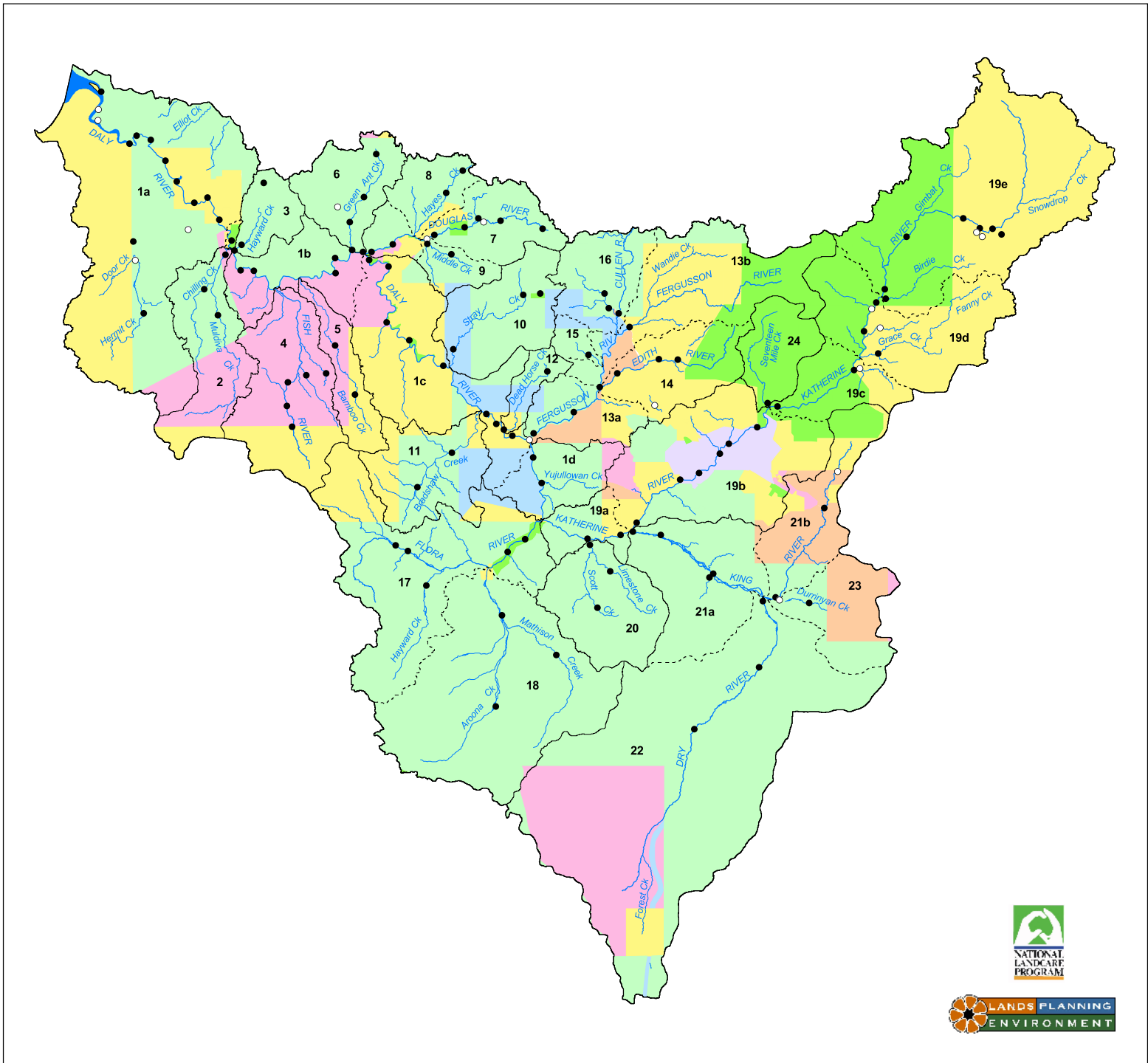




## ASSESSMENT OF RIVERINE CONDITION MAP SERIES

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*








- Map 10 Local Land Tenure
- Map 11 State of the Reach Environs
- Map 12 Channel Type Diversity
- Map 13 Bank Stability
- Map 14 Bed Stability
- Map 15 Cover and Structural Diversity of Riparian Vegetation
- Map 16 Width of Riparian Vegetation
- Map 17 Cover of Exotic Riparian Vegetation
- Map 18 Cover and Distribution of *Passiflora foetida*
- Map 19 Cover and Distribution of *Hyptis suaveolens*
- Map 20 Cover and Distribution of *Xanthium occidentale*
- Map 21 Cover and Distribution of Submerged Aquatic Vegetation
- Map 22 Cover and Distribution of Emergent Aquatic Vegetation
- Map 23 Cover and Diversity of Instream and Bank Habitats
- Map 24 Overall Condition
- Map 25 Flow Gauge Stations, Monitoring Bores and Springs
- Map 26 Water Quality Sampling Points



**LAND CLASSIFICATION**

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

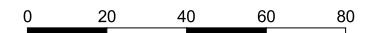
**LEGEND**

-  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

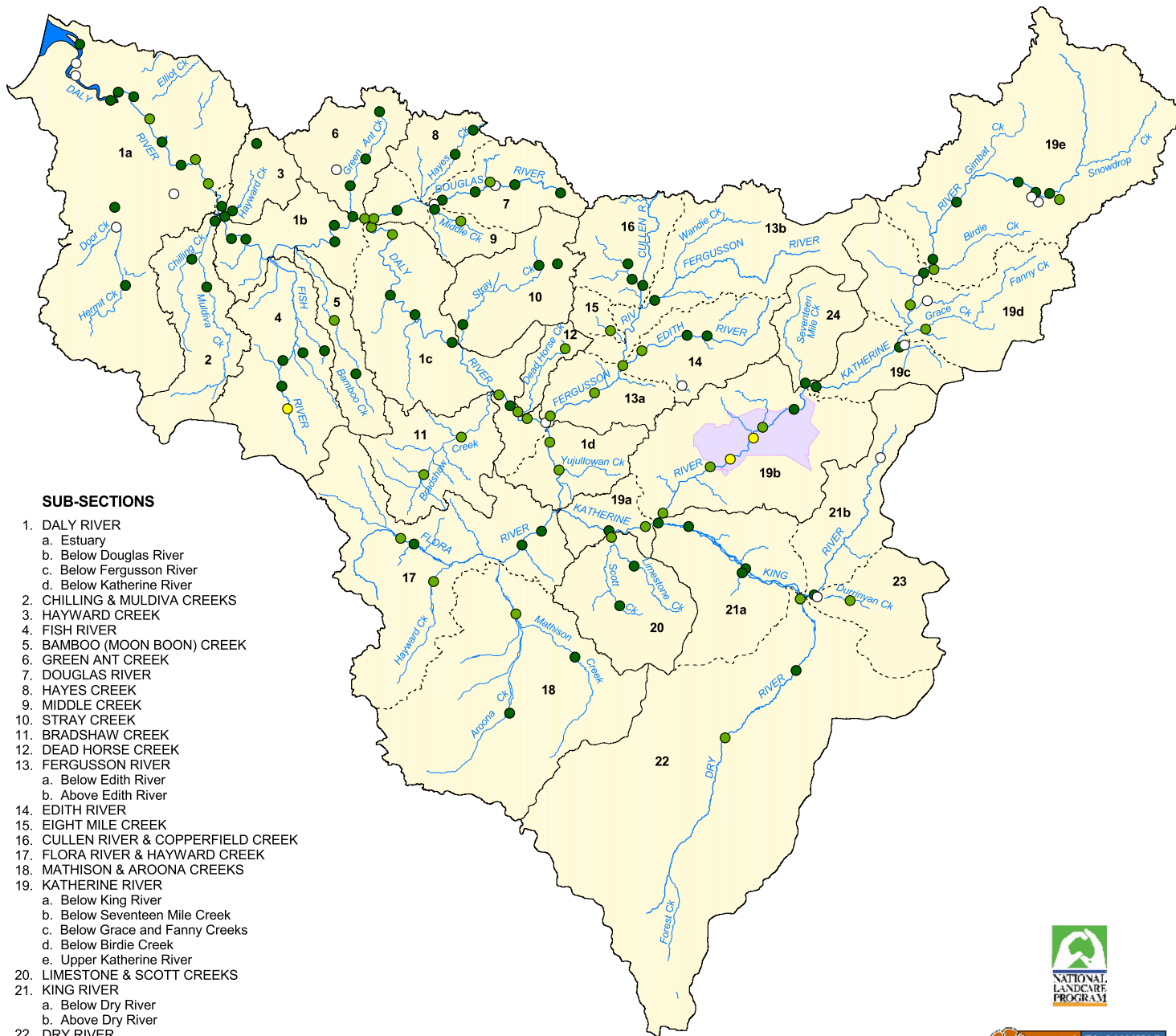


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**TOP END WATERWAYS PROJECT**  
**DALY RIVER CATCHMENT**

**LOCAL LAND TENURE**



**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

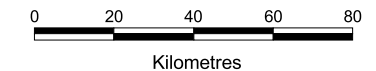
**LEGEND**

SITE LOCATION	REACH ENVIRONS CATEGORY	RATING (%)
●	Extreme Modification	0 - 20
●	Major Modification	21- 40
●	Moderate Modification	41- 60
●	Some Modification	61- 80
●	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 Enviro ns -  
 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 enviro ns.



TOP END WATERWAYS PROJECT  
 DALY RIVER CATCHMENT

**STATE OF  
 THE REACH ENVIRONS**



**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
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  - d. Below Birdie Creek
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21. KING RIVER
  - a. Below Dry River
  - b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

**LEGEND**

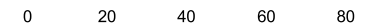
SITE LOCATION	DIVERSITY CATEGORY	RATING (out of 10)
<span style="color: red;">●</span>	Very Low Diversity	1 - 2
<span style="color: orange;">●</span>	Low Diversity	3 - 4
<span style="color: yellow;">●</span>	Moderate Diversity	5 - 6
<span style="color: green;">●</span>	High Diversity	7 - 8
<span style="color: darkgreen;">●</span>	Very High Diversity	9 - 10
<span style="color: white;">○</span>	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.



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TOP END WATERWAYS PROJECT  
DALY RIVER CATCHMENT

**CHANNEL TYPE DIVERSITY**



**SUB-SECTIONS**

1. DALY RIVER
  - a. Estuary
  - b. Below Douglas River
  - c. Below Fergusson River
  - d. Below Katherine River
2. CHILLING & MULDIRA CREEKS
3. HAYWARD CREEK
4. FISH RIVER
5. BAMBOO (MOON BOON) CREEK
6. GREEN ANT CREEK
7. DOUGLAS RIVER
8. HAYES CREEK
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  - a. Below Dry River
  - b. Above Dry River
22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

**LEGEND**

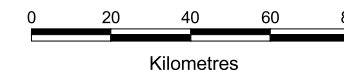
SITE LOCATION	STABILITY CATEGORY	RATING (%)
<span style="color: red;">●</span>	Extreme Instability	0 - 20
<span style="color: orange;">●</span>	Extensive Instability	21- 40
<span style="color: yellow;">●</span>	Moderate Instability	41- 60
<span style="color: lightgreen;">●</span>	Limited Instability	61- 80
<span style="color: darkgreen;">●</span>	Stable	81-100
<span style="color: white;">○</span>	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

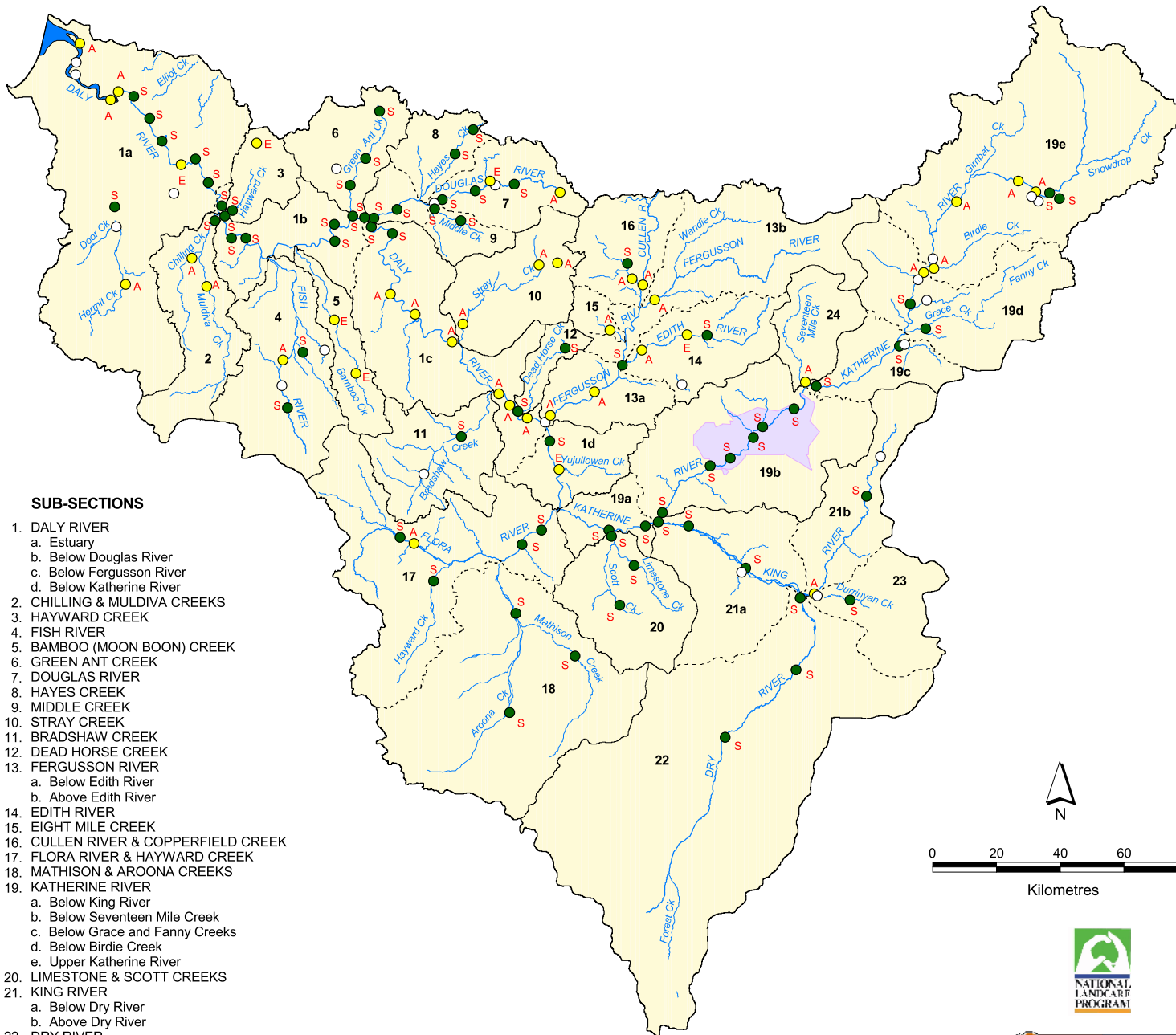
**NOTE**

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.



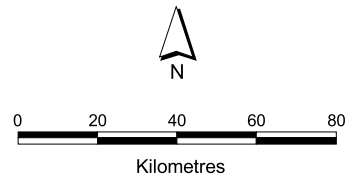
**TOP END WATERWAYS PROJECT**  
**DALY RIVER CATCHMENT**

**BANK STABILITY**



**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
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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)
<span style="color: red;">●</span>	Severe Erosion or Aggradation	2
<span style="color: yellow;">●</span>	Moderate Erosion or Aggradation	6
<span style="color: green;">●</span>	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

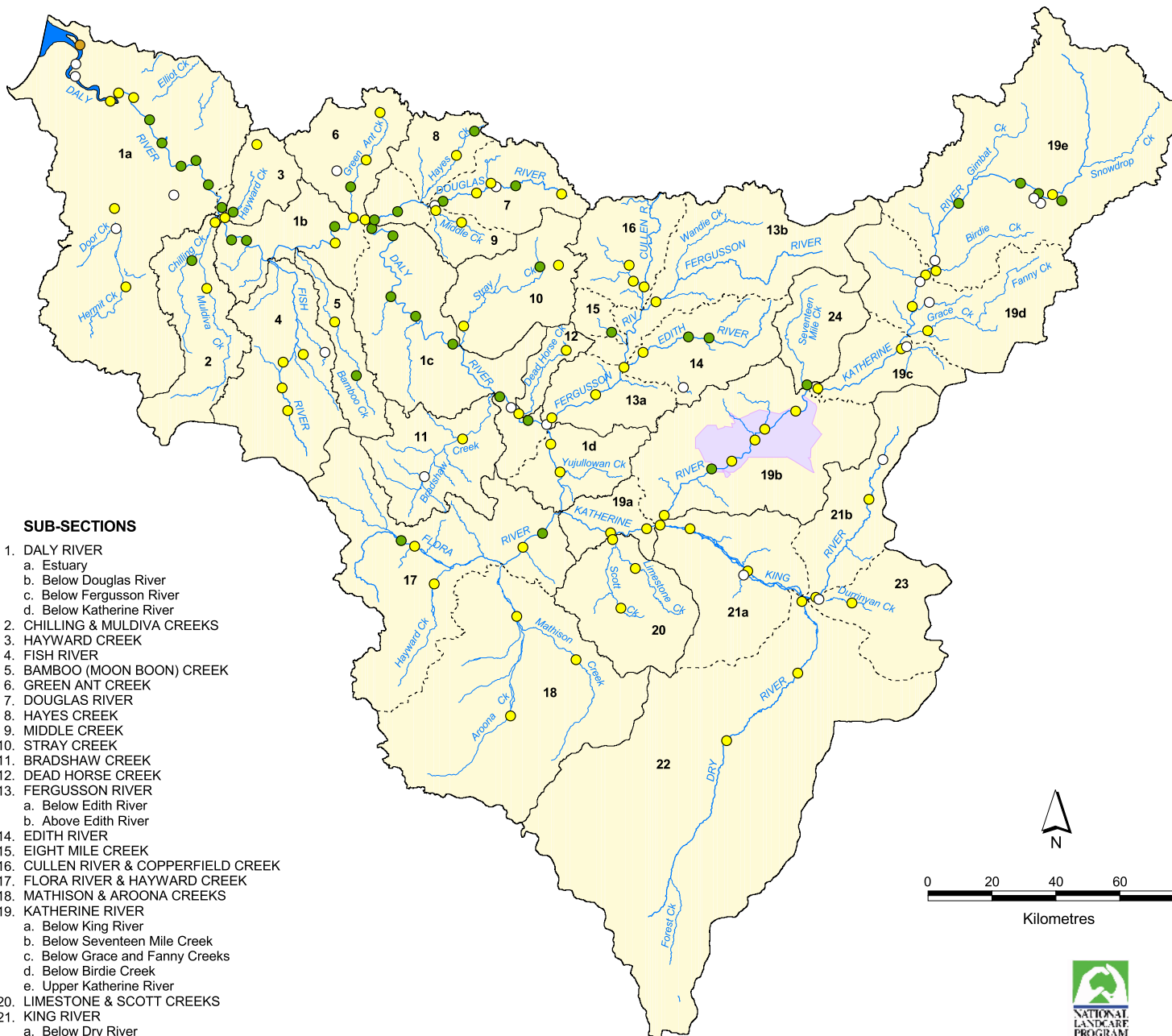
**NOTE**

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.



**BED STABILITY**



**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
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  - a. Below Dry River
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22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

**LEGEND**

SITE LOCATION	RIPARIAN VEGETATION CATEGORY	RATING (out of 10)
<span style="color: red;">●</span>	Very Low Cover/Diversity	1 - 2
<span style="color: orange;">●</span>	Low Cover/Diversity	3 - 4
<span style="color: yellow;">●</span>	Moderate Cover/Diversity	5 - 6
<span style="color: green;">●</span>	High Cover/Diversity	7 - 8
<span style="color: darkgreen;">●</span>	Very High Cover/Diversity	9 - 10
○	Site Not Assessed	

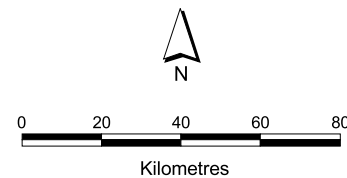
  

19a	Sub-section Number
	Catchment Boundary
	Sub-catchment Boundary
	Sub-section Boundary
	River
	Creek
	Katherine Municipal Boundary

**NOTE**

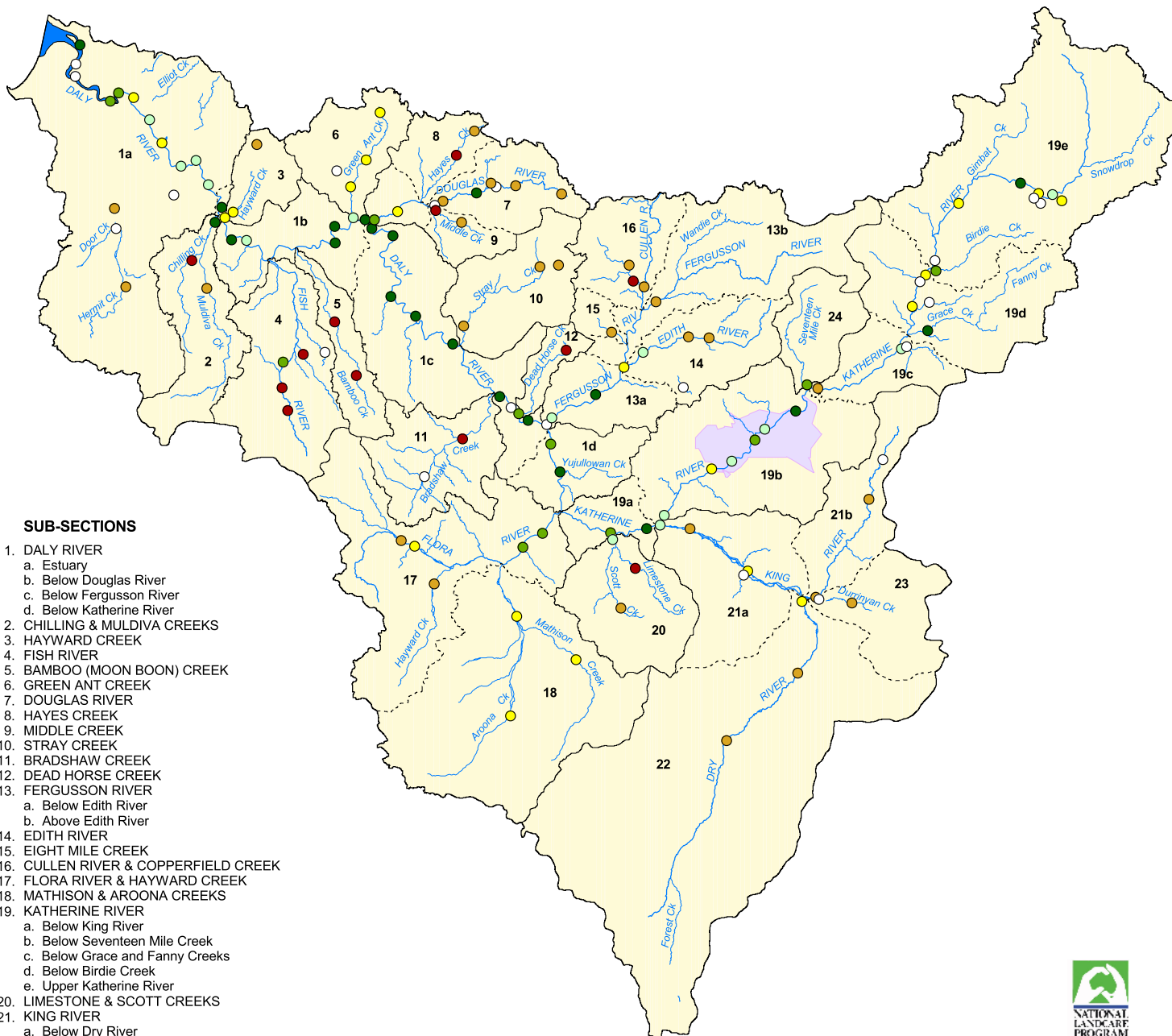
Cover and Structural Diversity of the Riparian Vegetation - The ratings take into account:

- 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 ).



TOP END WATERWAYS PROJECT  
DALY RIVER CATCHMENT

**COVER AND STRUCTURAL DIVERSITY OF RIPARIAN VEGETATION**



**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
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  - b. Above Edith River
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- 17. FLORA RIVER & HAYWARD CREEK
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  - 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 WIDTH CATEGORY (m)
<span style="color: red;">●</span>	< 5
<span style="color: orange;">●</span>	5 - 10
<span style="color: yellow;">●</span>	11 - 20
<span style="color: lightgreen;">●</span>	21 - 30
<span style="color: darkgreen;">●</span>	31 - 40
<span style="color: white;">○</span>	> 40
<span style="color: white;">○</span>	Site Not Assessed
19a	Sub-section Number
	Catchment Boundary
	Sub-catchment Boundary
	Sub-section Boundary
	River
	Creek
	Katherine Municipal Boundary

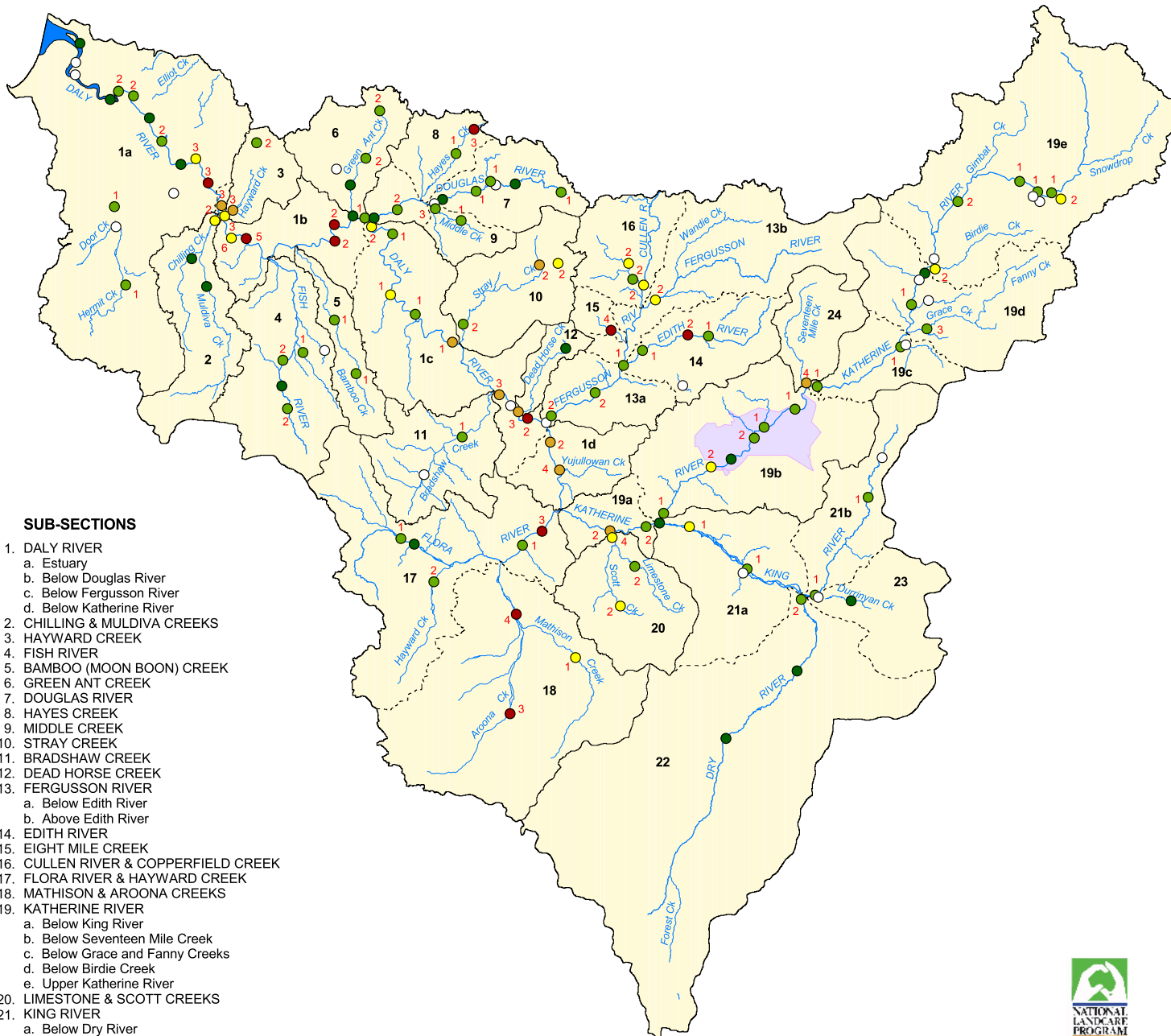
**NOTE**

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



TOP END WATERWAYS PROJECT  
DALY RIVER CATCHMENT

**WIDTH OF RIPARIAN VEGETATION**



**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
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  - 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
○ (White)	Site Not Assessed	

**NUMBER OF TYPES OF EXOTIC SPECIES**

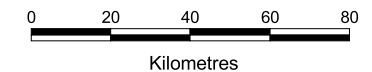
1 - 6 The number of different types of exotic species recorded at a site, if present.

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

**NOTE**

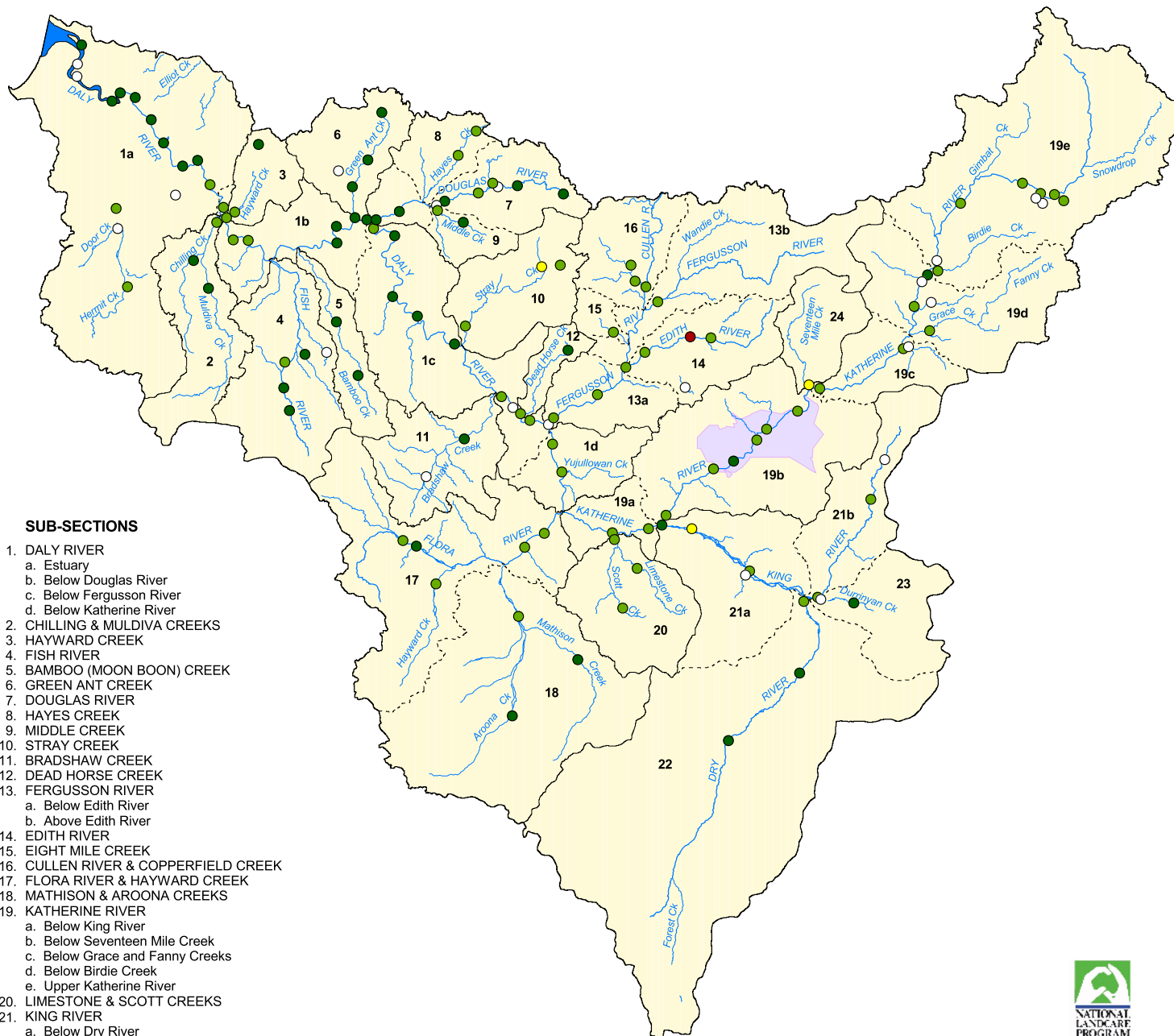
Cover of Exotic Riparian Vegetation - The ratings take into account the percentage cover recorded for exotic species within the riparian zone, averaged for both river banks at a site. The higher the percentage cover recorded for exotic species, or the higher the degree of invasion, the lower the rating.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



TOP END WATERWAYS PROJECT  
DALY RIVER CATCHMENT

**COVER OF EXOTIC RIPARIAN VEGETATION**



**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
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  - 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
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22. DRY RIVER
23. DURRINYAN CREEK
24. SEVENTEEN MILE CREEK

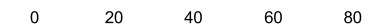
**LEGEND**

SITE LOCATION	% COVER CATEGORY
<span style="color: red;">●</span>	16-20*
<span style="color: orange;">●</span>	11-15
<span style="color: yellow;">●</span>	6-10
<span style="color: lightgreen;">●</span>	1-5
<span style="color: darkgreen;">●</span>	0
○	Site Not Assessed
<b>19a</b>	Sub-section Number
— (solid)	Catchment Boundary
— (dashed)	Sub-catchment Boundary
— (dotted)	Sub-section Boundary
— (blue)	River
— (light blue)	Creek
■ (purple)	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%.



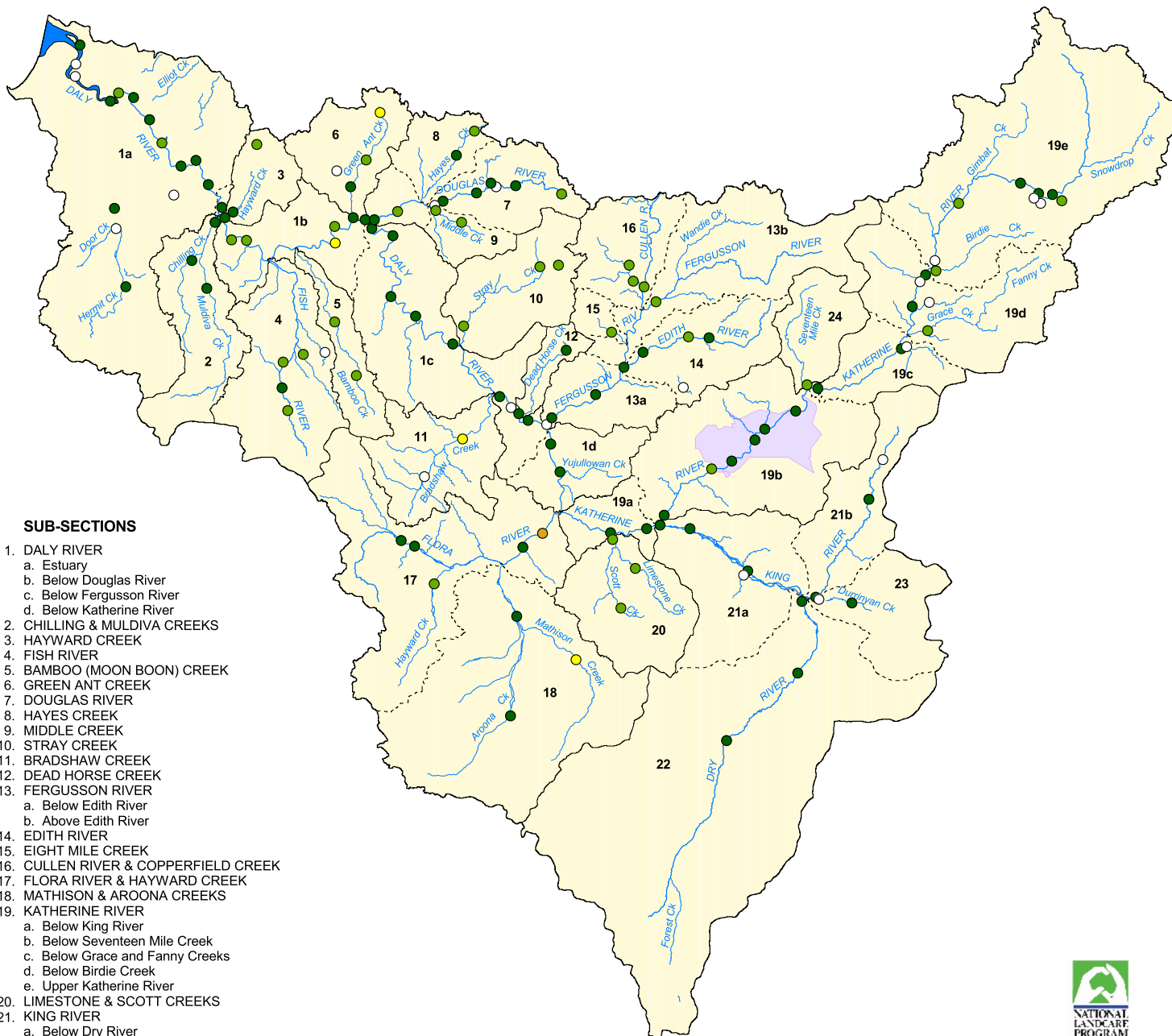
Kilometres



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 & MULDIRA CREEKS
- 3. HAYWARD CREEK
- 4. FISH RIVER
- 5. BAMBOO (MOON BOON) CREEK
- 6. GREEN ANT CREEK
- 7. DOUGLAS RIVER
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- 10. STRAY CREEK
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- 12. DEAD HORSE CREEK
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  - 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

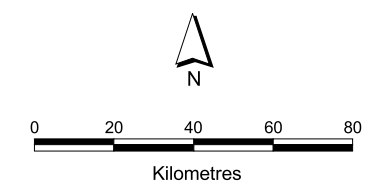
**LEGEND**

SITE LOCATION	% COVER CATEGORY *
<span style="color: red;">●</span>	> 15
<span style="color: orange;">●</span>	11-15
<span style="color: yellow;">●</span>	6-10
<span style="color: green;">●</span>	1-5
<span style="color: darkgreen;">●</span>	0
○	Site Not Assessed
19a	Sub-section Number
— (solid)	Catchment Boundary
— (dashed)	Sub-catchment Boundary
— (dotted)	Sub-section Boundary
— (blue)	River
— (light blue)	Creek
■ (purple)	Katherine Municipal Boundary

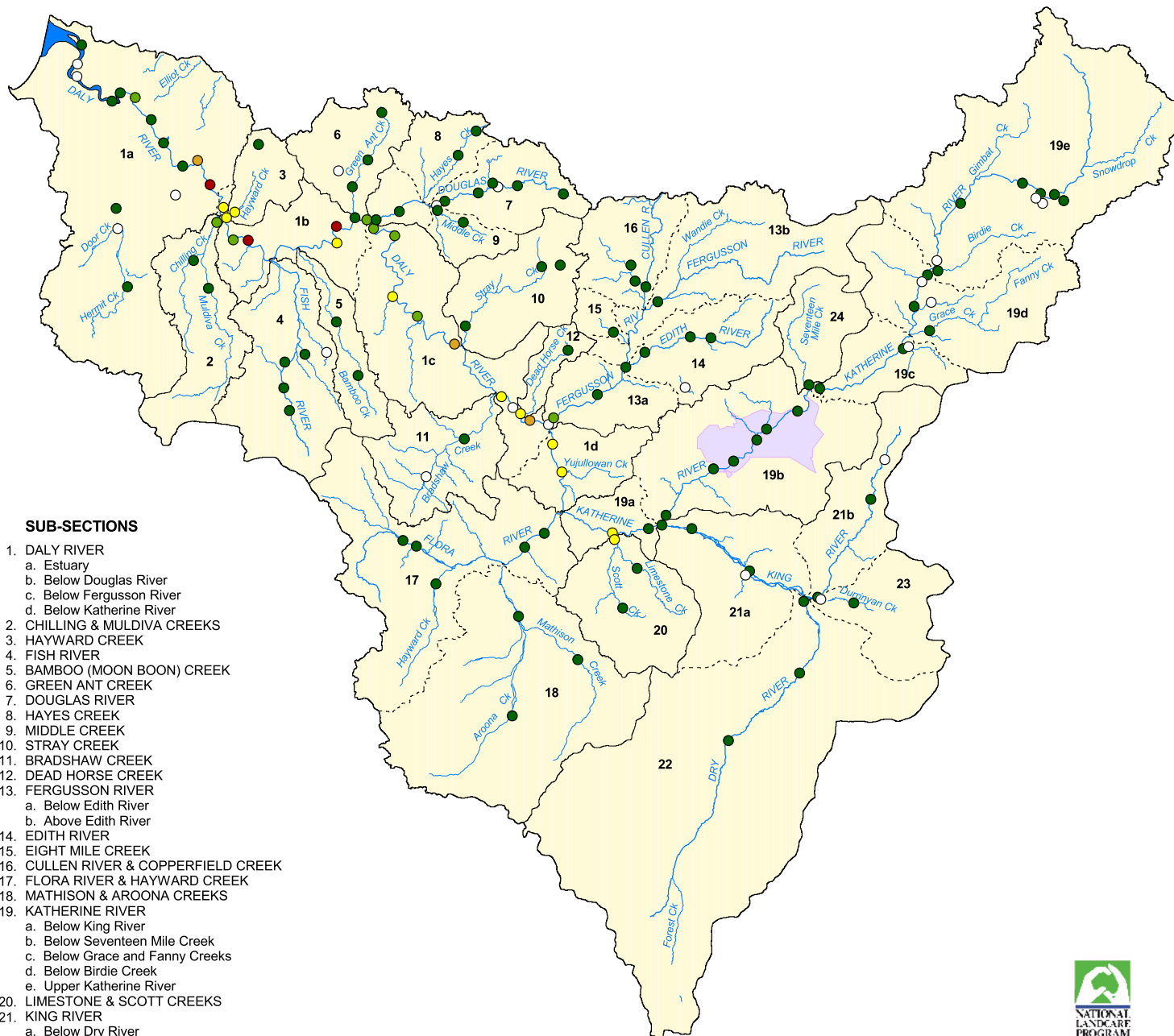
**NOTE**

*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%.



TOP END WATERWAYS PROJECT  
 DALY RIVER CATCHMENT  
**COVER AND DISTRIBUTION  
 OF *Hyptis suaveolens***



**SUB-SECTIONS**

- 1. DALY RIVER
  - a. Estuary
  - b. Below Douglas River
  - c. Below Fergusson River
  - d. Below Katherine River
- 2. CHILLING & MULDIRA 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**

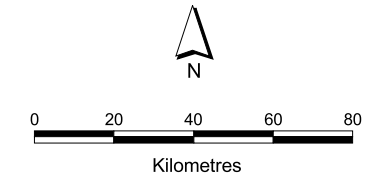
SITE LOCATION	% COVER CATEGORY
<span style="color: red;">●</span>	16-28*
<span style="color: orange;">●</span>	11-15
<span style="color: yellow;">●</span>	6-10
<span style="color: lightgreen;">●</span>	1-5
<span style="color: green;">●</span>	0
<span style="color: white; border: 1px solid black; border-radius: 50%; display: inline-block; width: 10px; height: 10px;"></span>	Site Not Assessed

<b>19a</b>	Sub-section Number
<span style="border-bottom: 1px solid black; width: 20px; display: inline-block;"></span>	Catchment Boundary
<span style="border-bottom: 1px dashed black; width: 20px; display: inline-block;"></span>	Sub-catchment Boundary
<span style="border-bottom: 1px dashed black; width: 20px; display: inline-block;"></span>	Sub-section Boundary
<span style="border-bottom: 1px solid blue; width: 20px; display: inline-block;"></span>	River
<span style="border-bottom: 1px solid lightblue; width: 20px; display: inline-block;"></span>	Creek
<span style="background-color: #e6e6fa; border: 1px solid black; width: 20px; height: 10px; display: inline-block;"></span>	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%.



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
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15. EIGHT MILE CREEK
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19. KATHERINE RIVER
  - a. Below King River
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  - 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

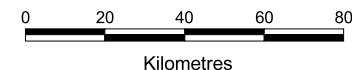
**LEGEND**

SITE LOCATION	% COVER CATEGORY
<span style="color: red;">●</span>	0
<span style="color: orange;">●</span>	1-5
<span style="color: yellow;">●</span>	6-10
<span style="color: lightgreen;">●</span>	11-15
<span style="color: green;">●</span>	16-25*
○	Site Not Assessed
<b>19a</b>	Sub-section Number
— (solid)	Catchment Boundary
— (dashed)	Sub-catchment Boundary
— (dotted)	Sub-section Boundary
— (blue)	River
— (light blue)	Creek
■ (purple)	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%.



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
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  - 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**

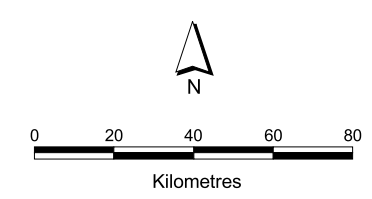
SITE LOCATION	% COVER CATEGORY
<span style="color: red;">●</span>	0
<span style="color: orange;">●</span>	1-5
<span style="color: yellow;">●</span>	6-10
<span style="color: lightgreen;">●</span>	11-15
<span style="color: green;">●</span>	16-45*
<span style="color: white; border: 1px solid black; border-radius: 50%; padding: 2px;">○</span>	Site Not Assessed

<b>19a</b>	Sub-section Number
<span style="border-bottom: 1px solid black; width: 20px; display: inline-block;"></span>	Catchment Boundary
<span style="border-bottom: 1px dashed black; width: 20px; display: inline-block;"></span>	Sub-catchment Boundary
<span style="border-bottom: 1px solid blue; width: 20px; display: inline-block;"></span>	River
<span style="border-bottom: 1px solid lightblue; width: 20px; display: inline-block;"></span>	Creek
<span style="background-color: #e6e6fa; width: 20px; height: 10px; display: inline-block;"></span>	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%.





**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
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  - 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 (%)
●	Very Low Cover/Diversity	0 - 20
●	Low Cover/Diversity	21- 40
●	Moderate Cover/Diversity	41- 60
●	High Cover/Diversity	61- 80
●	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.



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
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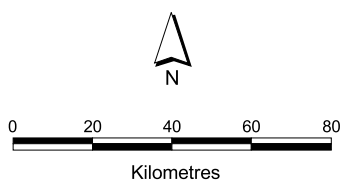
**LEGEND**

SITE LOCATION	OVERALL CONDITION CATEGORY	RATING (%)
●	Extreme Modification/ Instability, Very Low Cover/ Diversity or Very High Cover for Exotics	0 - 20
●		21-40
●		41 - 60
●		61 - 80
●	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.



TOP END WATERWAYS PROJECT  
 DALY RIVER CATCHMENT

**OVERALL CONDITION**



**LEGEND**

- Flow Gauge Station - open
- Flow Gauge Station - closed
- G814003 Gauge Station Number
- (H) High Flow Station
- (T) Tide Station
- ▲ Spring
- Monitoring Bore
  
- 19a Sub-section Number
- Catchment Boundary
- River
- Creek
- Road
- Katherine Municipal Boundary

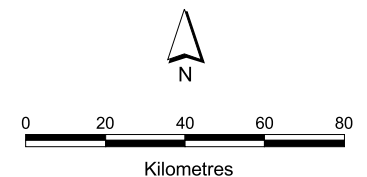
**OPEN FLOW GAUGE STATIONS ●**

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
G8140026	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.



TOP END WATERWAYS PROJECT  
DALY RIVER CATCHMENT

**FLOW GAUGE STATIONS,  
MONITORING BORES  
AND SPRINGS**

Map 25

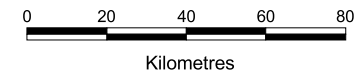


**LEGEND**

- 19a** Sub-section Number
- Catchment Boundary
- River
- Creek
- Road
- Katherine Municipal Boundary
- 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).
- ▲ 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).
- 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)



TOP END WATERWAYS PROJECT  
DALY RIVER CATCHMENT

**WATER QUALITY SAMPLING POINTS**