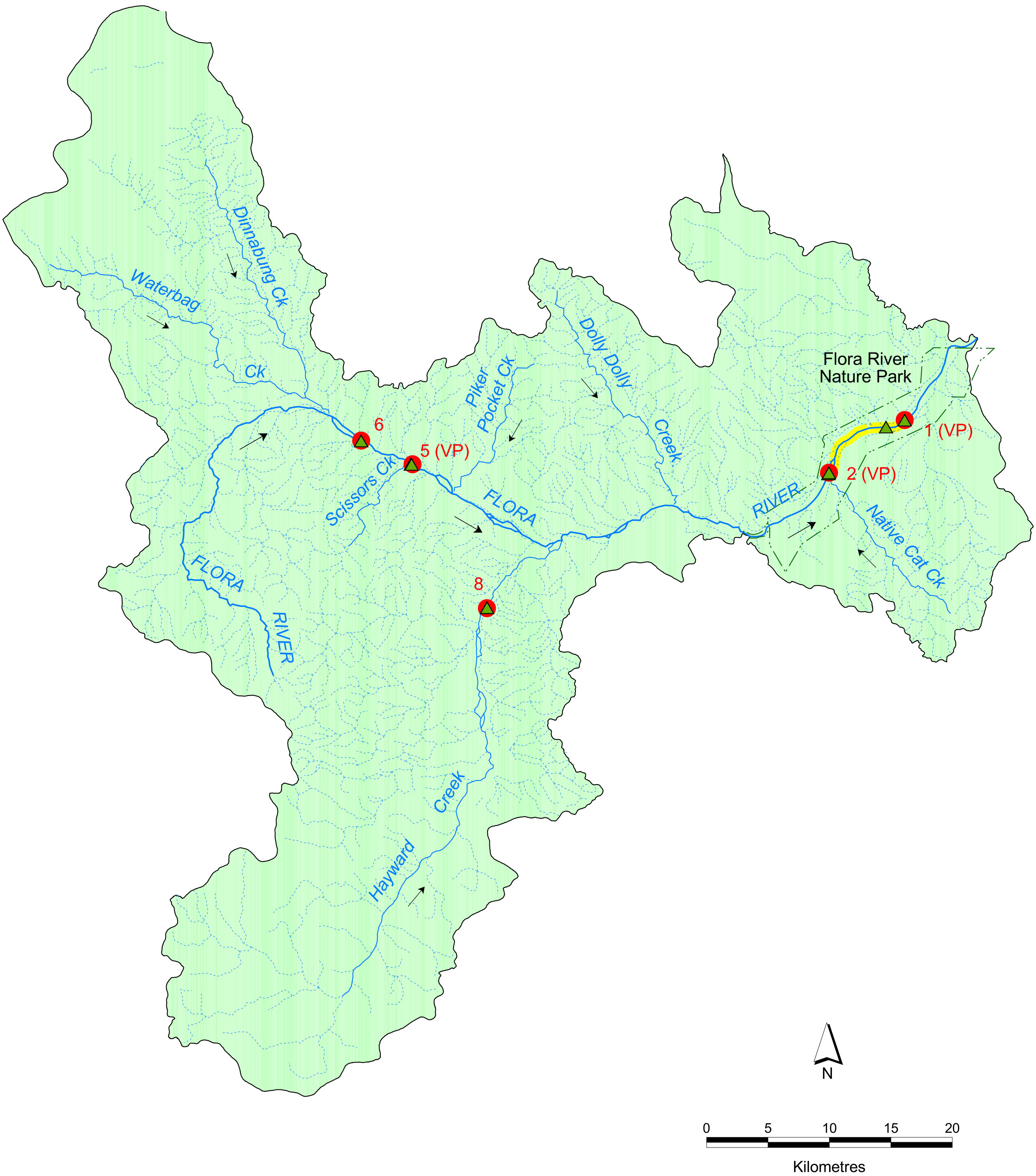
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

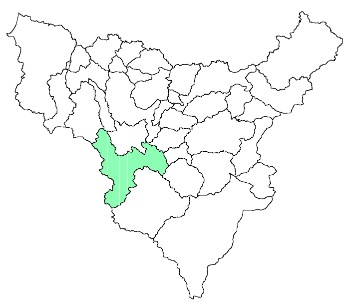
CULLEN RIVER & COPPERFIELD CREEK

SUB-SECTION 16

Map 46



Area - 2,946 km ^{2}



LOCATION OF SUB-SECTION

LEGEND

5	Site
	Sample Point
(VP)	Vegetation Profile
	Longitudinal Profile Survey
	River
	Creek
	Flow direction

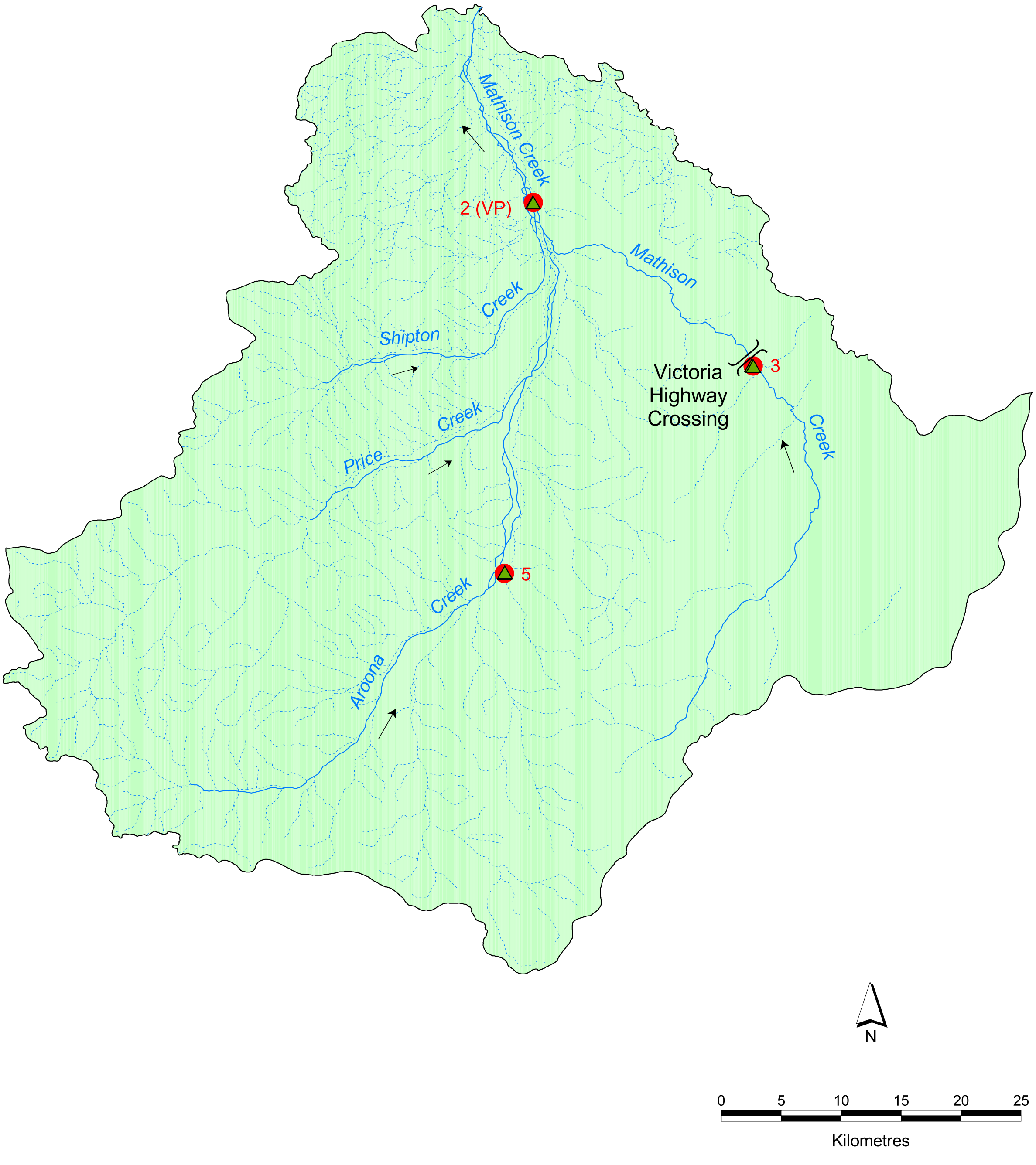
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

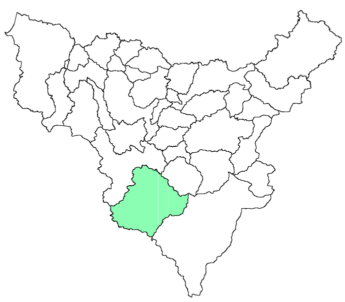
FLORA RIVER & HAYWARD CREEK

SUB-SECTION 17

Map 47



Area - 3,790 km^2



LOCATION OF SUB-SECTION

LEGEND

5	Site
	Sample Point
(VP)	Vegetation Profile
	Longitudinal Profile Survey
	River
	Creek
	Flow direction

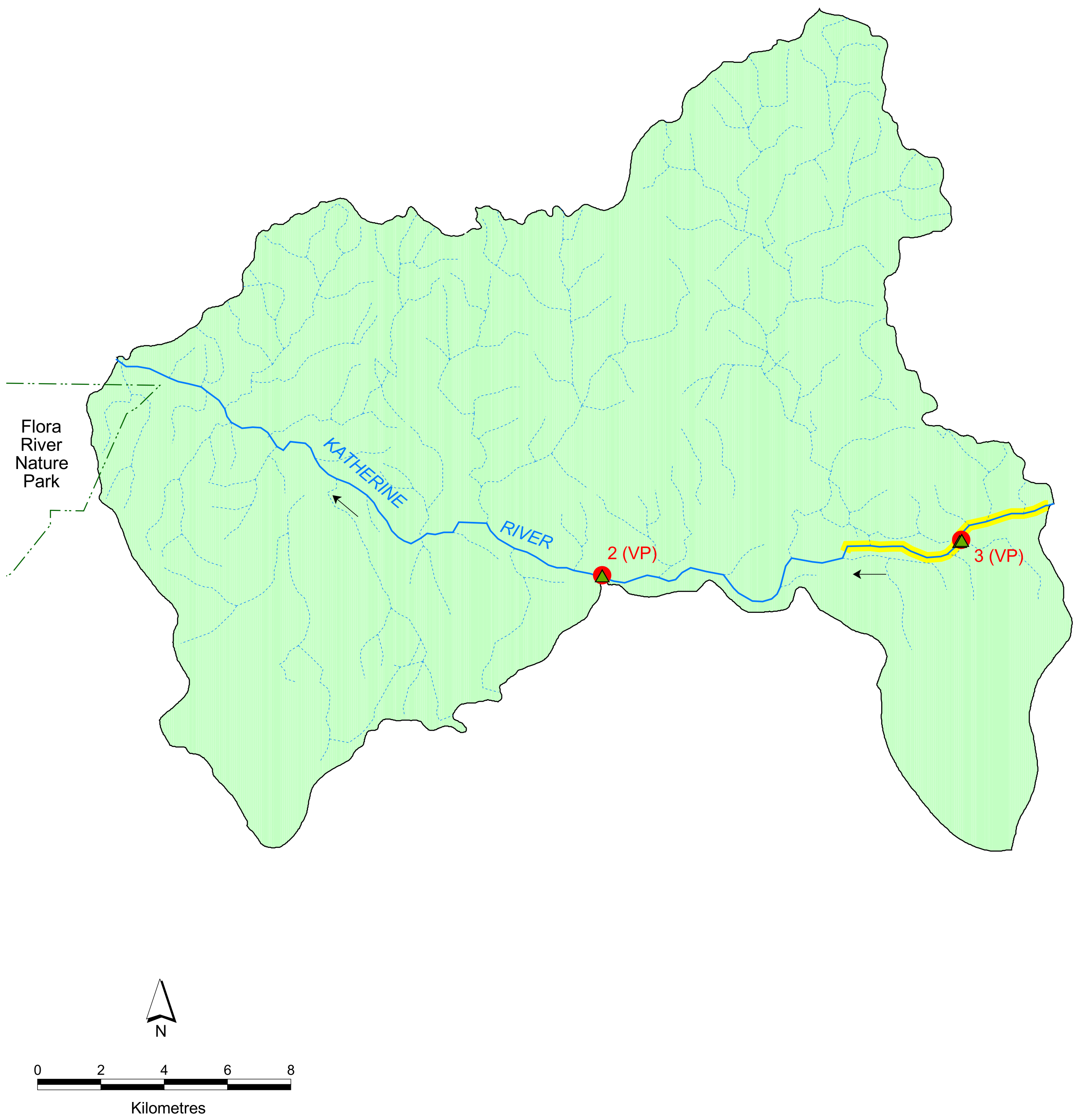
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

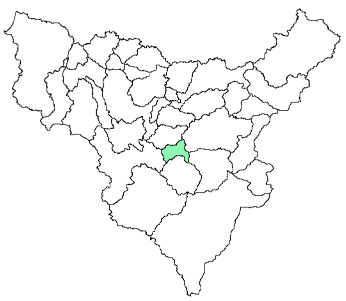
MATHISON & AROONA CREEKS

SUB-SECTION 18

Map 48



Area - 446 km^2



LOCATION OF SUB-SECTION

LEGEND

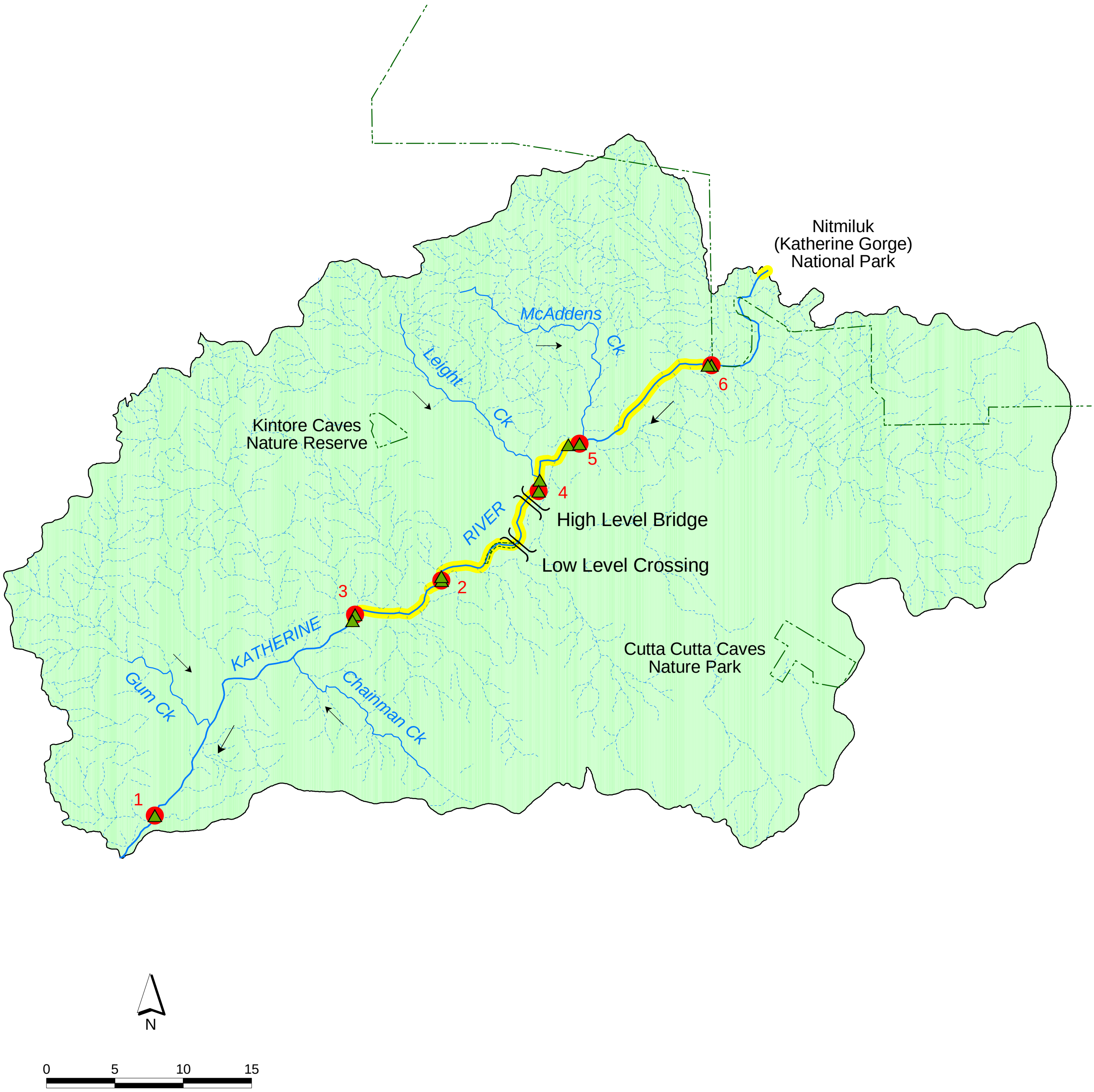
- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

TOP END WATERWAYS PROJECT
DALY RIVER CATCHMENT

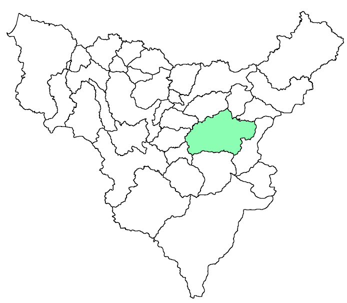
KATHERINE RIVER
Below King River

SUB-SECTION 19a

Map 49



Area - 2,546 km ^{2}



LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

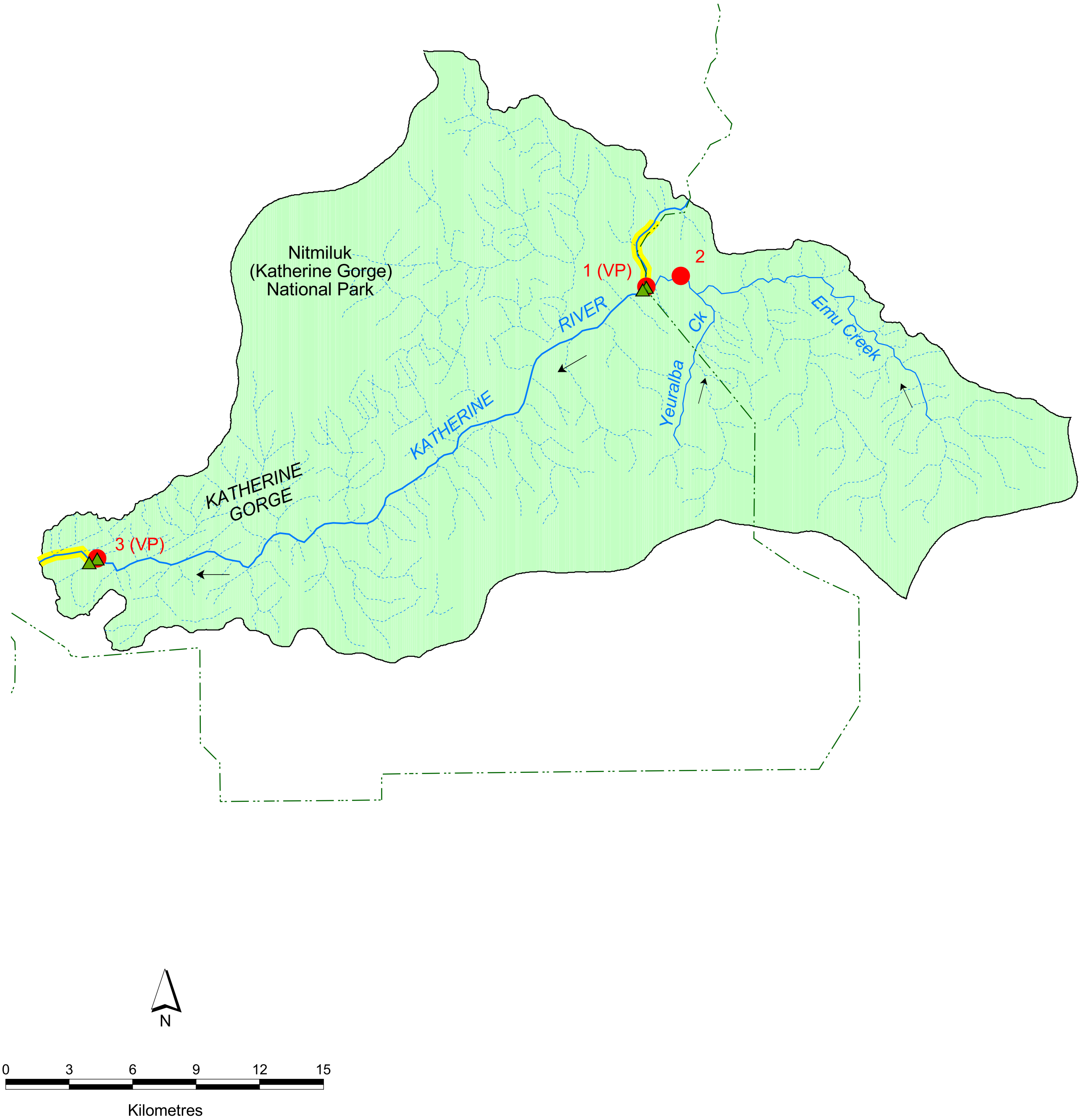
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

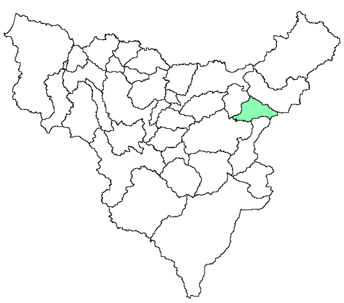
KATHERINE RIVER Below Seventeen Mile Creek

SUB-SECTION 19b

Map 50



Area - 713 km^2



LOCATION OF SUB-SECTION

LEGEND

5	Site
	Sample Point
(VP)	Vegetation Profile
	Longitudinal Profile Survey
	River
	Creek
	Flow direction

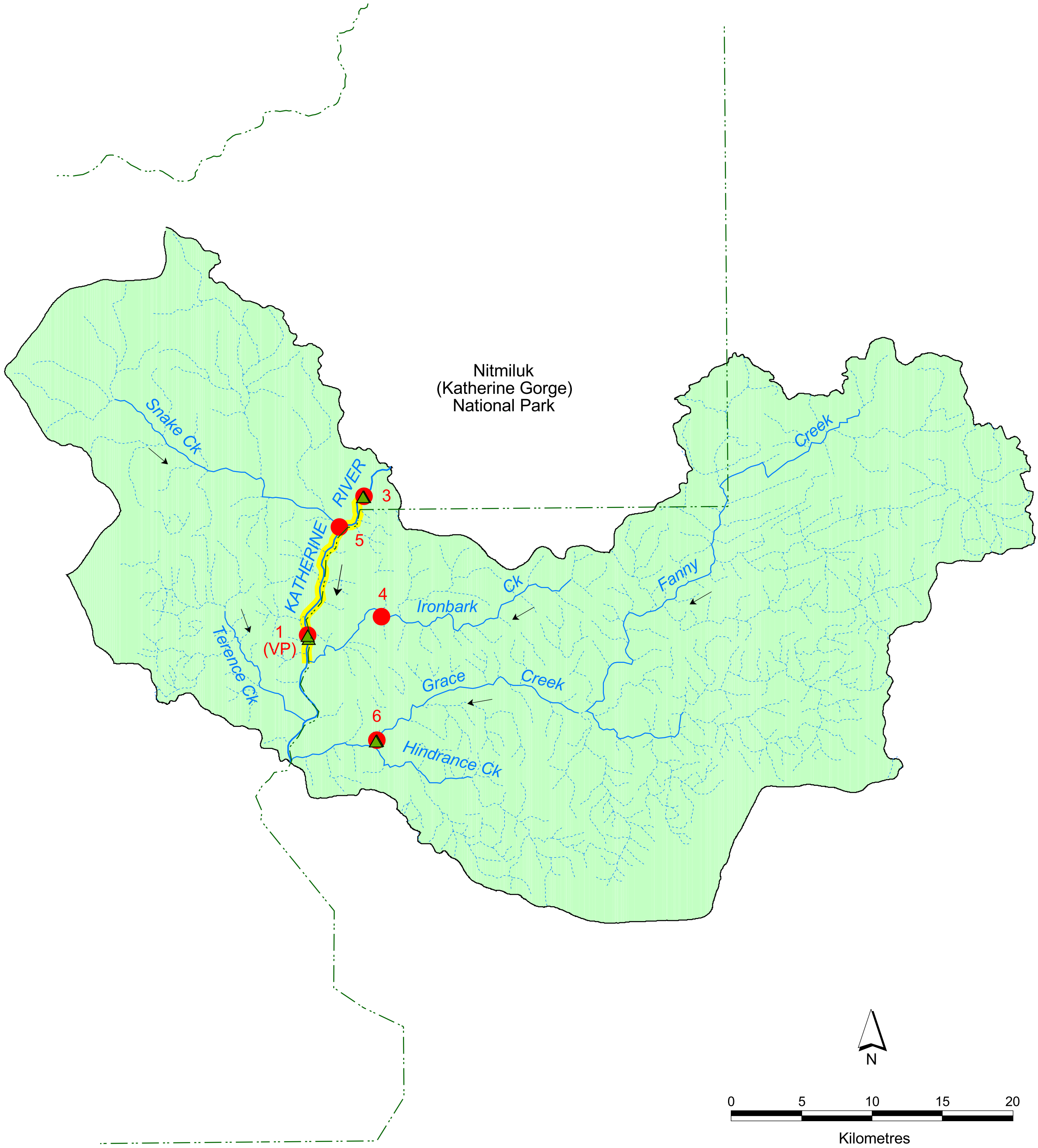
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

KATHERINE RIVER Below Grace & Fanny Creeks

SUB-SECTION 19c

Map 51



Area - 1,782 km ^{2}

LOCATION OF SUB-SECTION

LEGEND

5	Site
	Sample Point
(VP)	Vegetation Profile
	Longitudinal Profile Survey
	River
	Creek
	Flow direction

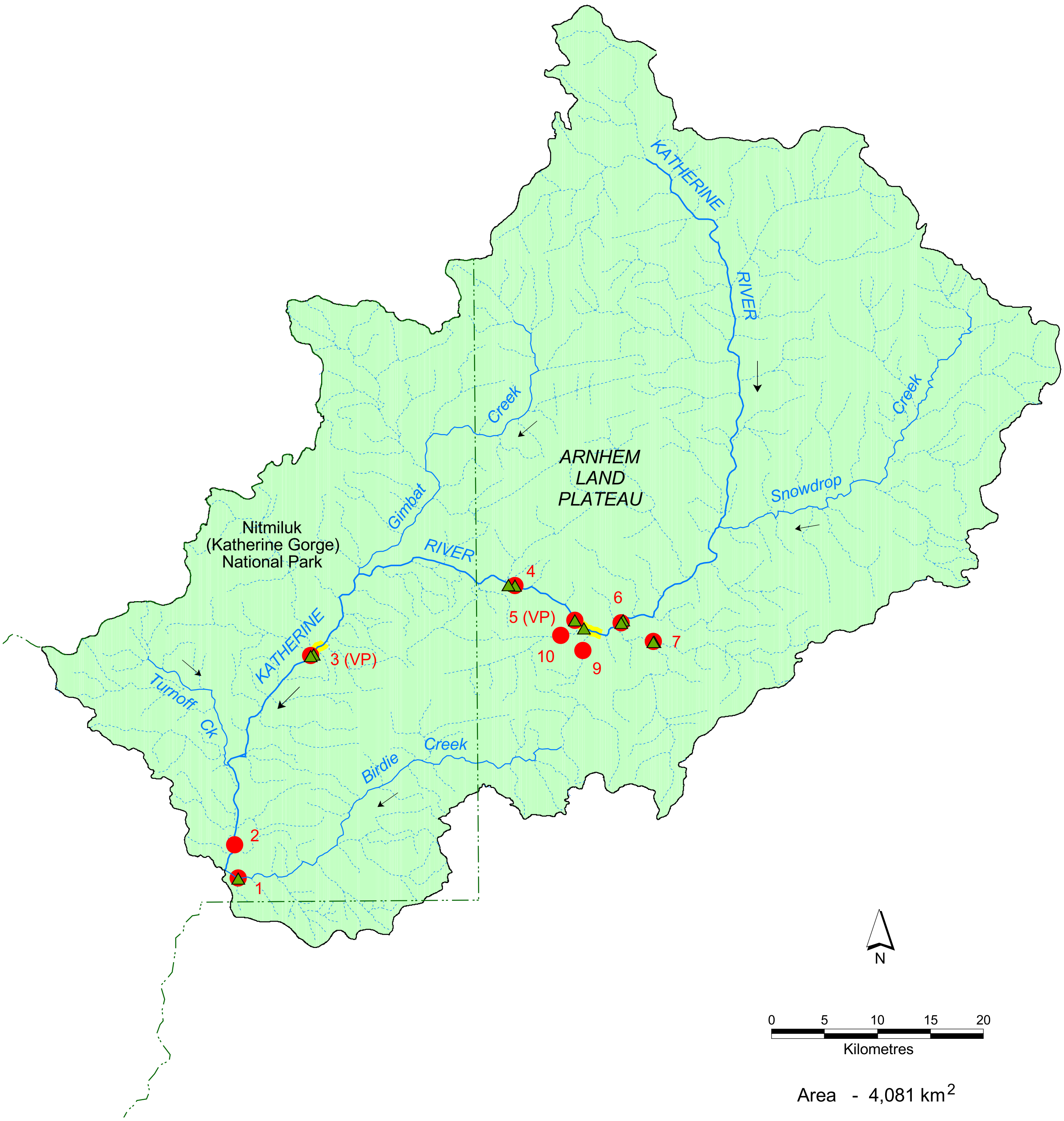
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

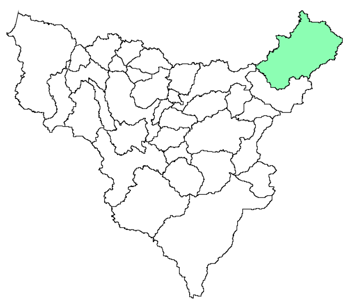
KATHERINE RIVER Below Birdie Creek

SUB-SECTION 19d

Map 52



Area - 4,081 km^2



LOCATION OF SUB-SECTION

LEGEND

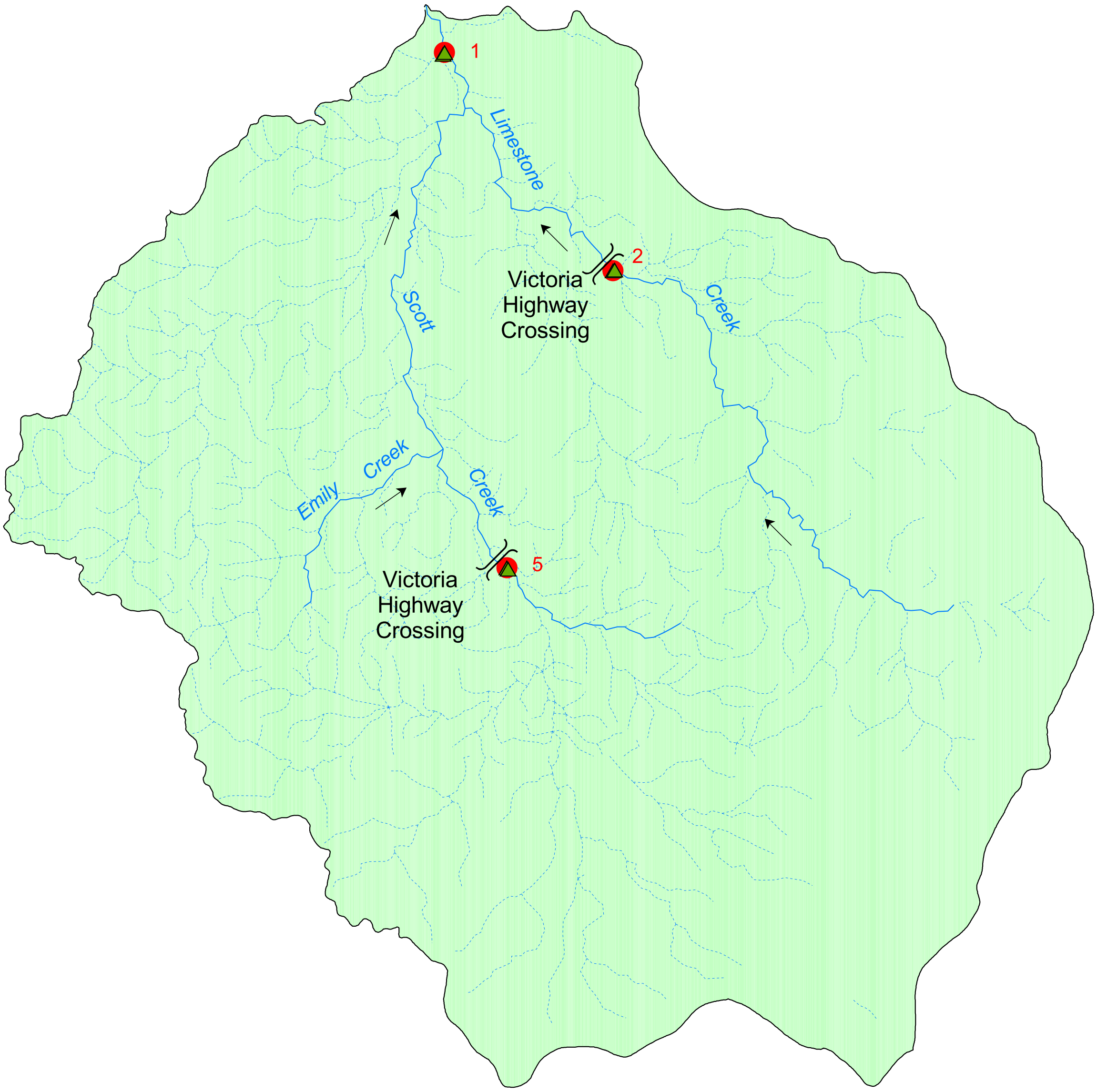
5	Site
	Sample Point
(VP)	Vegetation Profile
	Longitudinal Profile Survey
	River
	Creek
	Flow direction

TOP END WATERWAYS PROJECT
DALY RIVER CATCHMENT

KATHERINE RIVER
Upper Katherine River

SUB-SECTION 19e

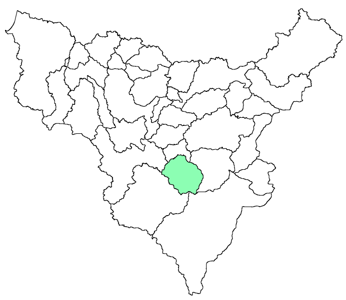
Map 53



N

0 3 6 9 12
Kilometres

Area - 1,275 km^2



LOCATION OF SUB-SECTION

LEGEND

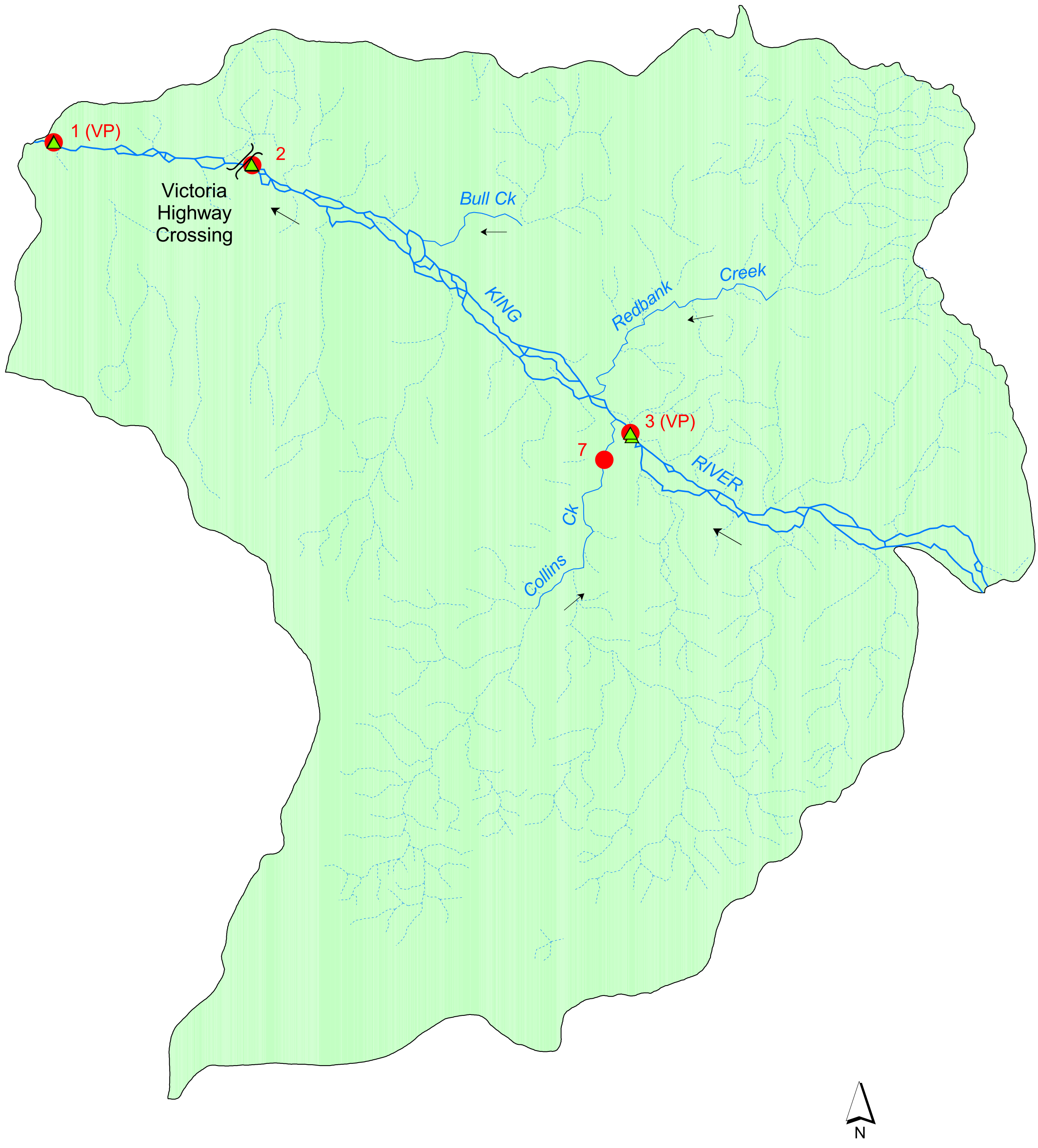
5	Site
	Sample Point
(VP)	Vegetation Profile
	Longitudinal Profile Survey
	River
	Creek
	Flow direction

TOP END WATERWAYS PROJECT
DALY RIVER CATCHMENT

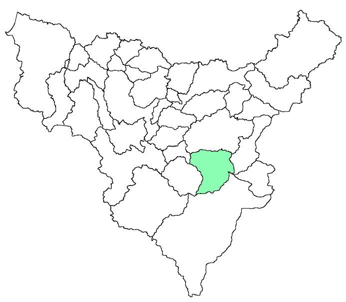
LIMESTONE AND SCOTT CREEKS

SUB-SECTION 20

Map 54



Area - 1,636 km^2



LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

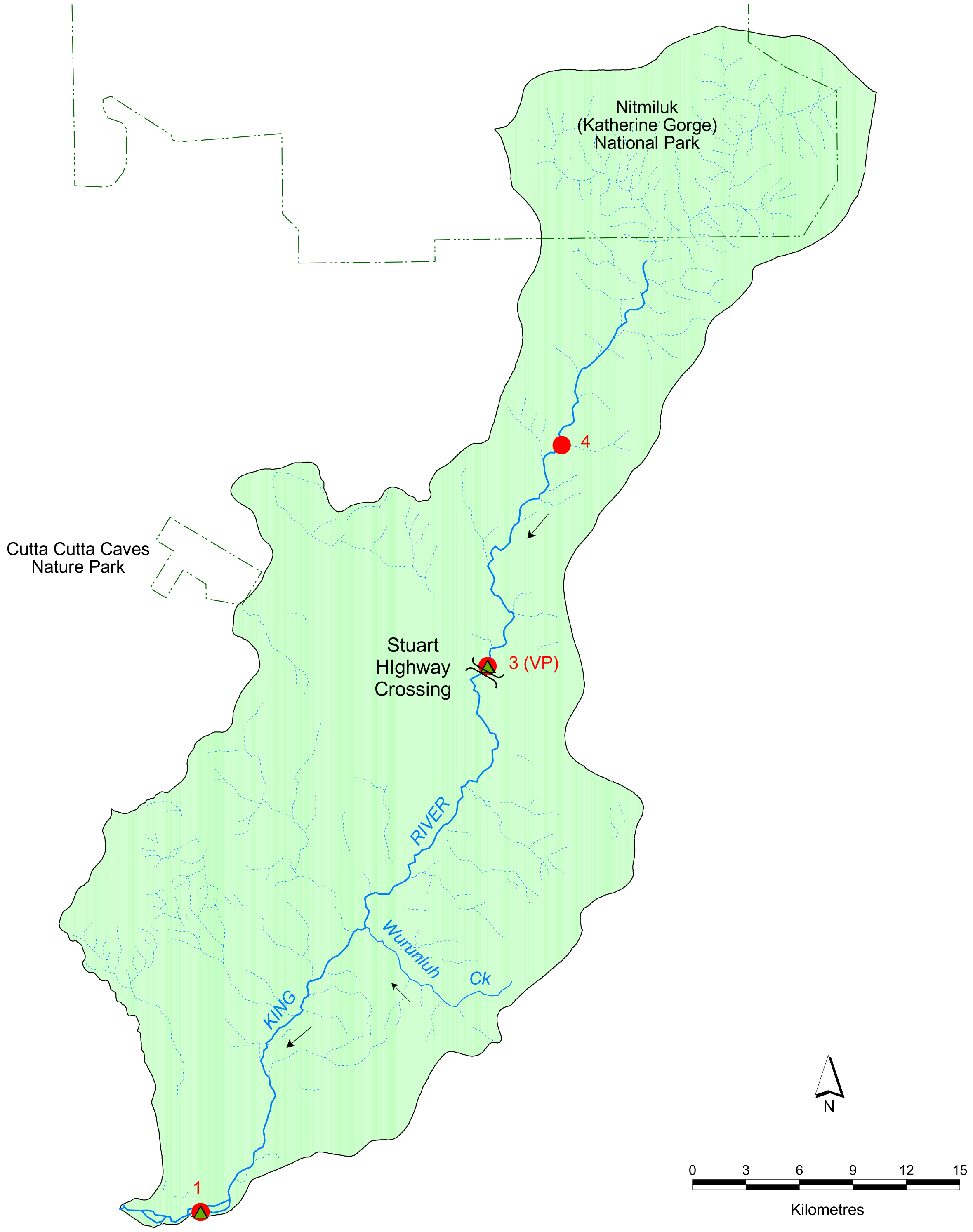
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

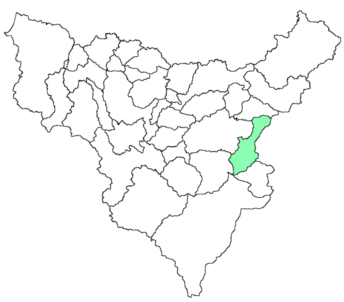
KING RIVER
Below Dry River

SUB-SECTION 21a

Map 55



Area - 1,179 km^2



LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

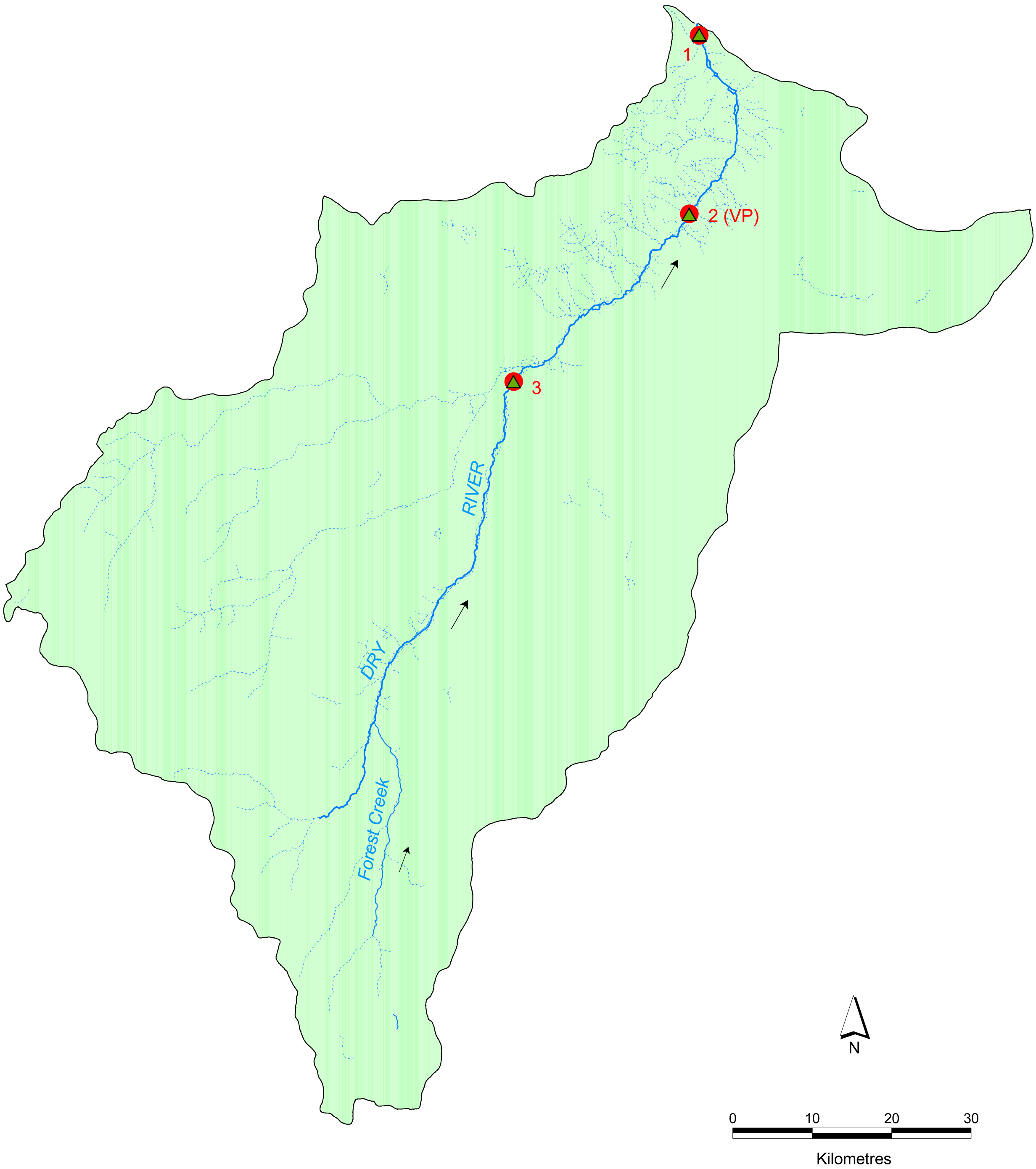
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

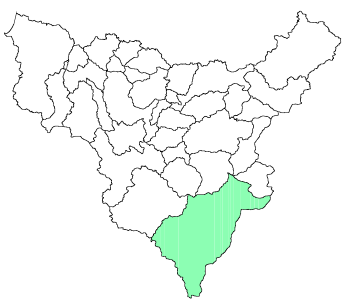
KING RIVER
Above Dry River

SUB-SECTION 21b

Map 56



Area - 7,208 km^2



LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

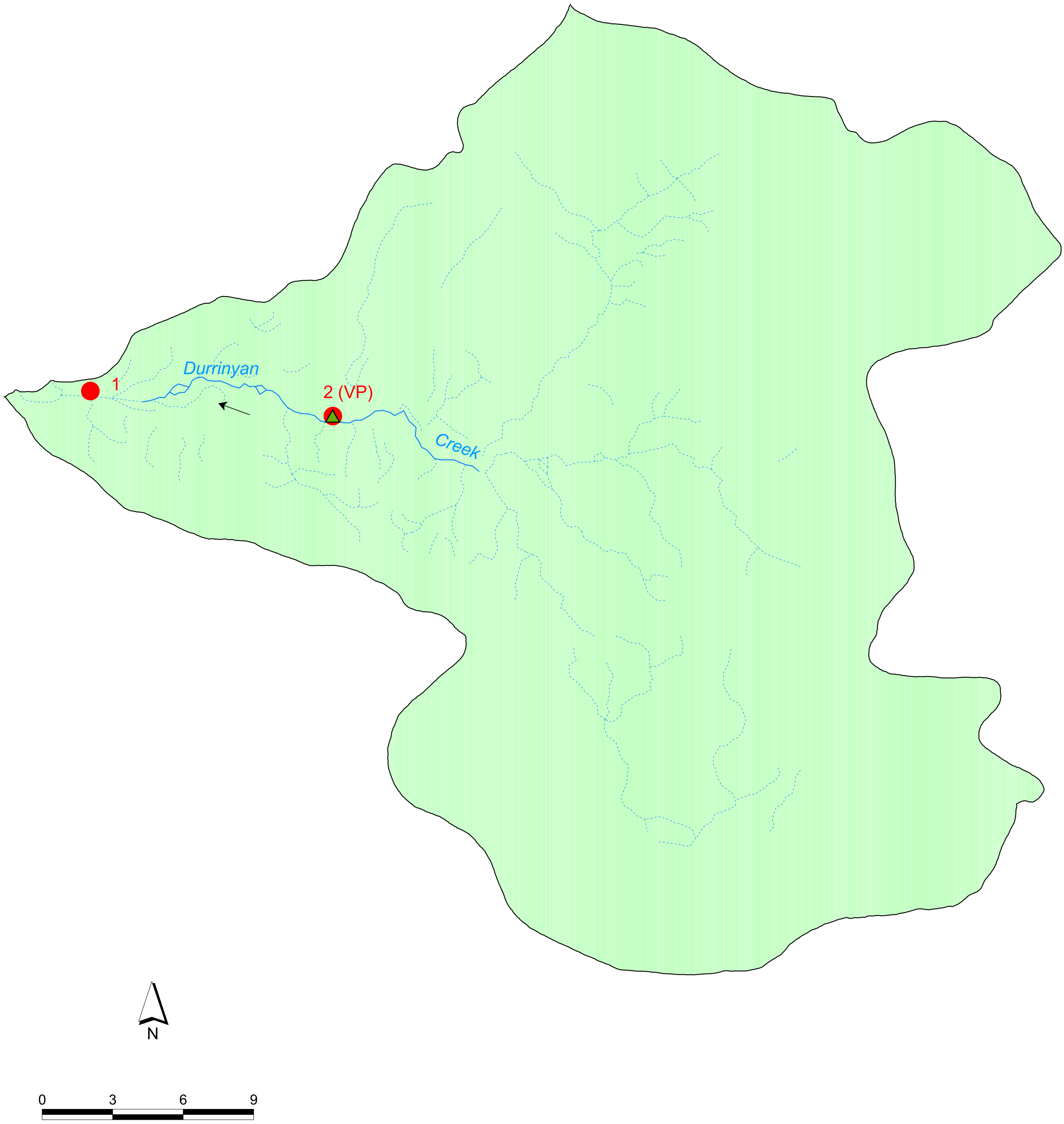
TOP END WATERWAYS PROJECT

DALY RIVER CATCHMENT

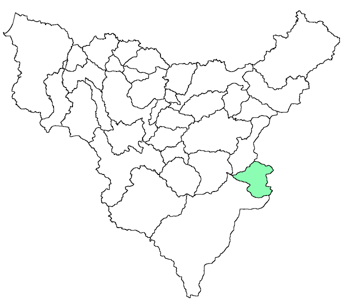
DRY RIVER

SUB-SECTION 22

Map 57



Area - 989 km^2



LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

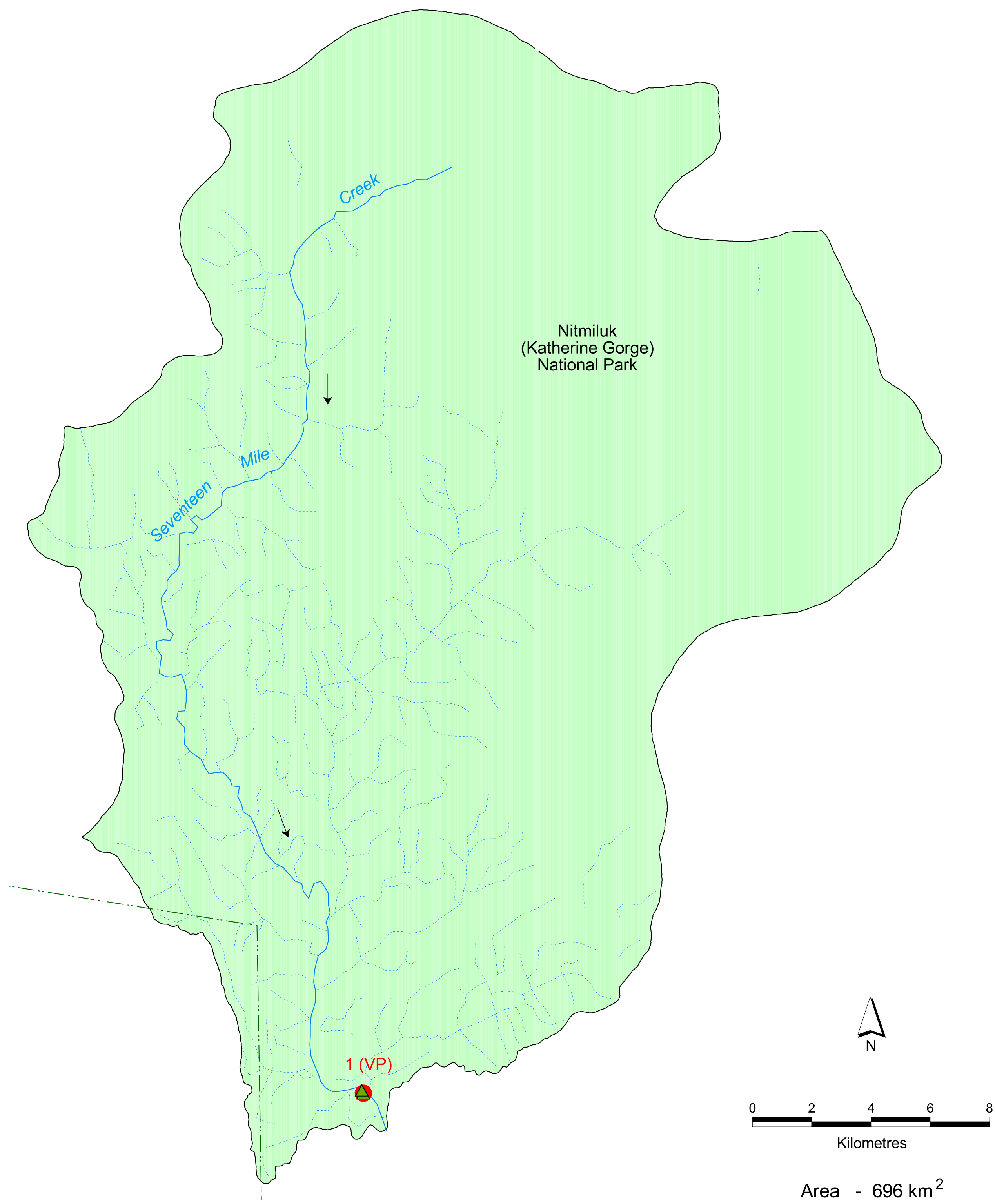
TOP END WATERWAYS PROJECT

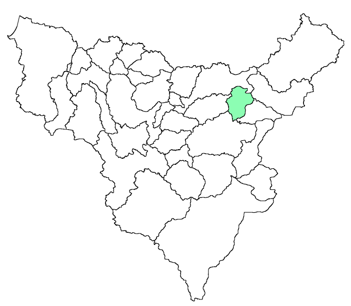
DALY RIVER CATCHMENT

DURRINYAN CREEK

SUB-SECTION 23

Map 58





LOCATION OF SUB-SECTION

LEGEND

- 5 Site
- Sample Point
- (VP) Vegetation Profile
- Longitudinal Profile Survey
- River
- Creek
- Flow direction

TOP END WATERWAYS PROJECT
DALY RIVER CATCHMENT

SEVENTEEN MILE CREEK

SUB-SECTION 24

Map 59