MARCH 1993

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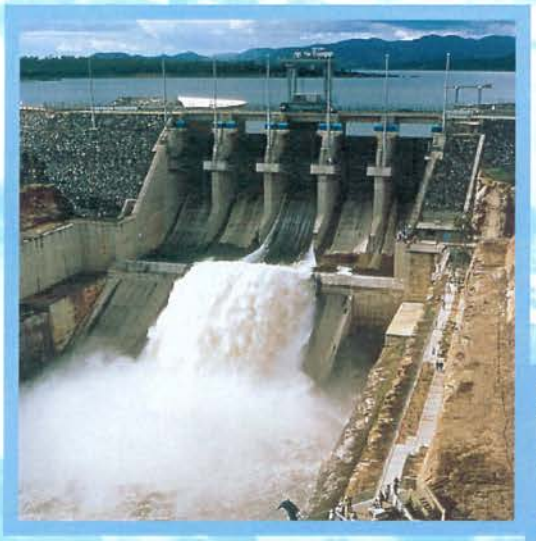
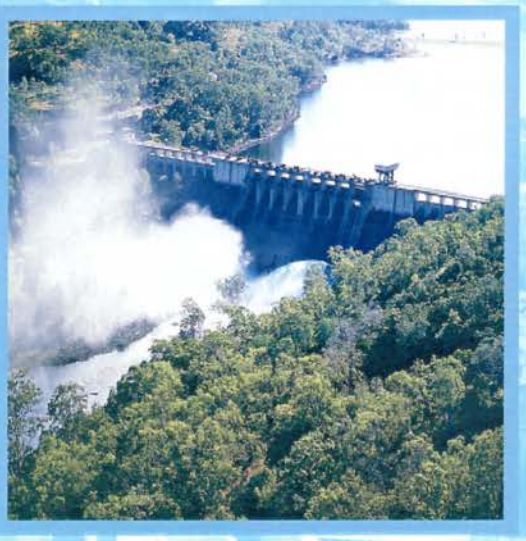


BRISBANE RIVER AND PINE RIVER FLOOD STUDY :

Report No. 8d





BRISBANE RIVER FLOOD HYDROLOGY REPORT VOLUME IV

Runoff-Routing Model Layouts

South East Queensland WATER BOARD

NATURAL RESOURCES Queensland

Brisbane River and Pine River Flood Studies

BRISBANE RIVER FLOOD HYDROLOGY REPORT

REPORT ON DESIGN FLOOD ESTIMATION

APPENDIX C
RUNOFF – ROUTING MODEL LAYOUTS

Volume IV
March 1993

APPENDIX C

RUNOFF-ROUTING SUB-CATCHMENT MODEL LAYOUTS

	Sub-Catchment	Model
C1	Cooyar Creek @ damsite	COO
C2	Brisbane River @ Linville	LIN
C3	Emu Creek @ Boat Mountain	EMU
C4	Brisbane River @ Gregors Creek	GRE
C5	Cressbrook Creek @ Cressbrook Ck Dam	CREDAM
C6	Stanley River @ Somerset Dam	SOM
C7	Brisbane River @ Wivenhoe Dam	WIV
C8	Lockyer Creek @ Helidon	HEL
C9	Tenthill Creek @ Tenthill	TEN
C10	Lockyer Creek @ Lyons Bridge	LYO
C11	Brisbane River @ Savages Crossing	SAVDAM
C12	Brisbane River @ Mt Crosby Weir	MTC
C13	Bremer River @ Walloon	WAL
C14	Warrill Creek @ Kalbar	KAL
C15	Warrill Creek @ Amberley	AMB
C16	Purga Creek @ Loamside	PUR
C17	Bremer River @ Ipswich	IPS
C18	Brisbane River @ Jindalee	JIN
C19	Brisbane River @ Port Office Gauge	POG
C20	Stanley River @ Somerset Damsite	SOMNAT
C21	Brisbane River @ Wivenhoe Damsite	WIVNAT

APPENDIX C1

Cooyar Creek @ Damsite

Sub-Catchment Model COO

C1 Cooyar Creek @ Damsite COO

Table C1.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	45.5	95.54
2	31.7	84.75
3	82.8	78.64
4	76.3	65.07
5	103.7	64.77
6	102.0	45.80
7	67.8	29.80
8	75.7	19.03
9	72.5	39.44
10	111.2	25.95
11	92.2	12.02
12	48.4	20.50
13	67.2	7.88

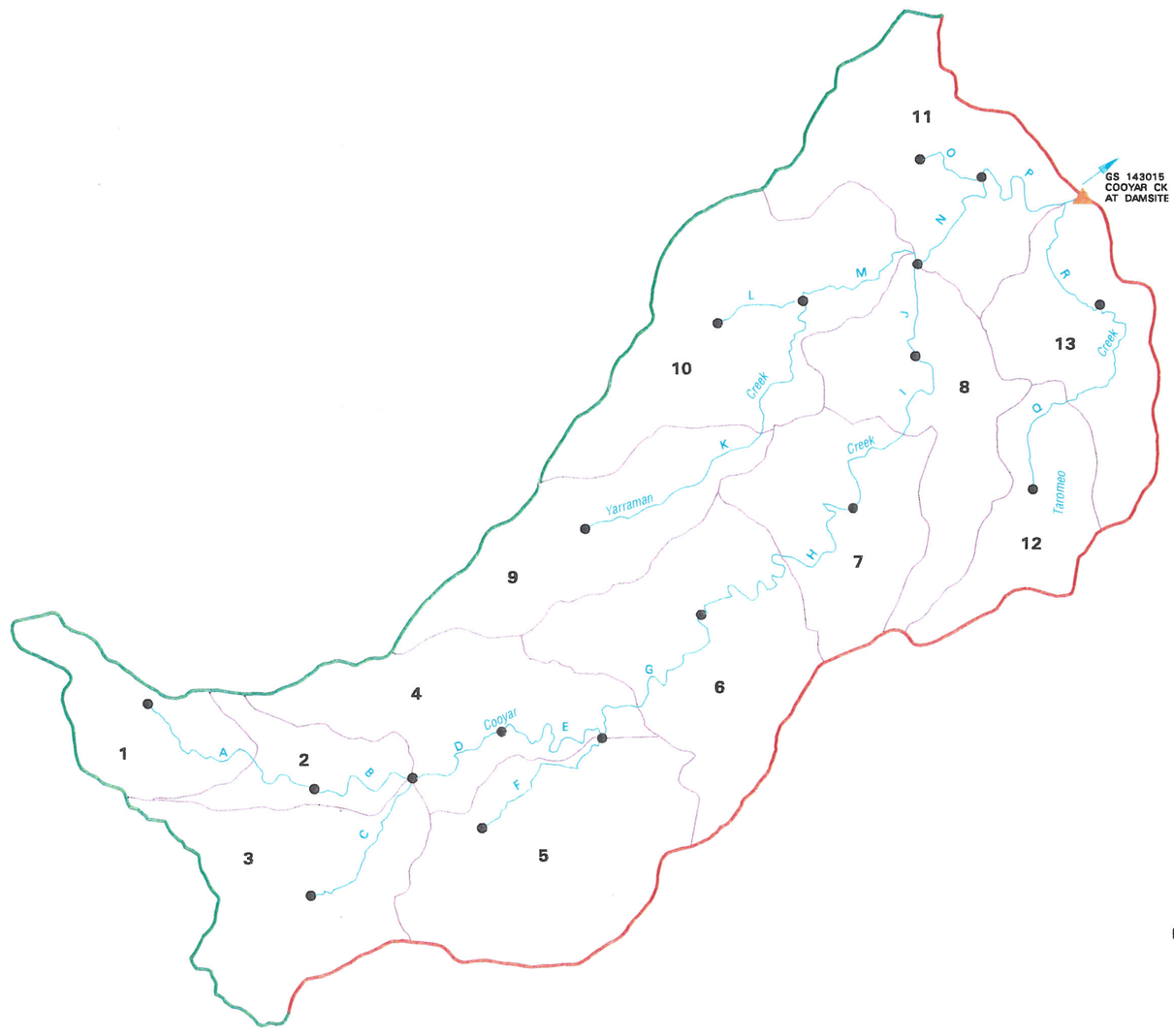
Table C1.2
Reach Details

Reach	Reach Length (km)
A	10.79
B	6.12
C	8.08
D	5.49
E	8.58
F	8.28
G	10.68
H	16.00
I	10.77
J	4.74
K	17.88
L	4.40
M	7.26
N	6.06
O	3.79
P	7.42
Q	12.62
R	7.07

Catchment Area $A = 977.0\ km^2$
Distance to Centroid of Area $d_c = 42.72\ km$

FIGURE C.1





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI DEPARTMENT OF PRIMARY INDUSTRIES
QUEENSLAND WATER RESOURCES

Brisbane River Flood Study
Cooyar Creek at Damsite
Design Model - COO

19 Mar 93

A3-101989

APPENDIX C2

Brisbane River @ Linville

Sub-Catchment Model LIN

Table C2.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	154.6	56.30
2	75.7	41.61
3	102.4	46.38
4	75.3	33.21
5	27.2	32.89
6	27.3	18.91
7	49.3	28.83
8	38.3	23.19
9	67.7	24.83
10	48.3	14.94
11	21.7	2.48
12	76.4	50.81
13	47.6	45.74
14	34.9	29.28
15	45.5	25.24
16	52.3	19.92
17	35.5	16.61
18	38.9	12.80
19	42.8	7.07

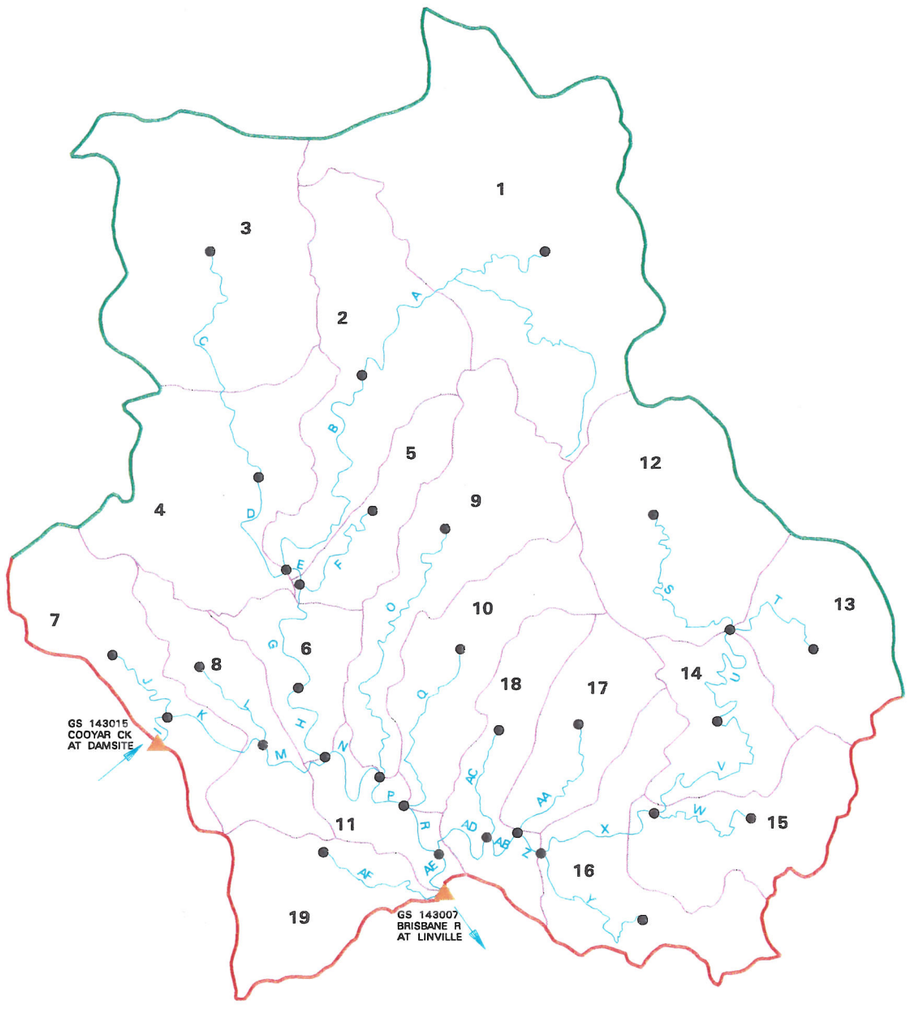
Table C2.2
Reach Details

Reach	Reach Length (km)	Reach	Reach Length (km)
A	2.15	Q	9.45
B	5.32	R	3.00
C	5.34	S	11.38
D	5.02	T	6.31
E	4.39	U	10.14
F	14.69	V	11.21
G	14.64	W	7.17
H	13.17	X	6.93
I	6.23	Y	8.78
J	1.20	Z	1.47
K	7.11	AA	6.93
L	6.87	AB	2.53
M	5.13	AC	5.65
N	5.55	AD	4.66
O	16.60	AE	2.48
P	2.75	AF	7.07

Catchment Area $A = 1061.6\ km^2$
Distance to Centroid of Area $d_c = 33.86\ km$

FIGURE C.2





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES
WATER RESOURCES

Brisbane River Flood Study
Brisbane River at Linville
Design Model - LIN

19 Mar 93

A3-101990

APPENDIX C3

Emu Creek @ Boat Mountain

Sub-Catchment Model EMU

C3 Emu Creek @ Boat Mountain EMU

Table C3.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	96.1	89.40
2	64.9	71.06
3	112.7	90.81
4	90.8	78.28
5	64.1	81.66
6	68.8	57.86
7	61.2	64.35
8	66.2	46.55
9	79.8	32.58
10	68.0	35.98
11	79.1	31.18
12	61.3	10.94

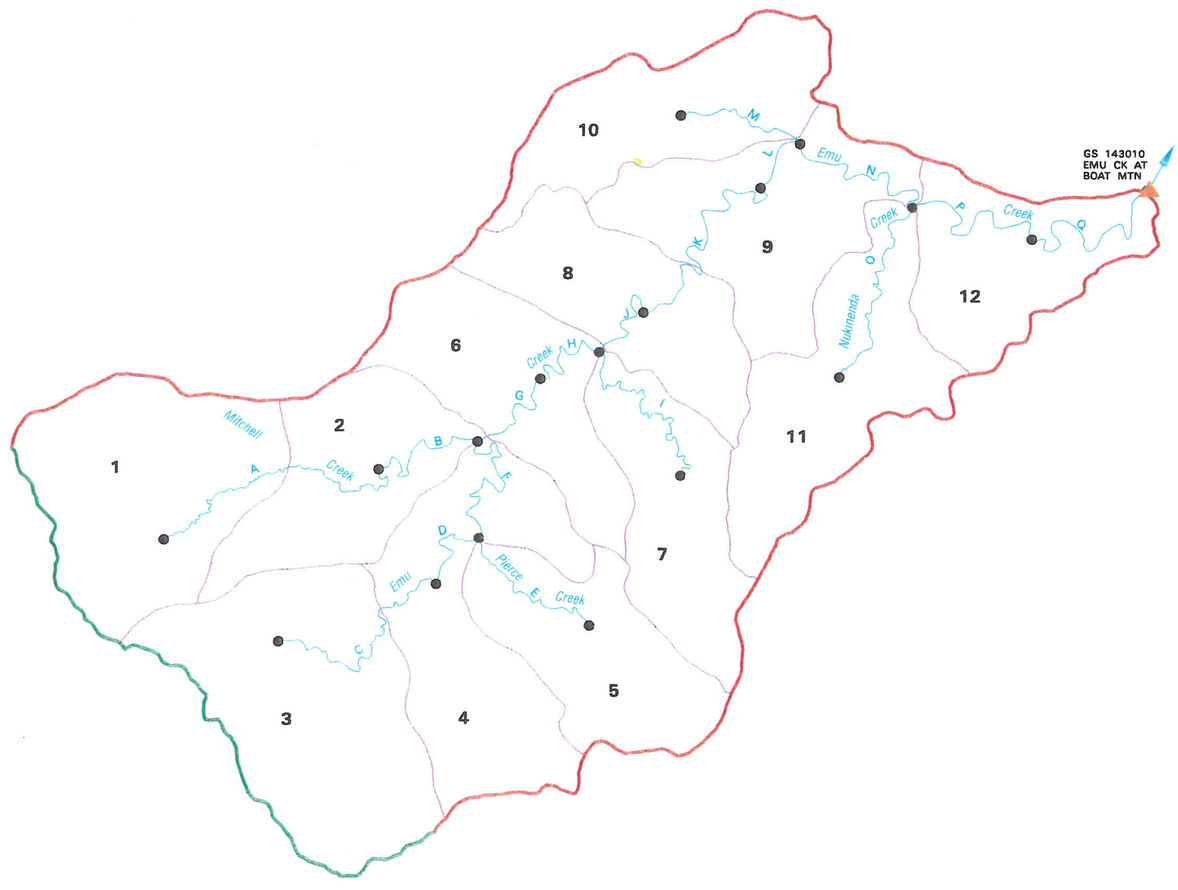
Table C3.2
Reach Details

Reach	Reach Length (km)
A	18.34
B	7.56
C	12.52
D	4.73
E	8.10
F	10.05
G	5.64
H	6.07
I	12.55
J	5.24
K	13.97
L	3.10
M	6.50
N	9.30
O	10.99
P	9.24
Q	10.94

Catchment Area A = 1061.6 km^2
Distance to Centroid of Area d_c = 33.86 km

FIGURE C.3





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES WATER RESOURCES

Brisbane River Flood Study
Emu Creek at Boat Mountain
Design Model - EMU

19 Mar 93

A3-101991

APPENDIX C4

Brisbane River @ Gregors Creek

Sub-Catchment Model GRE

Table C4.1
Sub-Area Details

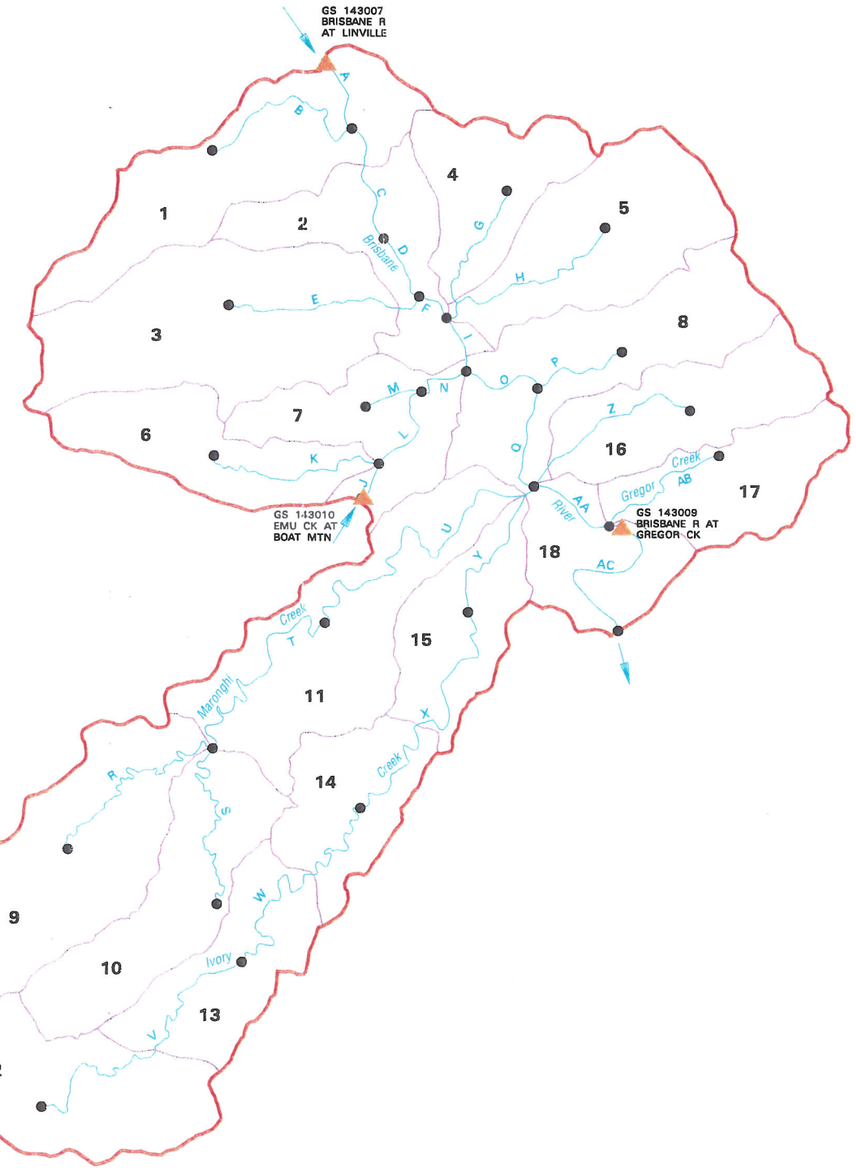
Sub-Area	Area (km^2)	Distance to Outlet (km)
1	71.8	44.54
2	45.8	29.70
3	89.5	35.83
4	38.3	32.18
5	61.2	34.59
6	42.9	38.52
7	40.8	27.63
8	66.3	22.82
9	75.9	56.92
10	57.0	55.55
11	79.3	30.58
12	61.2	66.41
13	44.3	50.86
14	38.5	35.15
15	38.8	20.61
16	46.7	22.14
17	40.3	15.81
18	34.2	9.07

Table C4.2
Reach Details

Reach	Reach Length (km)	Reach	Reach Length (km)
A	3.43	P	4.62
B	9.19	Q	5.03
C	5.65	R	12.64
D	3.24	S	11.27
E	9.36	T	13.71
F	1.68	U	17.40
G	7.40	V	15.56
H	9.81	W	15.70
I	2.63	X	14.54
J	1.97	Y	7.44
K	8.92	Z	8.97
L	4.64	AA	4.11
M	2.68	AB	6.74
N	2.80	AC	9.07
O	3.95		

Catchment Area $A = 972.7\ km^2$
Distance to Centroid of Area $d_c = 36.77\ km$

FIGURE C.4



LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES
WATER RESOURCES

Brisbane River Flood Study
Brisbane River at Gregors Creek
Design Model - GRE

19 Mar 93

A3-101992

APPENDIX C5

Cressbrook Creek @ Cressbrook Creek Dam

Sub-Catchment Model CREDAM

C5 Cressbrook Creek @ Cressbrook Dam CREDAM

Table C5.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	40.0	30.42
2	88.4	19.66
3	44.8	29.53
4	73.0	23.96
5	2.1	18.77
6	64.1	6.99
7	5.2	4.48

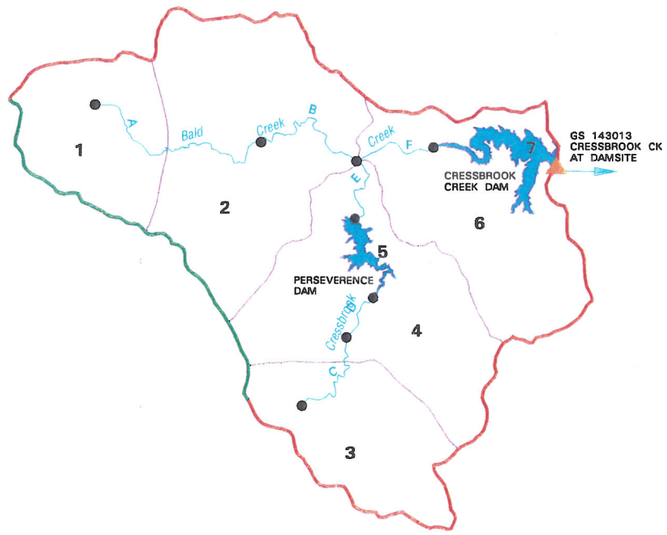
Table C5.2
Reach Details

Reach	Reach Length (km)
A	10.75
B	7.32
C	5.57
D	2.47
E	5.45
F	3.70
G	4.02
H	4.92
I	7.68
J	2.88
K	1.28

Catchment Area $A = 317.7\ km^2$
Distance to Centroid of Area $d_c = 20.59\ km$

FIGURE C.5

N



LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES
WATER RESOURCES

Brisbane River Flood Study
Cressbrook Creek at Cressbrook Dam
Design Model - CRE

19 Mar 93

A3-101993

APPENDIX C6

Stanley River @ Somerset Dam

Sub-Catchment Model SOM

C6 Stanley River @ Somerset Dam SOM

Table C6.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	110.8	76.36
2	96.4	55.77
3	34.3	54.91
4	72.8	51.47
5	46.8	47.61
6	55.7	40.32
7	25.6	39.47
8	119.7	45.04
9	26.5	33.88
10	58.3	26.17
11	52.4	53.20
12	24.6	39.90
13	29.8	25.74
14	55.8	46.83
15	94.9	32.67
16	42.8	53.62
17	56.3	51.49
18	43.7	36.47
19	69.5	30.89
20	38.5	23.17
21	38.6	22.90
22	50.0	12.91
23	46.3	9.87
24	38.3	14.16

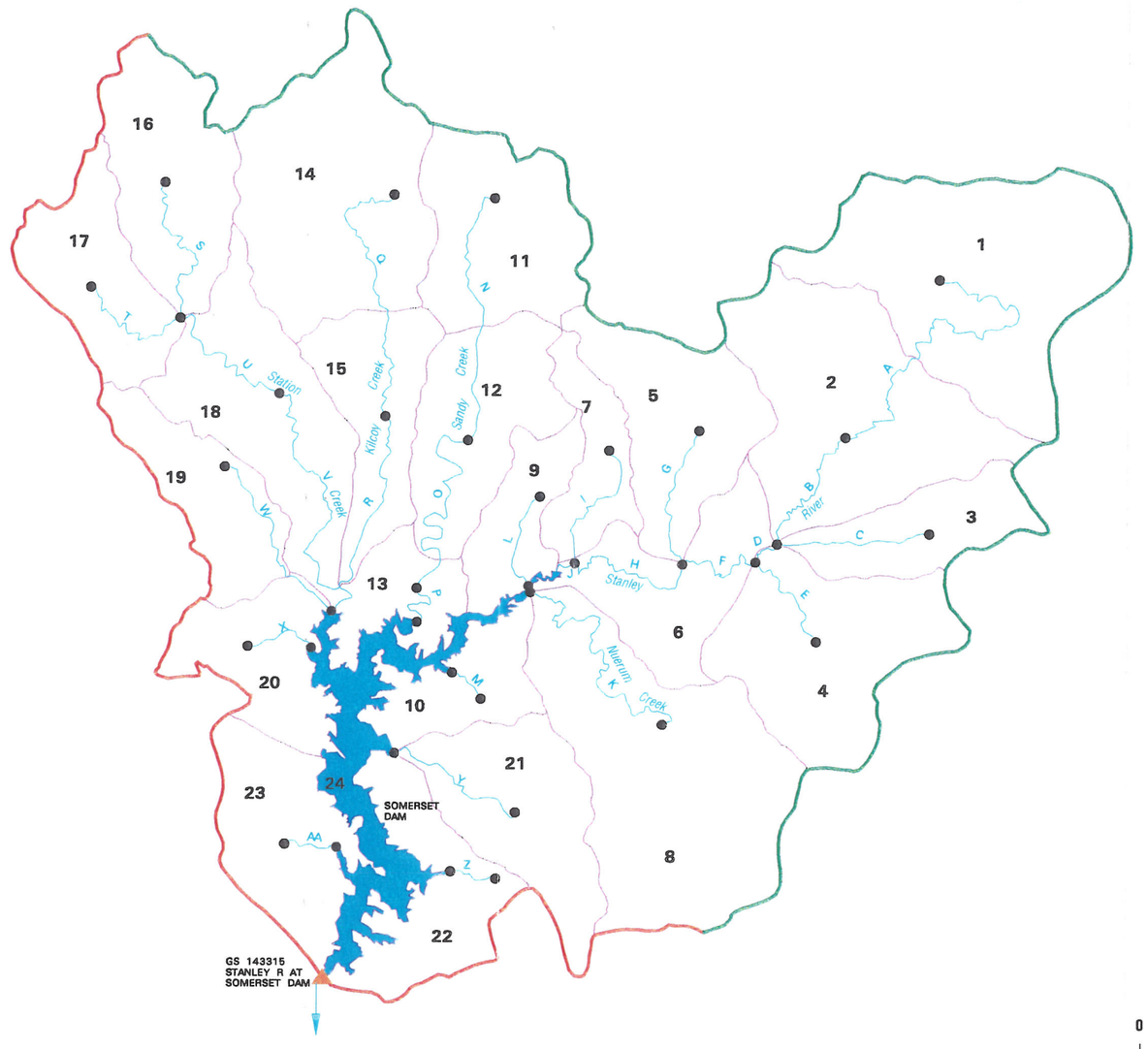
Table C6.2
Reach Details

Reach	Reach length (km)	Reach	Reach Length (km)
A	30.21	O	20.77
B	11.96	P	5.03
C	10.69	Q	20.77
D	2.52	R	13.94
E	8.17	S	13.20
F	8.19	T	10.08
G	10.69	U	11.96
H	11.96	V	19.51
I	10.71	W	13.89
J	5.04	X	5.03
K	23.91	Y	11.33
L	7.54	Z	3.77
M	3.15	AA	3.78
N	19.51		

Catchment Area $A = 1327.4$ km^2
Distance to Centroid of Area $d_c = 31.79$ km

FIGURE C.6





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI DEPARTMENT OF PRIMARY INDUSTRIES
QUEENSLAND WATER RESOURCES

Brisbane River Flood Study
Stanley River at Somerset Dam
Design Model - SOM

19 Mar 93

A3-101994

APPENDIX C7

Brisbane River @ Wivenhoe Dam

Sub-Catchment Model WIV

Table C7.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	36.3	134.91
2	47.2	127.89
3	45.2	119.31
4	46.2	116.98
5	100.2	99.74
6	30.2	96.37
7	62.6	96.35
8	84.4	85.16
9	38.3	83.69
10	75.7	90.26
11	55.3	90.10
12	62.2	73.12
13	58.7	62.90
14	28.3	50.33
15	71.2	66.48
16	106.8	70.40
17	23.9	54.50
18	70.0	58.21
19	35.5	50.63
20	23.8	48.94
21	36.0	54.70
22	32.1	41.08
23	37.1	35.40
24	39.0	41.50
25	20.3	14.85
26	120.3	29.35
27	73.0	25.73

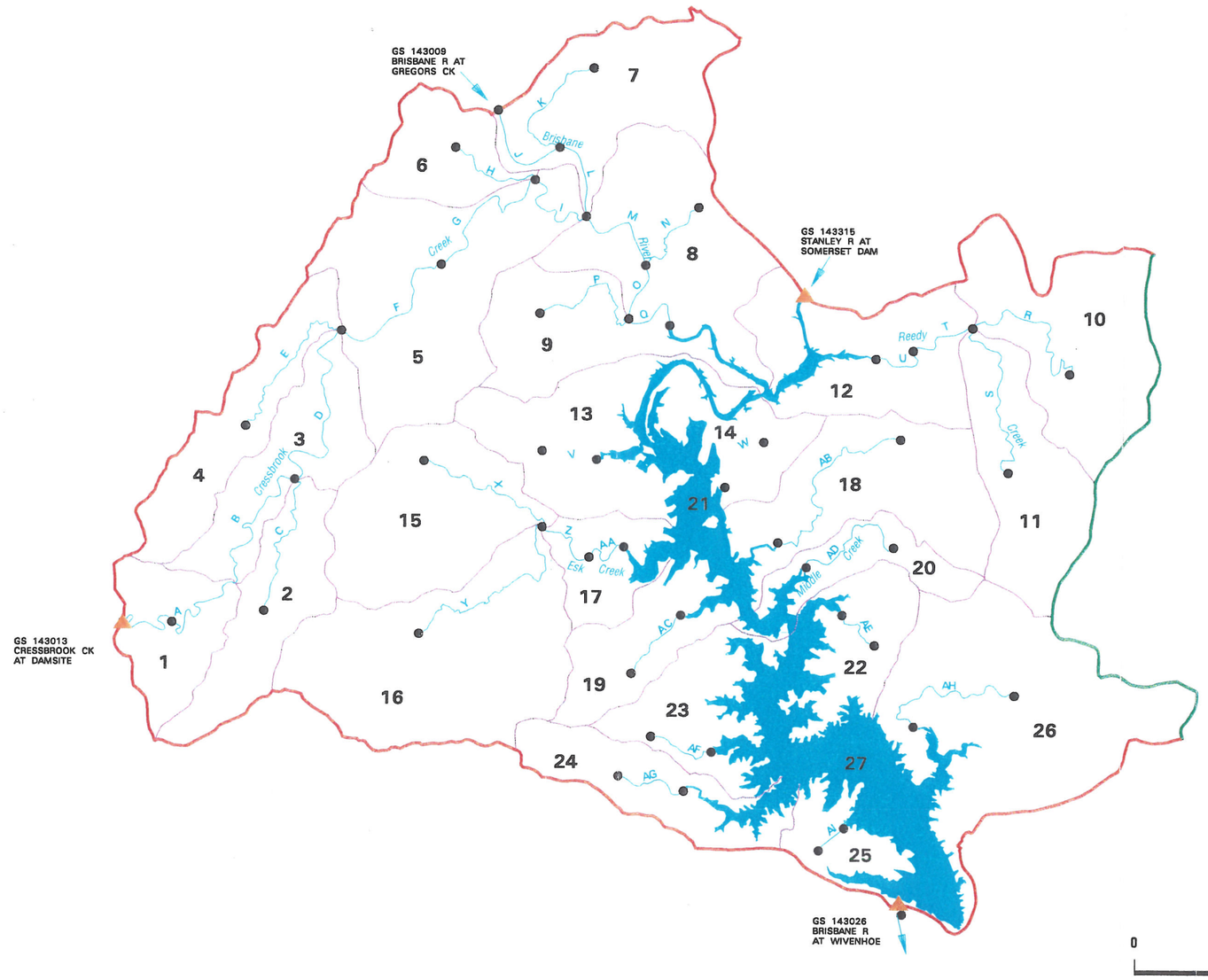
Table C7.2
Reach Details

Reach	Reach Length (km)	Reach	Reach Length (km)
A	4.11	S	10.24
B	15.59	T	6.75
C	8.58	U	3.05
D	11.77	V	4.94
E	9.43	W	3.45
F	7.80	X	8.29
G	8.67	Y	12.21
H	5.30	Z	3.70
I	5.82	AA	1.60
J	5.31	AB	11.84
K	7.17	AC	4.06
L	4.22	AD	7.25
M	5.08	AE	2.76
N	4.99	AF	3.67
O	3.04	AG	4.05
P	7.78	AH	1.69
Q	3.58	AI	9.10
R	10.40		

Catchment Area $A = 1410.5$ km^2
Distance to Centroid of Area $d_c = 44.54$ km

FIGURE C.7





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES
WATER RESOURCES

Brisbane River Flood Study
Brisbane River at Wivenhoe Dam
Design Model - WIV

19 Mar 93

A3-101995

APPENDIX C8

Lockyer Creek @ Helidon

Sub-Catchment Model HEL

C8 Lockyer Creek @ Helidon HEL

Table C8.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	90.4	25.83
2	84.6	26.05
3	59.7	25.85
4	57.7	6.81
5	84.6	14.86

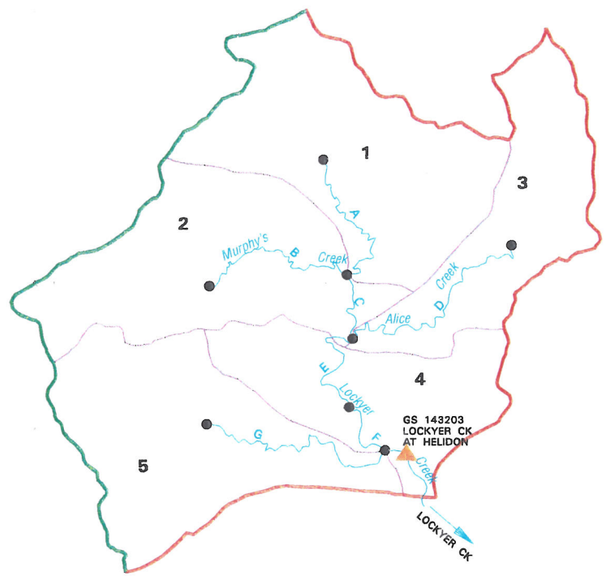
Table C8.2
Reach Details

Reach	Reach Length (km)
A	9.08
B	9.30
C	3.58
D	12.67
E	6.37
F	3.41
G	11.46
H	3.39

Catchment Area A = 377.0 km^2
Distance to Centroid of Area d_c = 20.51 km

FIGURE C.8

N



LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES
WATER RESOURCES

Brisbane River Flood Study
Lockyer Creek at Helidon
Design Model - HEL

19 Mar 93

A3-101996

APPENDIX C9

Tenthill Creek @ Tenthill

Sub-Catchment Model TEN

C9 Tenthill Creek @ Tenthill TEN

Table C9.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	96.7	46.61
2	75.1	54.18
3	75.5	45.21
4	51.3	29.50
5	66.1	32.52
6	38.3	21.99
7	62.3	10.14

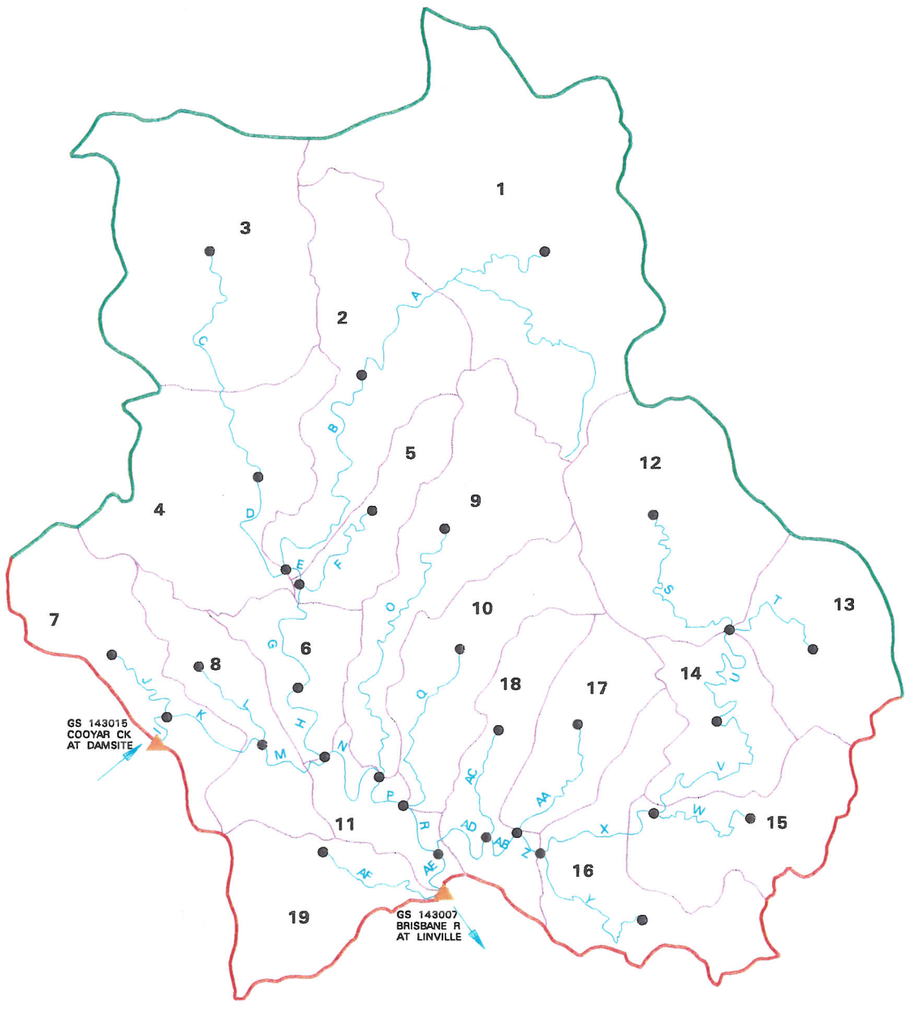
Table C9.2
Reach Details

Reach	Reach Length (km)
A	11.56
B	13.73
C	4.76
D	5.40
E	5.54
F	5.65
G	8.66
H	6.85
I	4.99
J	6.87
K	10.14

Catchment Area $A = 465.3\ km^2$
Distance to Centroid of Area $d_c = 36.81\ km$

FIGURE C.2





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI DEPARTMENT OF PRIMARY INDUSTRIES
QUEENSLAND WATER RESOURCES

Brisbane River Flood Study
Brisbane River at Linville
Design Model - LIN

19 Mar 93

A3-101990

APPENDIX C3

Emu Creek @ Boat Mountain

Sub-Catchment Model EMU

C3 Emu Creek @ Boat Mountain EMU

Table C3.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	96.1	89.40
2	64.9	71.06
3	112.7	90.81
4	90.8	78.28
5	64.1	81.66
6	68.8	57.86
7	61.2	64.35
8	66.2	46.55
9	79.8	32.58
10	68.0	35.98
11	79.1	31.18
12	61.3	10.94

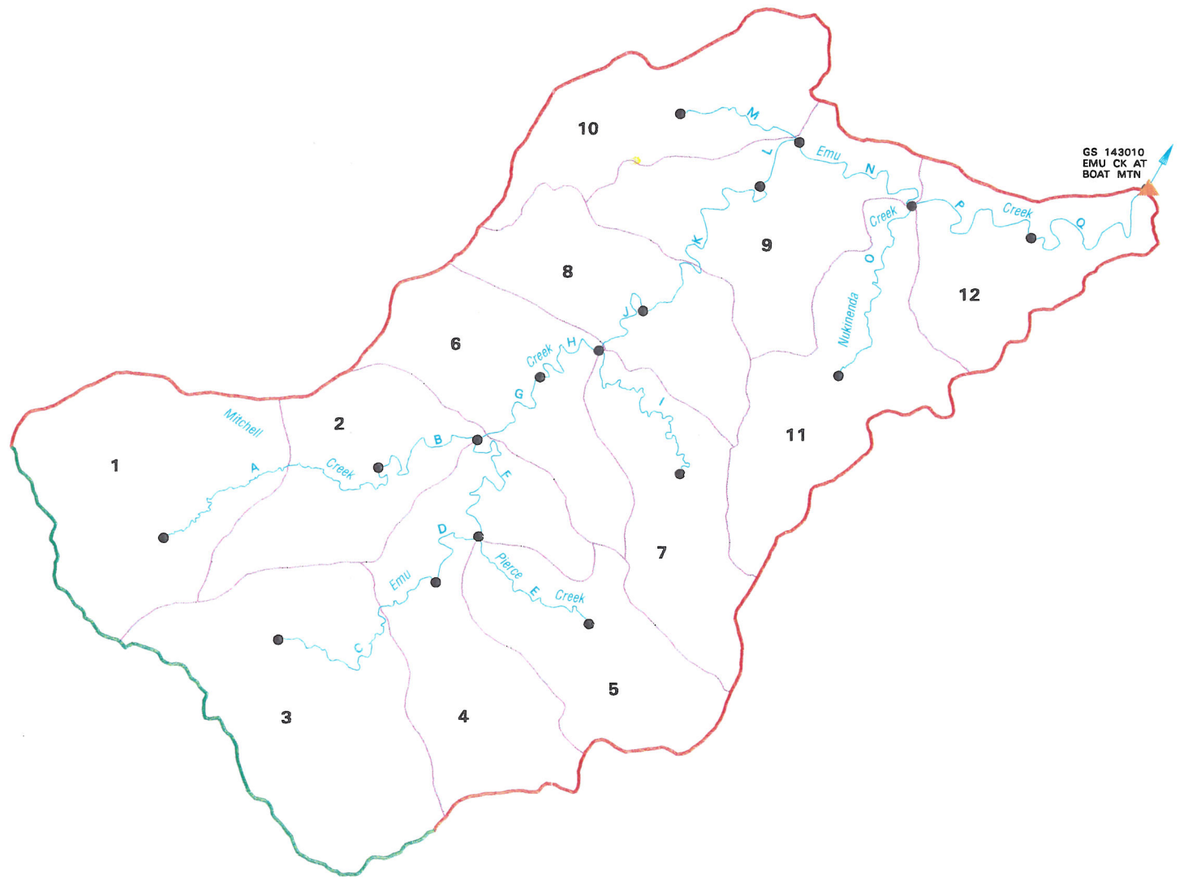
Table C3.2
Reach Details

Reach	Reach Length (km)
A	18.34
B	7.56
C	12.52
D	4.73
E	8.10
F	10.05
G	5.64
H	6.07
I	12.55
J	5.24
K	13.97
L	3.10
M	6.50
N	9.30
O	10.99
P	9.24
Q	10.94

Catchment Area $A = 1061.6\ km^2$
Distance to Centroid of Area $d_c = 33.86\ km$

FIGURE C.3





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI DEPARTMENT OF PRIMARY INDUSTRIES
QUEENSLAND WATER RESOURCES

Brisbane River Flood Study
Emu Creek at Boat Mountain
Design Model - EMU

19 Mar 93

A3-101991

APPENDIX C4

Brisbane River @ Gregors Creek

Sub-Catchment Model GRE

Table C4.1
Sub-Area Details

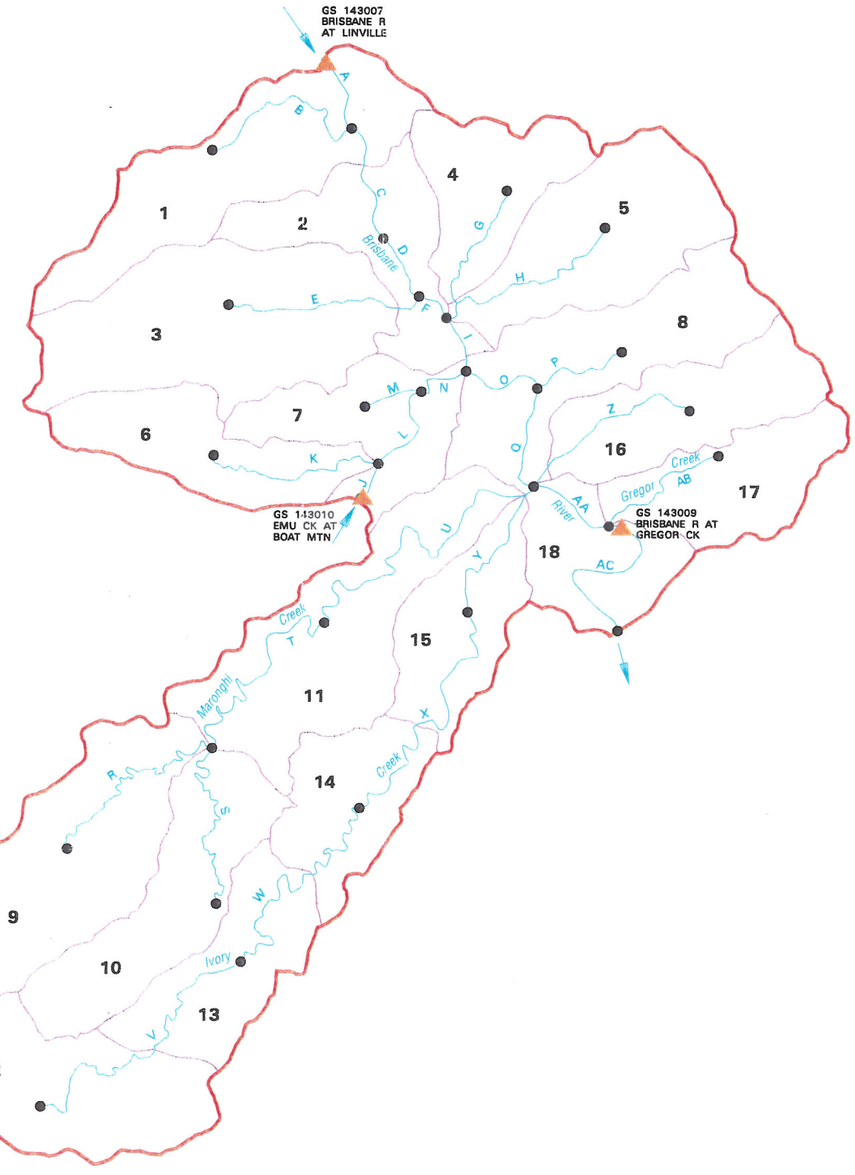
Sub-Area	Area (km^2)	Distance to Outlet (km)
1	71.8	44.54
2	45.8	29.70
3	89.5	35.83
4	38.3	32.18
5	61.2	34.59
6	42.9	38.52
7	40.8	27.63
8	66.3	22.82
9	75.9	56.92
10	57.0	55.55
11	79.3	30.58
12	61.2	66.41
13	44.3	50.86
14	38.5	35.15
15	38.8	20.61
16	46.7	22.14
17	40.3	15.81
18	34.2	9.07

Table C4.2
Reach Details

Reach	Reach Length (km)	Reach	Reach Length (km)
A	3.43	P	4.62
B	9.19	Q	5.03
C	5.65	R	12.64
D	3.24	S	11.27
E	9.36	T	13.71
F	1.68	U	17.40
G	7.40	V	15.56
H	9.81	W	15.70
I	2.63	X	14.54
J	1.97	Y	7.44
K	8.92	Z	8.97
L	4.64	AA	4.11
M	2.68	AB	6.74
N	2.80	AC	9.07
O	3.95		

Catchment Area $A = 972.7\ km^2$
Distance to Centroid of Area $d_c = 36.77\ km$

FIGURE C.4



LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES
WATER RESOURCES

Brisbane River Flood Study
Brisbane River at Gregors Creek
Design Model - GRE

19 Mar 93 A3-101992

APPENDIX C5

Cressbrook Creek @ Cressbrook Creek Dam

Sub-Catchment Model CREDAM

C5 Cressbrook Creek @ Cressbrook Dam CREDAM

Table C5.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	40.0	30.42
2	88.4	19.66
3	44.8	29.53
4	73.0	23.96
5	2.1	18.77
6	64.1	6.99
7	5.2	4.48

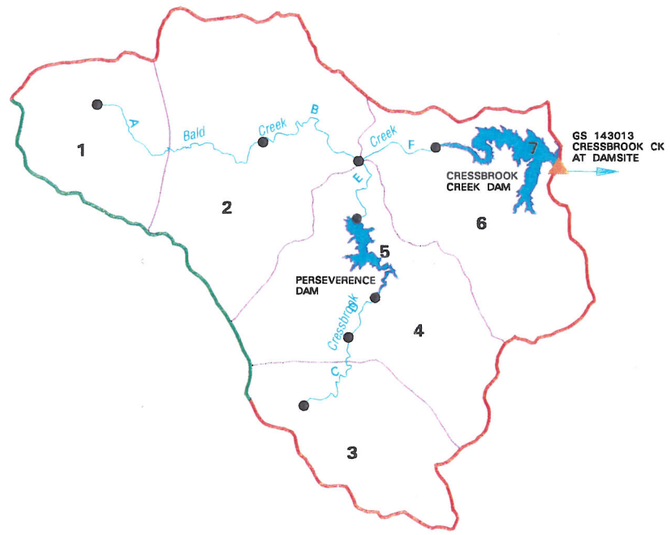
Table C5.2
Reach Details

Reach	Reach Length (km)
A	10.75
B	7.32
C	5.57
D	2.47
E	5.45
F	3.70
G	4.02
H	4.92
I	7.68
J	2.88
K	1.28

Catchment Area $A = 317.7\ km^2$
Distance to Centroid of Area $d_c = 20.59\ km$

FIGURE C.5





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES
WATER RESOURCES

Brisbane River Flood Study
Cressbrook Creek at Cressbrook Dam
Design Model - CRE

19 Mar 93

A3-101993

APPENDIX C6

Stanley River @ Somerset Dam

Sub-Catchment Model SOM

C6 Stanley River @ Somerset Dam SOM

Table C6.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	110.8	76.36
2	96.4	55.77
3	34.3	54.91
4	72.8	51.47
5	46.8	47.61
6	55.7	40.32
7	25.6	39.47
8	119.7	45.04
9	26.5	33.88
10	58.3	26.17
11	52.4	53.20
12	24.6	39.90
13	29.8	25.74
14	55.8	46.83
15	94.9	32.67
16	42.8	53.62
17	56.3	51.49
18	43.7	36.47
19	69.5	30.89
20	38.5	23.17
21	38.6	22.90
22	50.0	12.91
23	46.3	9.87
24	38.3	14.16

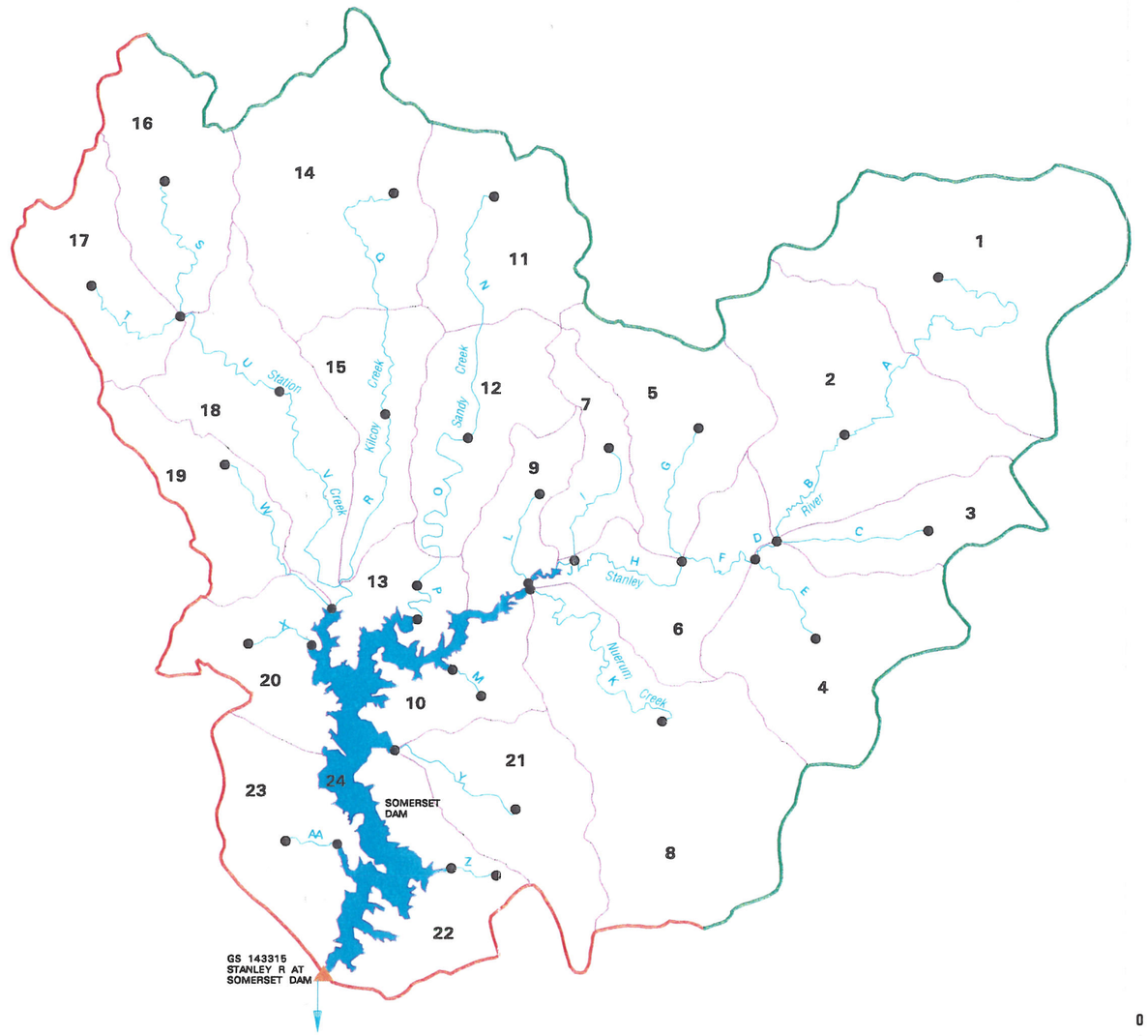
Table C6.2
Reach Details

Reach	Reach length (km)	Reach	Reach Length (km)
A	30.21	O	20.77
B	11.96	P	5.03
C	10.69	Q	20.77
D	2.52	R	13.94
E	8.17	S	13.20
F	8.19	T	10.08
G	10.69	U	11.96
H	11.96	V	19.51
I	10.71	W	13.89
J	5.04	X	5.03
K	23.91	Y	11.33
L	7.54	Z	3.77
M	3.15	AA	3.78
N	19.51		

Catchment Area $A = 1327.4$ km^2
Distance to Centroid of Area $d_c = 31.79$ km

FIGURE C.6





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI DEPARTMENT OF PRIMARY INDUSTRIES
QUEENSLAND WATER RESOURCES

Brisbane River Flood Study
Stanley River at Somerset Dam
Design Model - SOM

19 Mar 93

A3-101994

APPENDIX C7

Brisbane River @ Wivenhoe Dam

Sub-Catchment Model WIV

C7 Brisbane River @ Wivenhoe Dam WIV

Table C7.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	36.3	134.91
2	47.2	127.89
3	45.2	119.31
4	46.2	116.98
5	100.2	99.74
6	30.2	96.37
7	62.6	96.35
8	84.4	85.16
9	38.3	83.69
10	75.7	90.26
11	55.3	90.10
12	62.2	73.12
13	58.7	62.90
14	28.3	50.33
15	71.2	66.48
16	106.8	70.40
17	23.9	54.50
18	70.0	58.21
19	35.5	50.63
20	23.8	48.94
21	36.0	54.70
22	32.1	41.08
23	37.1	35.40
24	39.0	41.50
25	20.3	14.85
26	120.3	29.35
27	73.0	25.73

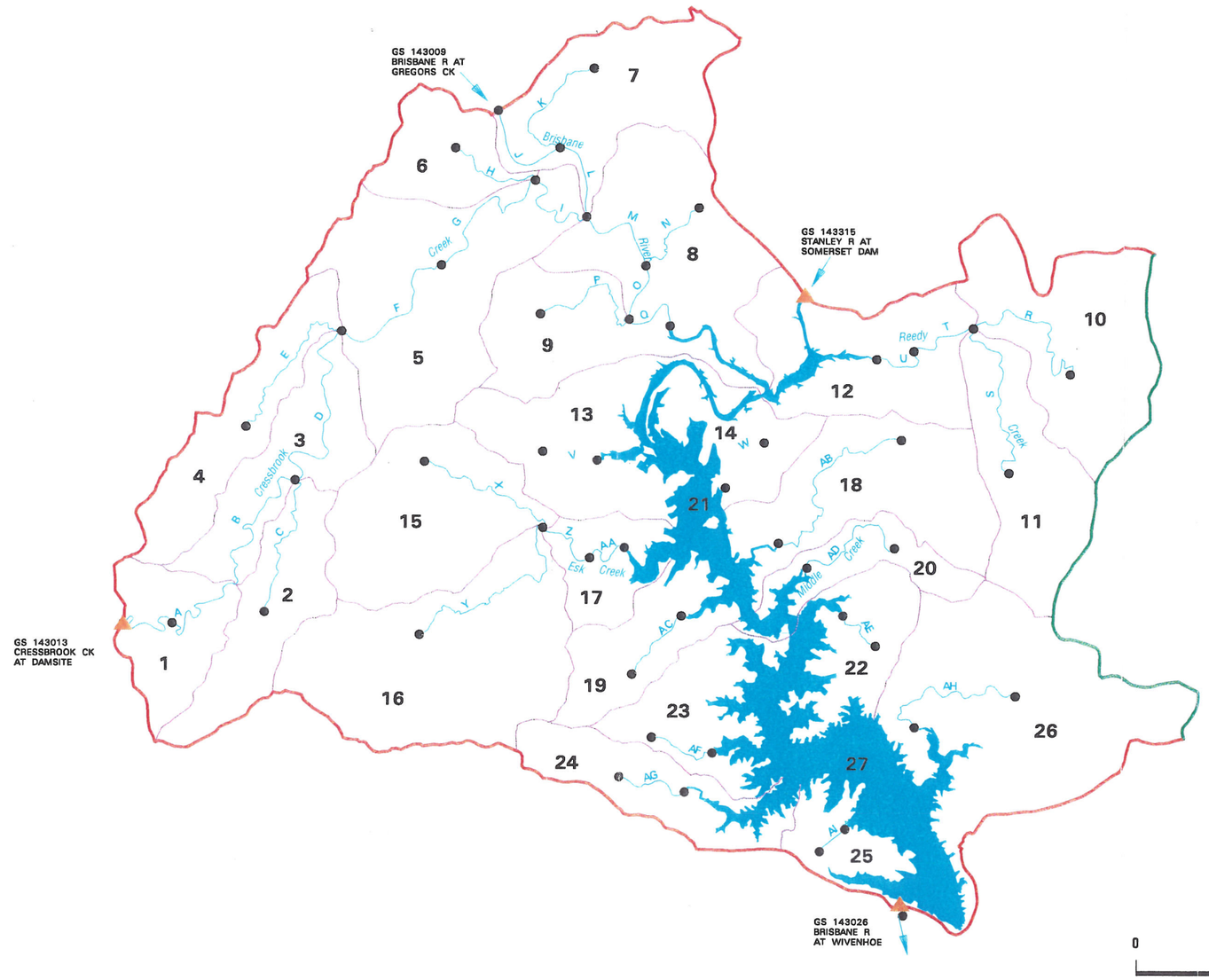
Table C7.2
Reach Details

Reach	Reach Length (km)	Reach	Reach Length (km)
A	4.11	S	10.24
B	15.59	T	6.75
C	8.58	U	3.05
D	11.77	V	4.94
E	9.43	W	3.45
F	7.80	X	8.29
G	8.67	Y	12.21
H	5.30	Z	3.70
I	5.82	AA	1.60
J	5.31	AB	11.84
K	7.17	AC	4.06
L	4.22	AD	7.25
M	5.08	AE	2.76
N	4.99	AF	3.67
O	3.04	AG	4.05
P	7.78	AH	1.69
Q	3.58	AI	9.10
R	10.40		

Catchment Area $A = 1410.5$ km^2
Distance to Centroid of Area $d_c = 44.54$ km

FIGURE C.7





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

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WATER RESOURCES

Brisbane River Flood Study
Brisbane River at Wivenhoe Dam
Design Model - WIV

19 Mar 93

A3-101995

APPENDIX C8

Lockyer Creek @ Helidon

Sub-Catchment Model HEL

C8 Lockyer Creek @ Helidon HEL

Table C8.1
Sub-Area Details

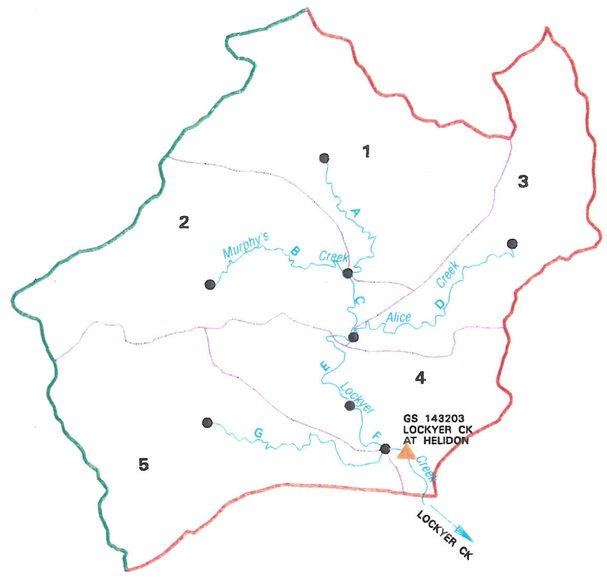
Sub-Area	Area (km^2)	Distance to Outlet (km)
1	90.4	25.83
2	84.6	26.05
3	59.7	25.85
4	57.7	6.81
5	84.6	14.86

Table C8.2
Reach Details

Reach	Reach Length (km)
A	9.08
B	9.30
C	3.58
D	12.67
E	6.37
F	3.41
G	11.46
H	3.39

Catchment Area A = 377.0 km^2
Distance to Centroid of Area d_c = 20.51 km

FIGURE C.8



LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES
WATER RESOURCES

Brisbane River Flood Study
Lockyer Creek at Helidon
Design Model - HEL

19 Mar 93

A3-101996

APPENDIX C9

Tenthill Creek @ Tenthill

Sub-Catchment Model TEN

C9 Tenthill Creek @ Tenthill TEN

Table C9.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	96.7	46.61
2	75.1	54.18
3	75.5	45.21
4	51.3	29.50
5	66.1	32.52
6	38.3	21.99
7	62.3	10.14

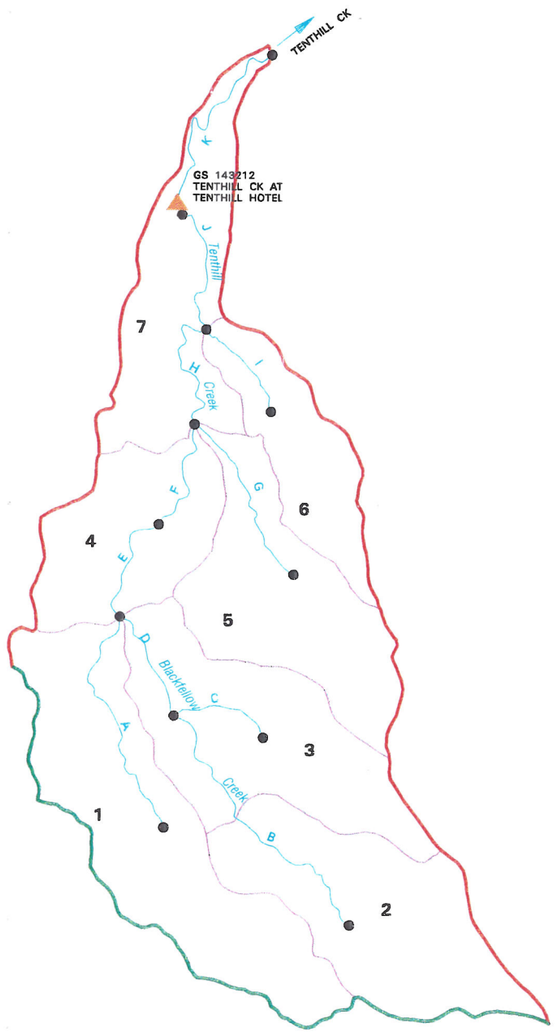
Table C9.2
Reach Details

Reach	Reach Length (km)
A	11.56
B	13.73
C	4.76
D	5.40
E	5.54
F	5.65
G	8.66
H	6.85
I	4.99
J	6.87
K	10.14

Catchment Area $A = 465.3\ km^2$
Distance to Centroid of Area $d_c = 36.81\ km$

FIGURE C.9





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI DEPARTMENT OF PRIMARY INDUSTRIES
QUEENSLAND WATER RESOURCES

Brisbane River Flood Study
Tenthill Creek at Tenthill
Design Model - TEN

19 Mar 93

A3-101997

APPENDIX C10

Lockyer Creek @ Lyons Bridge

Sub-Catchment Model LYO

C10 Lockyer Creek @ Lyons Bridge LYO

Table C10.1
Sub-Area Details

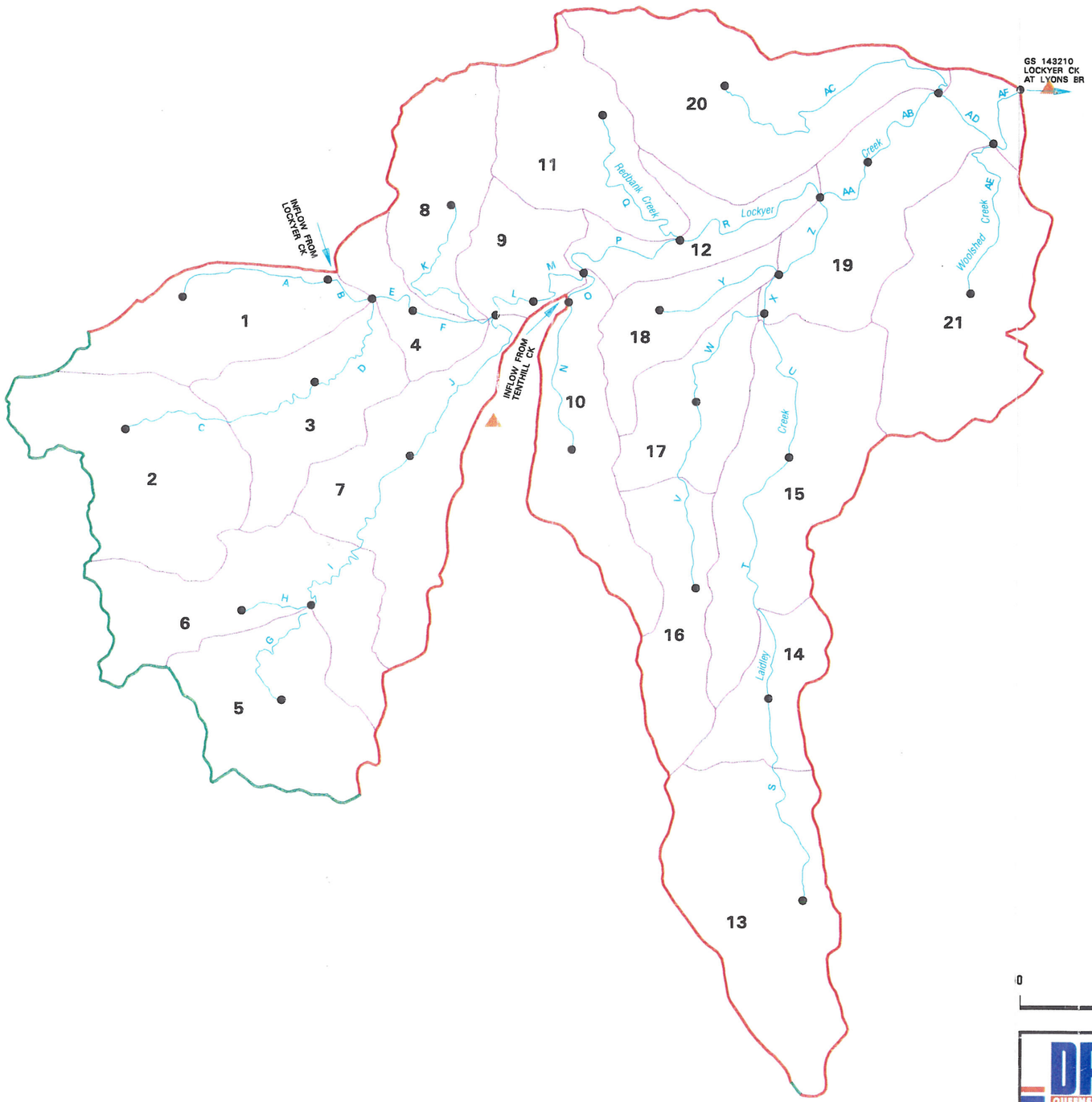
Sub-Area	Area (km^2)	Distance to Outlet (km)
1	69.8	69.30
2	103.1	77.60
3	70.6	64.80
4	29.1	53.70
5	78.8	84.10
6	92.5	80.00
7	93.5	60.70
8	61.1	61.30
9	40.6	45.20
10	69.5	52.10
11	73.3	42.80
12	40.3	31.40
13	123.2	66.10
14	40.7	53.20
15	121.5	37.30
16	56.1	48.70
17	52.3	37.30
18	41.7	34.30
19	98.5	16.60
20	122.3	28.40
21	111.3	15.50

Table C10.2
Reach Details

Reach	Reach Length (km)	Reach	Reach Length (km)
A	9.10	Q	11.40
B	3.10	R	10.70
C	12.80	S	12.90
D	7.90	T	15.90
E	3.20	U	9.20
F	4.70	V	11.40
G	8.50	W	8.10
H	4.40	X	2.60
I	14.90	Y	7.70
J	11.70	Z	7.00
K	12.30	AA	4.10
L	3.80	AB	7.00
M	5.30	AC	18.80
N	9.20	AD	4.40
O	3.00	AE	10.30
P	8.50	AF	5.20

Catchment Area $A = 1592.3$ km^2
Distance to Centroid of Area $d_c = 53.00$ km

FIGURE C.10



LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI DEPARTMENT OF PRIMARY INDUSTRIES
QUEENSLAND WATER RESOURCES

Brisbane River Flood Study
Lockyer Creek at Lyons Bridge
Design Model - LYO

19 Mar 93

A3-101998

APPENDIX C11

Brisbane River @ Savages Crossing

Sub-Catchment Model SAVDAM

Table C11.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	31.6	29.60
2	81.2	74.88
3	83.3	65.82
4	89.3	55.65
5	47.8	52.69
6	32.5	50.89
7	7.1	45.29
8	52.4	38.06
9	80.6	55.10
10	65.1	18.53
11	57.5	10.42
12	95.3	12.53

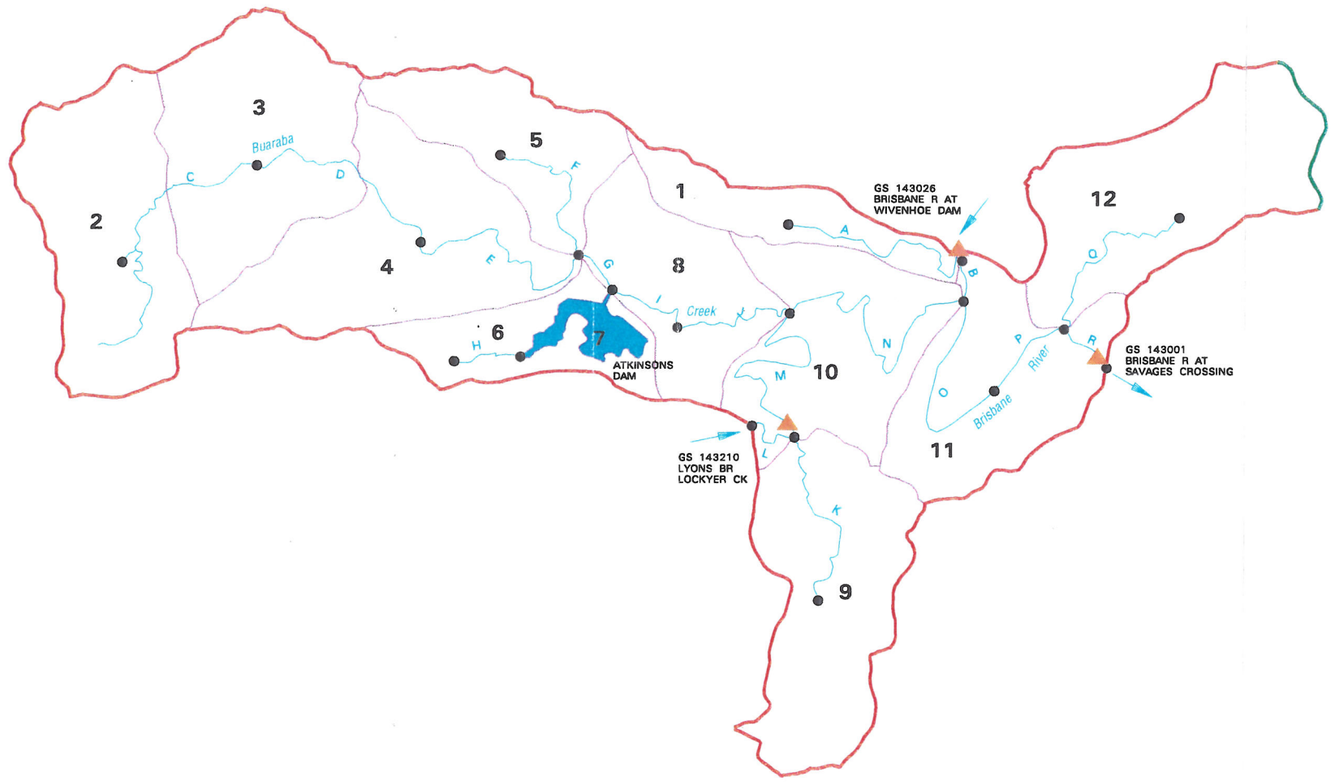
Table C11.2
Reach Details

Reach	Reach Length (km)
A	10.86
B	1.92
C	9.06
D	10.17
E	11.15
F	8.18
G	2.30
H	3.27
I	4.15
J	6.54
K	9.95
L	3.00
M	13.63
N	12.99
O	9.72
P	4.43
Q	9.85
R	2.68

Catchment Area A = 723.6 km^2
Distance to Centroid of Area d_c = 43.20 km

FIGURE C.11





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI DEPARTMENT OF PRIMARY INDUSTRIES
QUEENSLAND WATER RESOURCES

Brisbane River Flood Study
Brisbane River at Savages Crossing
Design Model - SAVDAM

19 Mar 93

A3-101999

APPENDIX C12

Brisbane River @ Mt Crosby Weir

Sub-Catchment Model MTC

C12 Brisbane River @ Mt Crosby Weir MTC

Table C12.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	61.1	42.03
2	98.7	38.61
3	53.0	32.25
4	68.7	32.53
5	2.3	24.56
6	77.4	13.45

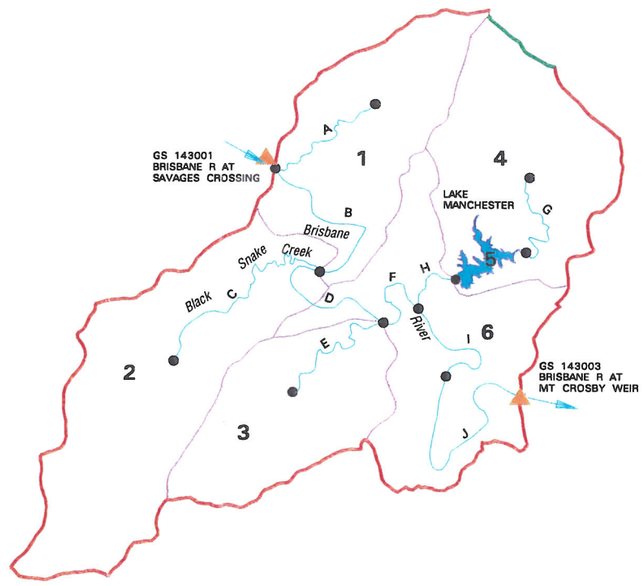
Table C12.2
Reach Details

Reach	Reach Length (km)
A	6.67
B	8.59
C	11.84
D	6.99
E	7.63
F	4.83
G	6.16
H	2.97
I	6.33
J	13.45

Catchment Area $A = 361.1\ km^2$
Distance to Centroid of Area $d_c = 32.33\ km$

FIGURE C.12





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI DEPARTMENT OF PRIMARY INDUSTRIES
QUEENSLAND WATER RESOURCES

Brisbane River Flood Study
Brisbane River at Mt Crosby Weir
Design Model - MTC

19 Mar 93

A3-102480

APPENDIX C13

Bremer River @ Walloon

Sub-Catchment Model WAL

C13 Bremer River @ Walloon WAL

Table C13.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	90.9	51.75
2	116.3	35.00
3	77.8	20.40
4	79.2	41.70
5	56.3	28.90
6	71.5	30.70
7	56.1	17.81
8	77.7	6.41

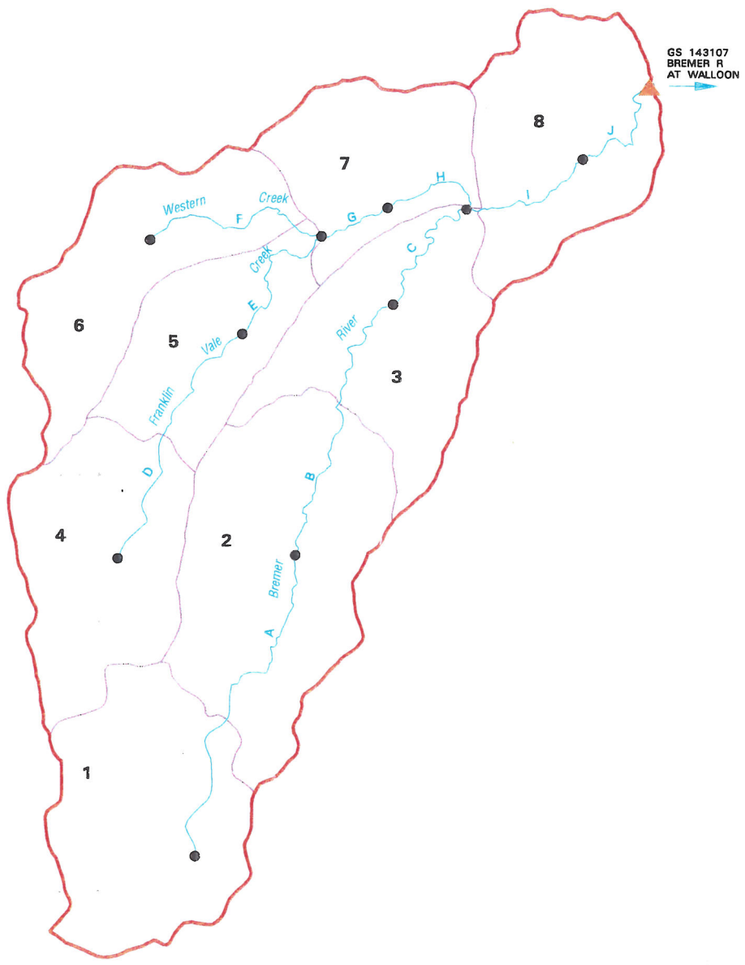
Table C13.2
Reach Details

Reach	Reach Length (km)
A	16.75
B	14.60
C	7.60
D	12.80
E	7.60
F	9.40
G	3.60
H	4.90
I	6.50
J	6.41

Catchment Area $A = 625.7\ km^2$
Distance to Centroid of Area $d_c = 30.56\ km$

FIGURE C.13





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES
WATER RESOURCES

Brisbane River Flood Study
Bremer River at Walloon
Design Model - WAL

22 Mar 93

A3-102481

APPENDIX C14

Warrill Creek @ Kalbar

Sub-Catchment Model KAL

C14 Warrill Creek @ Kalbar KAL

Table C14.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	139.2	28.00
2	80.8	27.50
3	7.5	16.30
4	42.6	7.70
5	91.7	26.50
6	106.9	11.50

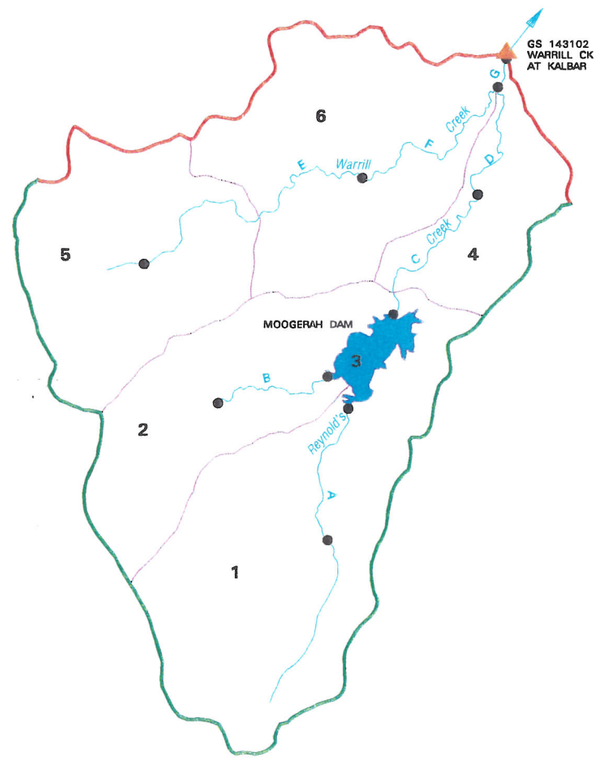
Table C14.2
Reach Details

Reach	Reach Length (km)
A	7.10
B	6.60
C	8.60
D	6.40
E	15.00
F	10.20
G	1.30

Catchment Area $A = 468.6\ km^2$
Distance to Centroid of Area $d_c = 21.28\ km$

FIGURE C.14





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES
WATER RESOURCES

Brisbane River Flood Study
Warrill Creek at Kalbar
Design Model - KAL

22 Mar 93 A3-102482

APPENDIX C15

Warrill Creek @ Amberley

Sub-Catchment Model AMB

C15 Warrill Creek @ Amberley AMB

Table C15.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	76.0	39.20
2	63.1	28.90
3	87.1	34.70
4	85.4	17.60
5	66.3	20.40
6	70.6	7.60

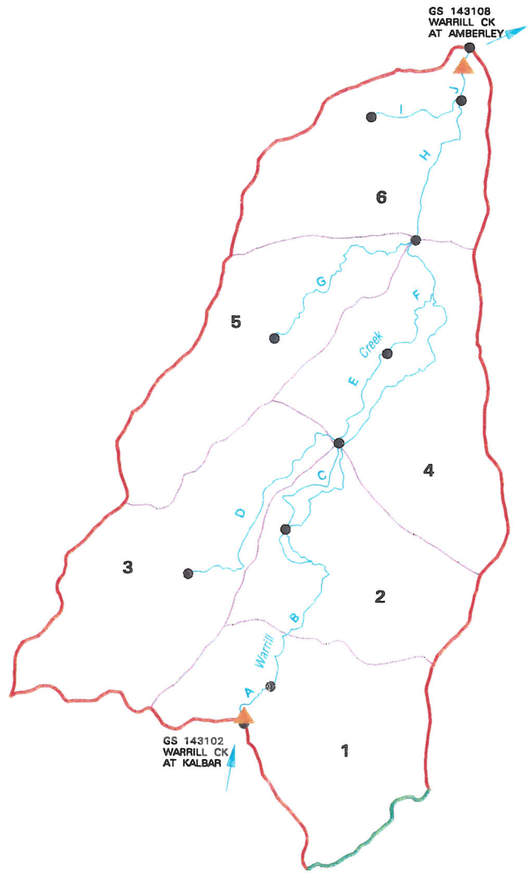
Table C15.2
Reach Details

Reach	Reach Length (km)
A	2.80
B	10.30
C	6.00
D	11.80
E	5.30
F	7.50
G	10.30
H	7.30
I	4.80
J	2.80

Catchment Area A = 447.2 km^2
Distance to Centroid of Area d_c = 24.32 km

FIGURE C.15





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

DPI DEPARTMENT OF PRIMARY INDUSTRIES
QUEENSLAND WATER RESOURCES

Brisbane River Flood Study
Warrill Creek at Amberley
Design Model - AMB

22 Mar 93

A3-102483

APPENDIX C16

Purga Creek @ Loamside

Sub-Catchment Model PUR

C16 Purqa Creek @ Loamside PUR

Table C16.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	38.2	39.60
2	51.8	31.50
3	53.2	23.60
4	32.9	16.00
5	46.6	6.90

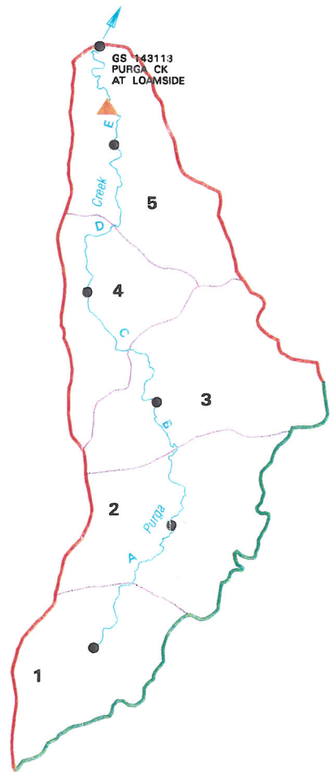
Table C16.2
Reach Details

Reach	Reach Length (km)
A	8.10
B	7.90
C	7.60
D	9.10
E	6.90

Catchment Area A = 222.7 km^2
Distance to Centroid of Area d_c = 23.89 km

FIGURE C.16





LEGEND

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- SUB-AREA BOUNDARY
- NODE POINT
- GAUGING STATION
- 5 SUB-AREA NUMBERS
- A REACH LABELS

KILOMETRES

0 27.5

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WATER RESOURCES

Brisbane River Flood Study
Purga Creek at Loamside
Design Model - PUR

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APPENDIX C17

Bremer River @ Ipswich (David Trumpy Bridge)

Sub-Catchment Model IPS

Table C17.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	26.4	30.40
2	89.7	24.20
3	72.7	31.80
4	39.8	18.70

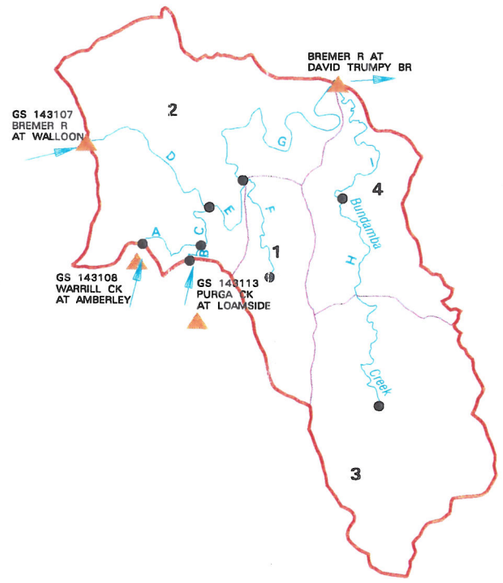
Table C17.2
Reach Details

Reach	Reach Length (km)
A	2.80
B	0.70
C	2.10
D	13.10
E	4.10
F	6.20
G	15.90
H	13.10
I	10.40

Catchment Area $A = 238.5\ km^2$
Distance to Centroid of Area $d_c = 18.29\ km$

FIGURE C.17





LEGEND

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QUEENSLAND WATER RESOURCES

Brisbane River Flood Study
Bremer River at Ipswich
Design Model - IPS

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APPENDIX C18

Brisbane River @ Jindalee (Centenary Bridge)

Sub-Catchment Model JIN

Table C18.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	56.9	36.47
2	28.2	30.04
3	57.5	22.12
4	64.7	27.26
5	59.5	17.18
6	43.7	10.18
7	67.7	14.86

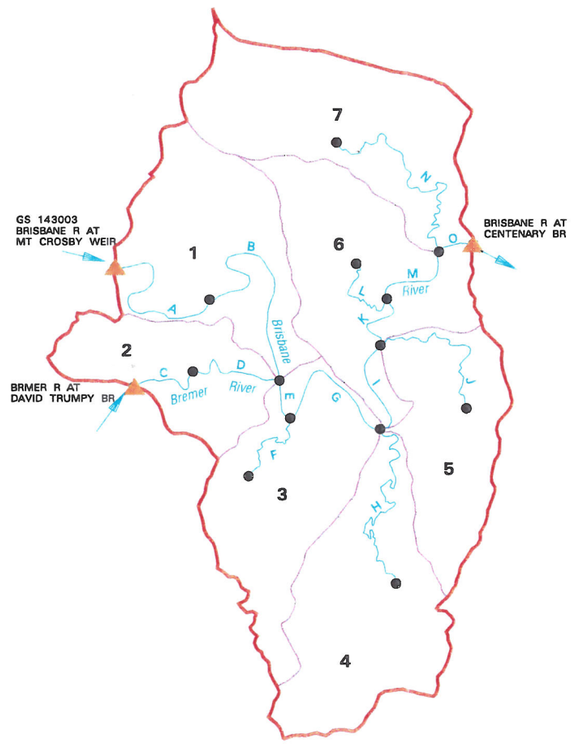
Table C18.2
Reach Details

Reach	Reach Length (km)
A	6.67
B	11.25
C	3.57
D	4.82
E	2.10
F	1.91
G	6.59
H	13.64
I	4.71
J	8.27
K	3.30
L	4.56
M	4.00
N	13.24
O	1.62

Catchment Area A = 378.2 km^2
Distance to Centroid of Area d_c = 22.00 km

FIGURE C.18





LEGEND

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KILOMETRES

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DPI QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES
WATER RESOURCES

Brisbane River Flood Study
Brisbane River at Jindalee
Design Model - JIN

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APPENDIX C19

Brisbane River @ Port Office Gauge

Sub-Catchment Model POG

C19 Brisbane River @ Port Office Gauge POG

Table C19.1
Sub-Area Details

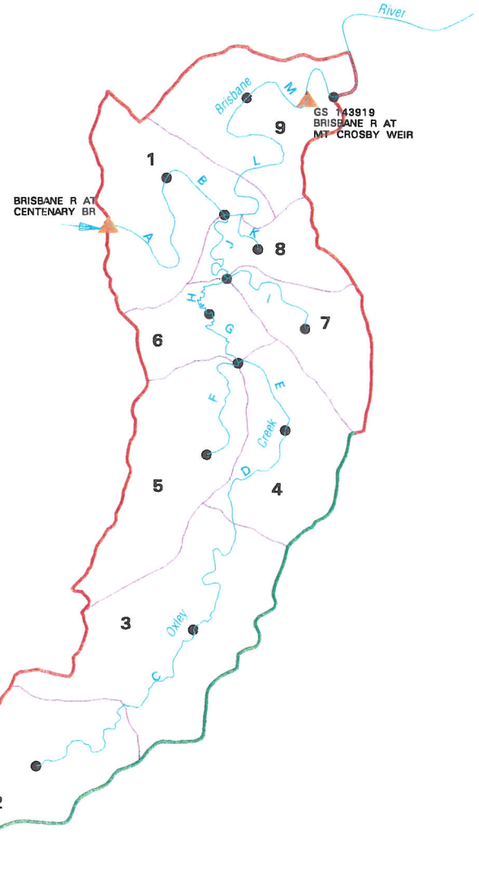
Sub-Area	Area (km^2)	Distance to Outlet (km)
1	41.8	18.38
2	62.0	59.48
3	61.0	46.92
4	34.7	33.28
5	42.5	35.20
6	17.9	25.01
7	22.9	27.00
8	16.5	19.47
9	33.7	4.29

Table C19.2
Reach Details

Reach	Reach Length (km)
A	8.17
B	3.59
C	12.56
D	13.64
E	4.34
F	6.26
G	3.93
H	4.02
I	6.00
J	4.46
K	2.94
L	10.50
M	4.29

Catchment Area A = 333.1 km^2
Distance to Centroid of Area d_c = 34.53 km

FIGURE C.19



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QUEENSLAND WATER RESOURCES

Brisbane River Flood Study
Brisbane River at Port Office
Design Model - POG

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APPENDIX C20

Stanley River @ Somerset Damsite

Sub-Catchment Model SOMNAT

C21 Stanley River @ Somerset Damsite SOMNAT

Table C20.1
Sub-Area Details

Sub-Area	Area (km^2)	Distance to Outlet (km)
1	110.8	76.36
2	96.4	55.77
3	34.3	54.91
4	72.8	51.47
5	46.8	47.61
6	55.7	40.32
7	25.6	39.47
8	119.7	45.04
9	26.5	33.88
10	58.3	26.17
11	52.4	53.20
12	24.6	39.90
13	29.8	25.74
14	55.8	46.83
15	94.9	32.67
16	42.8	53.62
17	56.3	51.49
18	43.7	36.47
19	69.5	30.89
20	38.5	23.17
21	38.6	22.90
22	50.0	12.91
23	46.3	9.87
24	38.3	14.16

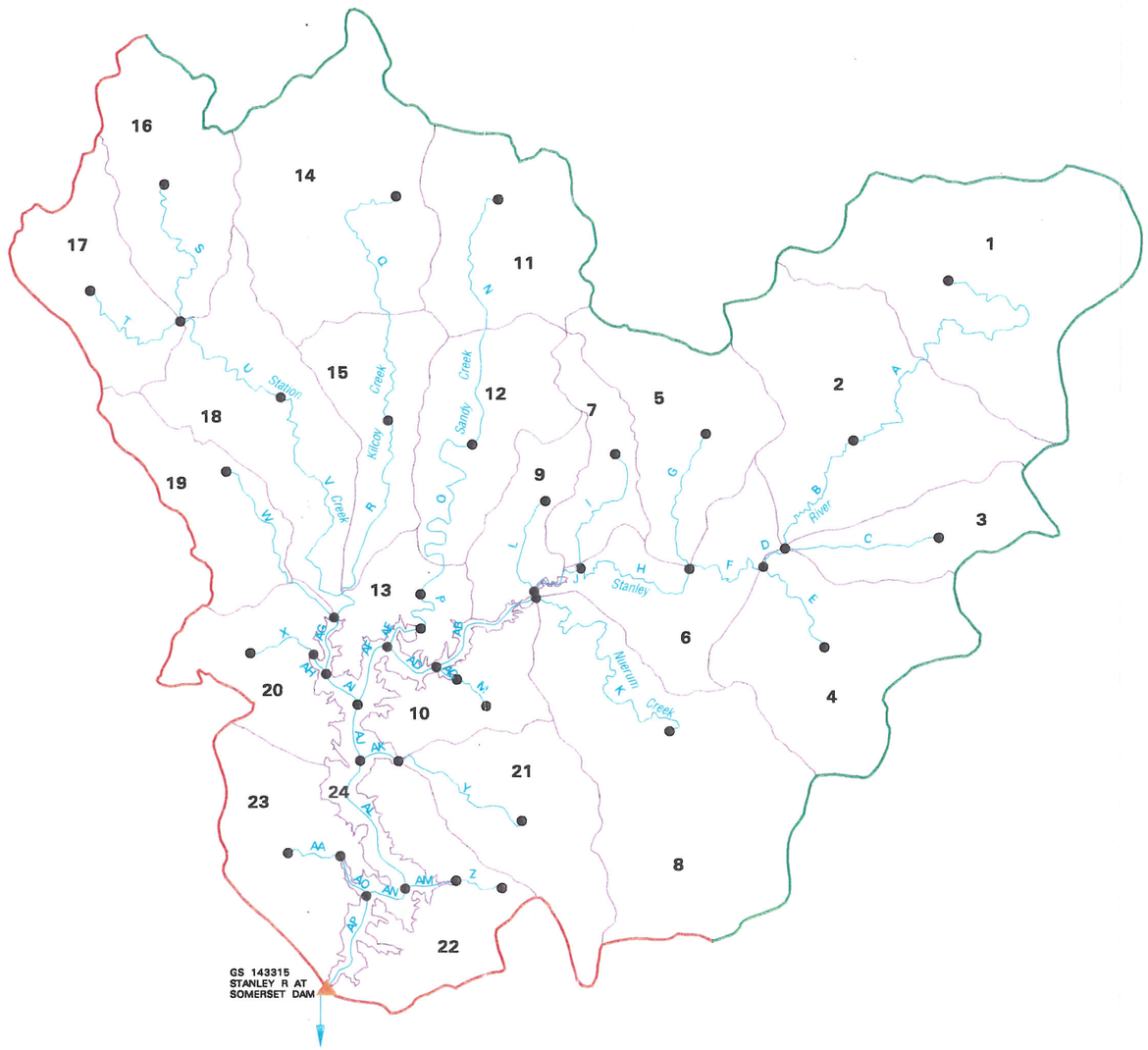
Table C20.2
Reach Details

Reach	Reach length (km)	Reach	Reach Length (km)
A	30.21	V	19.51
B	11.96	W	13.89
C	10.69	X	5.03
D	2.52	Y	11.33
E	8.17	Z	3.77
F	8.19	AA	3.78
G	10.69	AB	6.28
H	11.96	AC	1.16
I	10.71	AD	2.69
J	5.04	AE	2.21
K	23.91	AF	3.37
L	7.54	AG	2.84
M	3.15	AH	1.01
N	19.51	AI	2.24
O	20.77	AJ	2.62
P	5.03	AK	1.93
Q	20.77	AL	7.12
R	13.94	AM	2.37
S	13.20	AN	2.31
T	10.08	AO	2.37
U	11.96	AP	4.84

Catchment Area $A = 1327.4$ km^2
Distance to Centroid of Area $d_c = 31.79$ km

FIGURE C.20





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KILOMETRES

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QUEENSLAND WATER RESOURCES

Brisbane River Flood Study
Stanley River at Somerset Damsite
Design Model - SOMNAT

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APPENDIX C21

Brisbane River @ Wivenhoe Damsite

Sub-Catchment Model WIVNAT

C21 Brisbane River @ Wivenhoe Damsite WIVNAT

Table C21.1
Sub-Area Details

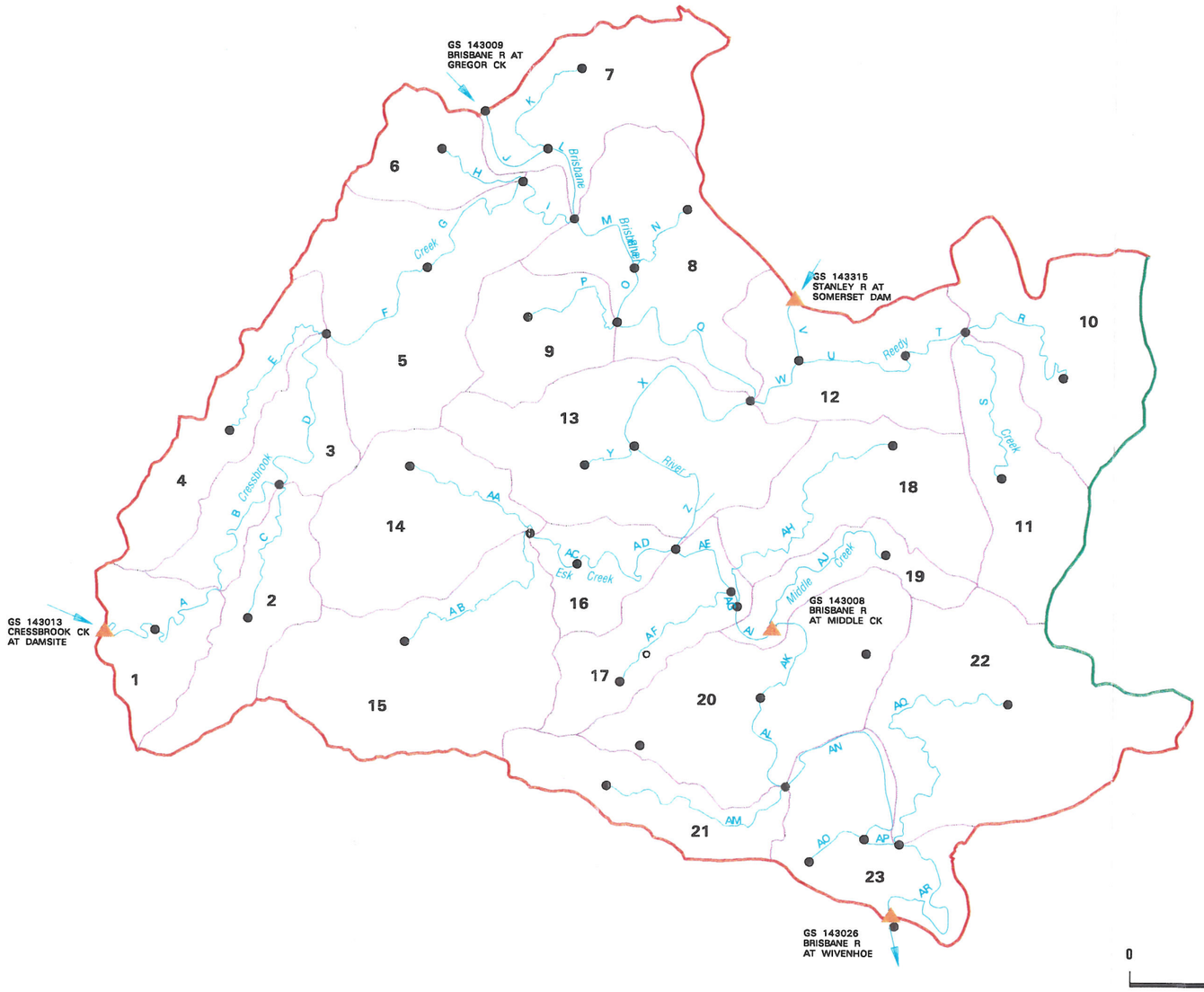
Sub-Area	Area (km^2)	Distance to Outlet (km)
1	36.3	127.70
2	47.2	120.69
3	45.2	112.11
4	46.2	109.77
5	100.2	92.54
6	30.2	89.17
7	62.6	89.44
8	84.4	72.97
9	38.3	72.72
10	75.7	78.07
11	55.3	77.91
12	64.5	60.92
13	110.1	45.77
14	71.2	54.29
15	106.8	58.21
16	28.2	42.30
17	46.1	38.43
18	71.4	40.74
19	29.1	36.74
20	97.1	21.63
21	39.0	25.53
22	61.3	20.01
23	119.3	10.12

Table C21.2
Reach Details

Reach	Reach Length (km)	Reach	Reach Length (km)
A	4.11	W	3.93
B	15.59	X	10.99
C	8.58	Y	3.26
D	11.77	Z	7.82
E	9.43	AA	8.29
F	7.80	AB	12.21
G	8.67	AC	3.70
H	5.30	AD	7.61
I	5.82	AE	4.52
J	5.31	AF	8.26
K	7.17	AG	0.73
L	4.22	AH	11.30
M	5.08	AI	1.69
N	4.99	AJ	9.10
O	3.04	AK	4.49
P	7.78	AL	4.09
Q	11.44	AM	7.99
R	10.40	AN	8.57
S	10.24	AO	1.15
T	6.75	AP	1.26
U	3.49	AQ	12.30
V	4.45	AR	7.71

Catchment Area $A = 1410.5$ km^2
Distance to Centroid of Area $d_c = 44.54$ km

FIGURE C.21



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KILOMETRES

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QUEENSLAND WATER RESOURCES

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Brisbane River at Wivenhoe Dam
Design Model - WIVNAT

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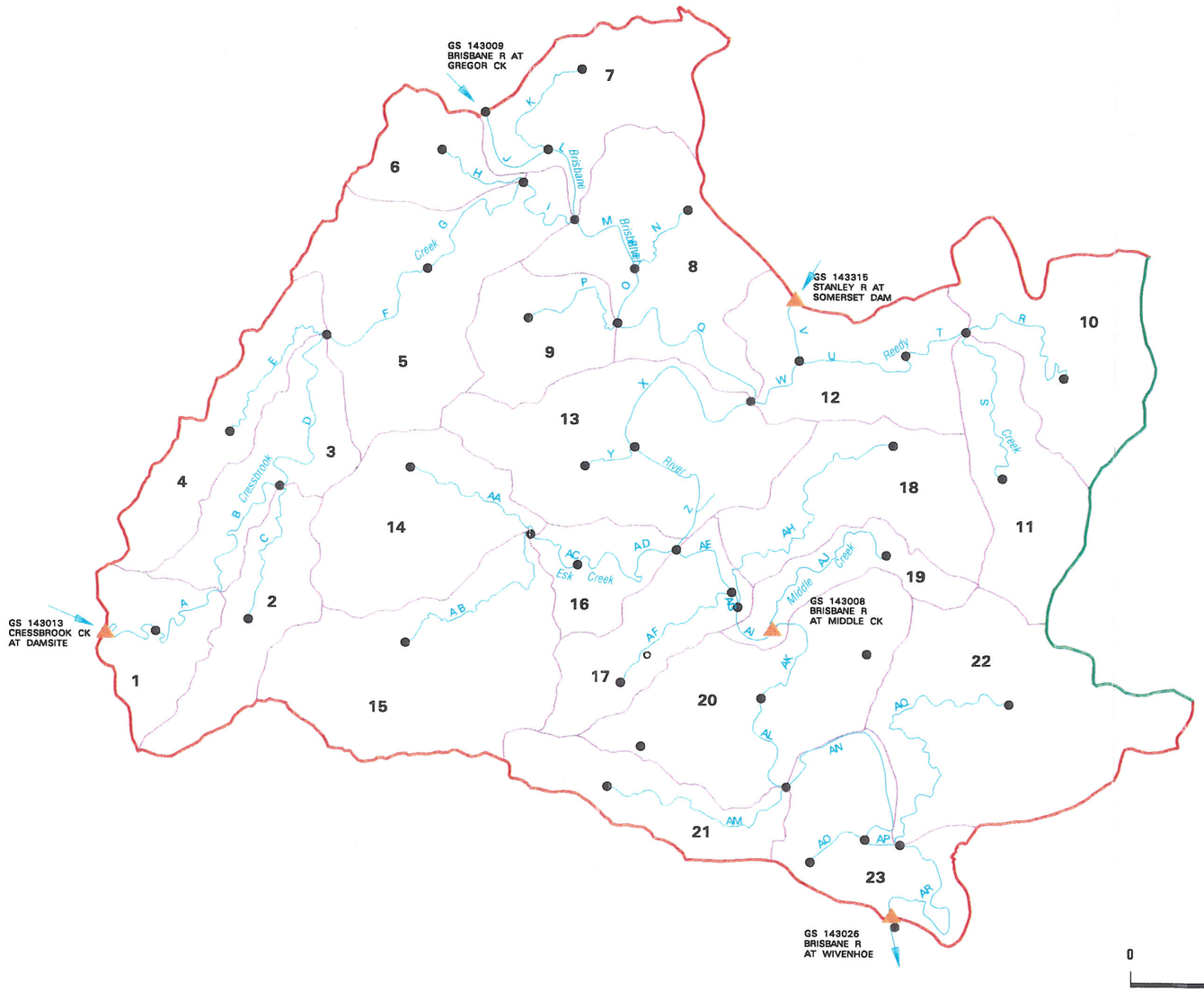
FIGURE C.21



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