

B.1.3 FSR Index Flood Estimate

Job Title	Midleton FRS
Job Number	252803
Calculation	Flood Studies Report

1.0 Subcatchment:	19_990_4
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2.0 Physical Catchment Descriptors:			
AREA	=	2.55	
MSL	=	1.55	
J50K	=	1.00	
J1inch	=	1.05	
Fs	=	0.99	
H10	=		
H85	=		
S1085	=	0.58	
LAKE	=	0.00	
Urban Area	=		
URBAN	=	0.00	
SAAR	=	1014	
SOIL	=	0.30	

3.0 Mean Annual Flood (Rural)			
<i>Qbar (rural, PCD)</i>		$0.00042 \times \text{AREA}^{0.95} \text{Fs}^{0.22} \text{SOIL}^{1.18} \text{SAAR}^{1.05} (1+\text{LAKE})^{-0.93} \text{S1085}^{0.16}$	
<i>Qbar (rural, PCD)</i>	=	0.32	m ³ /s

4.0 Adjustment for Urbanisation			
CWI	=	125.00	Catchment Wetness Index
PR	=	$(102.4 \times \text{SOIL}) + 0.28 \times (\text{CWI}-125)$	
PR	=	30.72	
<i>Qu bar/QR bar</i>	=	$(1 + \text{URBAN})^{1.5} (1 + 0.3 \times \text{URBAN} \times (70/\text{PR}-1))$	
<i>Qu bar/QR bar</i>	=	1.00	
<i>Qbar_urban</i>	=	0.32	m ³ /s

5.0 Standard Factorial Error			
Standard Factorial Error	=	1.5	
<i>Qbar (68% Confidence)</i>	=	0.48	m ³ /s

Job Title	Midleton FRS
Job Number	252803
Calculation	Flood Studies Report

1.0 Subcatchment:	19 1902 4
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2.0 Physical Catchment Descriptors:			
AREA	=	37.57	
MSL	=	16.64	
J50K	=	13.00	
J1inch	=	13.34	
Fs	=	0.82	
H10	=		
H85	=		
S1085	=	11.60	
LAKE	=	0.00	
Urban Area	=		
URBAN	=	0.00	
SAAR	=	1161	
SOIL	=	0.30	

3.0 Mean Annual Flood (Rural)			
<i>Qbar (rural, PCD)</i>		$0.00042 \times \text{AREA}^{0.95} \text{Fs}^{0.22} \text{SOIL}^{1.18} \text{SAAR}^{1.05} (1+\text{LAKE})^{-0.93} \text{S1085}^{0.16}$	
<i>Qbar (rural, PCD)</i>	=	7.45	m ³ /s

4.0 Adjustment for Urbanisation			
CWI	=	125.00	Catchment Wetness Index
PR	=	$(102.4 \times \text{SOIL}) + 0.28 \times (\text{CWI}-125)$	
PR	=	30.72	
<i>Qu bar/Qr bar</i>	=	$(1 + \text{URBAN})^{1.5} (1 + 0.3 \times \text{URBAN} \times (70/\text{PR}-1))$	
<i>Qu bar/Qr bar</i>	=	1.00	
<i>Qbar_urban</i>	=	7.45	m ³ /s

5.0 Standard Factorial Error			
Standard Factorial Error	=	1.5	
<i>Qbar (68% Confidence)</i>	=	11.18	m ³ /s

Job Title	Midleton FRS
Job Number	252803
Calculation	Flood Studies Report

1.0 Subcatchment: 19_1957_2

2.0 Physical Catchment Descriptors:

AREA	=	49.52
MSL	=	17.14
J50K	=	13.00
J1inch	=	13.34
Fs	=	0.58
H10	=	
H85	=	
S1085	=	11.19
LAKE	=	0.00
Urban Area	=	
URBAN	=	0.00
SAAR	=	1137
SOIL	=	0.30

3.0 Mean Annual Flood (Rural)

$$Q_{bar} (rural, PCD) = 0.00042 \times AREA^{0.95} \times Fs^{0.22} \times SOIL^{1.18} \times SAAR^{1.05} \times (1+LAKE)^{-0.93} \times S1085^{0.16}$$

$Q_{bar} (rural, PCD)$	=	8.73 m ³ /s
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4.0 Adjustment for Urbanisation

CWI	=	125.00	Catchment Wetness Index
PR	=	$(102.4 \times SOIL) + 0.28 \times (CWI-125)$	
PR	=	30.72	
$Q_{u\ bar}/Q_{r\ bar}$	=	$(1 + URBAN)^{1.5} (1 + 0.3 \times URBAN \times (70/PR-1))$	
$Q_{u\ bar}/Q_{r\ bar}$	=	1.00	
Q_{bar_urban}	=	8.74	m ³ /s

5.0 Standard Factorial Error

Standard Factorial Error	=	1.5
Q_{bar} (68% Confidence)	=	13.11 m ³ /s

Job Title	Midleton FRS
Job Number	252803
Calculation	Flood Studies Report

1.0 Subcatchment: 19 1957 5

2.0 Physical Catchment Descriptors:

AREA	=	52.43
MSL	=	18.64
J50K	=	14.00
J1inch	=	14.36
Fs	=	0.59
H10	=	
H85	=	
S1085	=	9.94
LAKE	=	0.00
Urban Area	=	
URBAN	=	0.02
SAAR	=	1132
SOIL	=	0.30

3.0 Mean Annual Flood (Rural)

$Q_{bar} (rural, PCD) = 0.00042 \times AREA^{0.95} Fs^{0.22} SOIL^{1.18} SAAR^{1.05} (1+LAKE)^{-0.93} S1085^{0.16}$

$Q_{bar} (rural, PCD) = 9.04 \text{ m}^3/s$

4.0 Adjustment for Urbanisation

CWI = 125.00 Catchment Wetness Index

$PR = (102.4 \times SOIL) + 0.28 \times (CWI-125)$

PR = 30.72

$Q_{u\ bar}/Q_{r\ bar} = (1 + URBAN)^{1.5} (1 + 0.3 \times URBAN \times (70/PR-1))$

$Q_{u\ bar}/Q_{r\ bar} = 1.03$

$Q_{bar_urban} = 9.32 \text{ m}^3/s$

5.0 Standard Factorial Error

Standard Factorial Error = 1.5

$Q_{bar} (68\% \text{ Confidence}) = 13.98 \text{ m}^3/s$

Job Title	Midleton FRS
Job Number	252803
Calculation	Flood Studies Report

1.0 Subcatchment: 19_1462_5

2.0 Physical Catchment Descriptors:

AREA	=	8.25
MSL	=	3.29
J50K	=	1.00
J1inch	=	1.05
Fs	=	0.19
H10	=	
H85	=	
S1085	=	26.22
LAKE	=	0.00
Urban Area	=	
URBAN	=	0.00
SAAR	=	1103
SOIL	=	0.30

3.0 Mean Annual Flood (Rural)

$Q_{bar} (rural, PCD) = 0.00042 \times AREA^{0.95} \times Fs^{0.22} \times SOIL^{1.18} \times SAAR^{1.05} \times (1+LAKE)^{-0.93} \times S1085^{0.16}$

$Q_{bar} (rural, PCD) = 1.37 \text{ m}^3/\text{s}$

4.0 Adjustment for Urbanisation

CWI = 125.00 Catchment Wetness Index

$PR = (102.4 \times SOIL) + 0.28 \times (CWI - 125)$

PR = 30.72

$Q_{urban}/Q_{rural} = (1 + URBAN)^{1.5} (1 + 0.3 \times URBAN \times (70/PR - 1))$

$Q_{urban}/Q_{rural} = 1.00$

$Q_{bar_urban} = 1.37 \text{ m}^3/\text{s}$

5.0 Standard Factorial Error

Standard Factorial Error = 1.5

$Q_{bar} (68\% \text{ Confidence}) = 2.06 \text{ m}^3/\text{s}$

Job Title	Midleton FRS
Job Number	252803
Calculation	Flood Studies Report

1.0 Subcatchment:	19_965_4
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2.0 Physical Catchment Descriptors:			
AREA	=	12.72	
MSL	=	6.29	
J50K	=	5.00	
J1inch	=	5.18	
Fs	=	0.97	
H10	=		
H85	=		
S1085	=	17.37	
LAKE	=	0.00	
Urban Area	=		
URBAN	=	0.00	
SAAR	=	1171	
SOIL	=	0.30	

3.0 Mean Annual Flood (Rural)			
<i>Qbar (rural, PCD)</i>		$0.00042 \times \text{AREA}^{0.95} \text{Fs}^{0.22} \text{SOIL}^{1.18} \text{SAAR}^{1.05} (1+\text{LAKE})^{-0.93} \text{S1085}^{0.16}$	
<i>Qbar (rural, PCD)</i>	=	2.97	m ³ /s

4.0 Adjustment for Urbanisation			
CWI	=	125.00	Catchment Wetness Index
PR	=	$(102.4 \times \text{SOIL}) + 0.28 \times (\text{CWI}-125)$	
PR	=	30.72	
<i>Qu bar/QR bar</i>	=	$(1 + \text{URBAN})^{1.5} (1 + 0.3 \times \text{URBAN} \times (70/\text{PR}-1))$	
<i>Qu bar/QR bar</i>	=	1.00	
<i>Qbar_urban</i>	=	2.97	m ³ /s

5.0 Standard Factorial Error			
Standard Factorial Error	=	1.5	
<i>Qbar (68% Confidence)</i>	=	4.46	m ³ /s

Job Title	Midleton FRS
Job Number	252803
Calculation	Flood Studies Report

1.0 Subcatchment:	19_1721_7
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2.0 Physical Catchment Descriptors:			
AREA	=	10.33	
MSL	=	4.56	
J50K	=	1.00	
J1inch	=	1.05	
Fs	=	0.11	
H10	=		
H85	=		
S1085	=	1.90	
LAKE	=	0.00	
Urban Area	=		
URBAN	=	0.00	
SAAR	=	1059	
SOIL	=	0.30	

3.0 Mean Annual Flood (Rural)			
<i>Qbar (rural, PCD)</i>		$0.00042 \times \text{AREA}^{0.95} \text{Fs}^{0.22} \text{SOIL}^{1.18} \text{SAAR}^{1.05} (1+\text{LAKE})^{-0.93} \text{S1085}^{0.16}$	
<i>Qbar (rural, PCD)</i>	=	0.96	m ³ /s

4.0 Adjustment for Urbanisation			
CWI	=	125.00	Catchment Wetness Index
PR	=	$(102.4 \times \text{SOIL}) + 0.28 \times (\text{CWI}-125)$	
PR	=	30.72	
<i>Qu bar/Qr bar</i>	=	$(1 + \text{URBAN})^{1.5} (1 + 0.3 \times \text{URBAN} \times (70/\text{PR}-1))$	
<i>Qu bar/Qr bar</i>	=	1.00	
<i>Qbar_urban</i>	=	0.96	m ³ /s

5.0 Standard Factorial Error			
Standard Factorial Error	=	1.5	
<i>Qbar (68% Confidence)</i>	=	1.44	m ³ /s

Job Title	Midleton FRS
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Calculation	Flood Studies Report

1.0 Subcatchment: Sink - Manual catchment derivation

2.0 Physical Catchment Descriptors:

AREA	=	4.21	
MSL	=	0.73	
J50K	=	1.00	
J1inch	=	1.05	
Fs	=	0.53	
H10	=		
H85	=		
S1085 (m/km)	=	1.77	
LAKE	=	0.00	
Urban Area	=		
URBAN	=	0.26	(includes future development)
SAAR	=	1051	
SOIL	=	0.30	

3.0 Mean Annual Flood (Rural)

$$Q_{bar} (rural, PCD) = 0.00042 \times AREA^{0.95} \times Fs^{0.22} \times SOIL^{1.18} \times SAAR^{1.05} \times (1+LAKE)^{-1}$$

$Q_{bar} (rural, PCD) = 0.56 \text{ m}^3/\text{s}$

4.0 Adjustment for Urbanisation

CWI = 125.00 Catchment Wetness Index

$PR = (102.4 \times SOIL) + 0.28 \times (CWI - 125)$

PR = 30.72

$$Q_{u\ bar}/Q_{r\ bar} = (1 + URBAN)^{1.5} (1 + 0.3 \times URBAN \times (70/PR - 1))$$

$Q_{u\ bar}/Q_{r\ bar} = 1.56$

$Q_{bar_urban} = 0.88 \text{ m}^3/\text{s}$

5.0 Standard Factorial Error

Standard Factorial Error = 1.5

$Q_{bar} (68\% \text{ Confidence}) = 1.31 \text{ m}^3/\text{s}$

Job Title	Midleton FRS
Job Number	252803
Calculation	Flood Studies Report

1.0 Subcatchment: 19_1959_2 - PCDs (incl. catchment area) corrected from FSU node

2.0 Physical Catchment Descriptors:

AREA	=	10.33	
MSL	=	1.23	
J50K	=	1.00	
J1inch	=	1.05	
Fs	=	0.11	
H10	=		
H85	=		
S1085	=	1.77	
LAKE	=	0.00	
Urban Area	=		
URBAN	=	0.16	(includes future development)
SAAR	=	1047	
SOIL	=	0.30	

3.0 Mean Annual Flood (Rural)

$Q_{bar} (rural, PCD) = 0.00042 \times AREA^{0.95} \times Fs^{0.22} \times SOIL^{1.18} \times SAAR^{1.05} \times (1+LAKE)^{-0.93} \times S1085^{0.16}$

$Q_{bar} (rural, PCD) = 0.94 \text{ m}^3/\text{s}$

4.0 Adjustment for Urbanisation

CWI = 125.00 Catchment Wetness Index

$PR = (102.4 \times SOIL) + 0.28 \times (CWI-125)$

PR = 30.72

$Q_{u\ bar}/Q_{r\ bar} = (1 + URBAN)^{1.5} (1 + 0.3 \times URBAN \times (70/PR-1))$

$Q_{u\ bar}/Q_{r\ bar} = 1.33$

$Q_{bar_urban} = 1.25 \text{ m}^3/\text{s}$

5.0 Standard Factorial Error

Standard Factorial Error = 1.5

$Q_{bar} (68\% \text{ Confidence}) = 1.88 \text{ m}^3/\text{s}$

Job Title	Midleton FRS
Job Number	252803
Calculation	Flood Studies Report

1.0 Subcatchment: 19020 - at Ballyedmond

2.0 Physical Catchment Descriptors:

AREA	=	73.95
MSL	=	13.99
J50K	=	27
J1inch	=	27.51
Fs	=	0.87
H10	=	
H85	=	
S1085	=	11.02
LAKE	=	0.00
Urban Area	=	
URBAN	=	0.00
SAAR	=	1179
SOIL	=	0.30

3.0 Mean Annual Flood (Rural)

$$Q_{bar} (rural, PCD) = 0.00042 \times AREA^{0.95} \times Fs^{0.22} \times SOIL^{1.18} \times SAAR^{1.05} \times (1+LAKE)^{-0.93} \times S1085^{0.16}$$

$Q_{bar} (rural, PCD)$	=	14.46 m ³ /s
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4.0 Adjustment for Urbanisation

CWI	=	125.00	Catchment Wetness Index
PR	=	$(102.4 \times SOIL) + 0.28 \times (CWI-125)$	
PR	=	30.72	
Q_{urban}/Q_{rural}	=	$(1 + URBAN)^{1.5} (1 + 0.3 \times URBAN \times (70/PR-1))$	
Q_{urban}/Q_{rural}	=	1.00	
Q_{bar_urban}	=	14.46	m ³ /s

5.0 Standard Factorial Error

Standard Factorial Error	=	1.5
Q_{bar} (68% Confidence)	=	21.69 m ³ /s

Job Title	Midleton FRS
Job Number	252803
Calculation	Flood Studies Report

1.0 Subcatchment:	19_712_6
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2.0 Physical Catchment Descriptors:			
AREA	=	77.09	
MSL	=	15.99	
J50K	=	27	
J1inch	=	27.51	
Fs	=	0.83	
H10	=		
H85	=		
S1085	=	10.40	
LAKE	=	0.00	
Urban Area	=		
URBAN	=	0.00	
SAAR	=	1177	
SOIL	=	0.30	

3.0 Mean Annual Flood (Rural)			
<i>Qbar (rural, PCD)</i>		$0.00042 \times \text{AREA}^{0.95} \text{Fs}^{0.22} \text{SOIL}^{1.18} \text{SAAR}^{1.05} (1+\text{LAKE})^{-0.93} \text{S1085}^{0.16}$	
<i>Qbar (rural, PCD)</i>	=	14.72	m ³ /s

4.0 Adjustment for Urbanisation			
CWI	=	125.00	Catchment Wetness Index
PR	=	$(102.4 \times \text{SOIL}) + 0.28 \times (\text{CWI}-125)$	
PR	=	30.72	
<i>Qu bar/Qr bar</i>	=	$(1 + \text{URBAN})^{1.5} (1 + 0.3 \times \text{URBAN} \times (70/\text{PR}-1))$	
<i>Qu bar/Qr bar</i>	=	1.00	
<i>Qbar_urban</i>	=	14.72	m ³ /s

5.0 Standard Factorial Error			
Standard Factorial Error	=	1.5	
<i>Qbar (68% Confidence)</i>	=	22.07	m ³ /s

Job Title	Midleton FRS
Job Number	252803
Calculation	Flood Studies Report

1.0 Subcatchment:	19_711_1
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2.0 Physical Catchment Descriptors:			
AREA	=	21.34	
MSL	=	6.70	
J50K	=	7.00	
J1inch	=	7.23	
Fs	=	0.78	
H10	=		
H85	=		
S1085	=	17.34	
LAKE	=	0.00	
Urban Area	=		
URBAN	=	0.00	
SAAR	=	1143	
SOIL	=	0.30	

3.0 Mean Annual Flood (Rural)			
<i>Qbar (rural, PCD)</i>		$0.00042 \times \text{AREA}^{0.95} \text{Fs}^{0.22} \text{SOIL}^{1.18} \text{SAAR}^{1.05} (1+\text{LAKE})^{-0.93} \text{S1085}^{0.16}$	
<i>Qbar (rural, PCD)</i>	=	4.51	m ³ /s

4.0 Adjustment for Urbanisation			
CWI	=	125.00	Catchment Wetness Index
PR	=	$(102.4 \times \text{SOIL}) + 0.28 \times (\text{CWI}-125)$	
PR	=	30.72	
<i>Qu bar/Qr bar</i>	=	$(1 + \text{URBAN})^{1.5} (1 + 0.3 \times \text{URBAN} \times (70/\text{PR}-1))$	
<i>Qu bar/Qr bar</i>	=	1.00	
<i>Qbar_urban</i>	=	4.51	m ³ /s

5.0 Standard Factorial Error			
Standard Factorial Error	=	1.5	
<i>Qbar (68% Confidence)</i>	=	6.76	m ³ /s

Job Title	Midleton FRS
Job Number	252803
Calculation	Flood Studies Report

1.0 Subcatchment: 19_1955_2

2.0 Physical Catchment Descriptors:

AREA	=	98.98
MSL	=	16.67
J50K	=	35.00
J1inch	=	35.57
Fs	=	0.83
H10	=	
H85	=	
S1085	=	9.89
LAKE	=	0.00
Urban Area	=	
URBAN	=	0.00
SAAR	=	1168
SOIL	=	0.30

3.0 Mean Annual Flood (Rural)

$$Q_{bar} (rural, PCD) = 0.00042 \times AREA^{0.95} \times Fs^{0.22} \times SOIL^{1.18} \times SAAR^{1.05} \times (1+LAKE)^{-0.93} \times S1085^{0.16}$$

$Q_{bar} (rural, PCD) = 18.39 \text{ m}^3/s$

4.0 Adjustment for Urbanisation

CWI = 125.00 Catchment Wetness Index

PR = (102.4 x SOIL) + 0.28 x (CWI-125)

PR = 30.72

$$Q_{u\ bar}/Q_{r\ bar} = (1 + URBAN)^{1.5} (1 + 0.3 \times URBAN \times (70/PR-1))$$

$Q_{u\ bar}/Q_{r\ bar} = 1.00$

$Q_{bar_urban} = 18.40 \text{ m}^3/s$

5.0 Standard Factorial Error

Standard Factorial Error = 1.5

$Q_{bar} (68\% \text{ Confidence}) = 27.60 \text{ m}^3/s$

Job Title	Midleton FRS
Job Number	252803
Calculation	Flood Studies Report

1.0 Subcatchment: 19 1955 4

2.0 Physical Catchment Descriptors:

AREA	=	99.47
MSL	=	17.67
J50K	=	35.00
J1inch	=	35.57
Fs	=	0.83
H10	=	
H85	=	
S1085	=	9.68
LAKE	=	0.00
Urban Area	=	
URBAN	=	0.00
SAAR	=	1168.00
SOIL	=	0.30

3.0 Mean Annual Flood (Rural)

$$Q_{bar} (rural, PCD) = 0.00042 \times AREA^{0.95} \times Fs^{0.22} \times SOIL^{1.18} \times SAAR^{1.05} \times (1+LAKE)^{-0.93} \times S1085^{0.16}$$

$Q_{bar} (rural, PCD)$	=	18.40 m ³ /s
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4.0 Adjustment for Urbanisation

CWI	=	125.00	Catchment Wetness Index
PR	=	$(102.4 \times SOIL) + 0.28 \times (CWI-125)$	
PR	=	30.72	
$Q_{u\ bar}/Q_{r\ bar}$	=	$(1 + URBAN)^{1.5} (1 + 0.3 \times URBAN \times (70/PR-1))$	
$Q_{u\ bar}/Q_{r\ bar}$	=	1.00	
Q_{bar_urban}	=	18.47	m ³ /s

5.0 Standard Factorial Error

Standard Factorial Error	=	1.5
Q_{bar} (68% Confidence)	=	27.70 m ³ /s

Job Title	Midleton FRS
Job Number	252803
Calculation	Flood Studies Report

1.0 Subcatchment: 19 1955 6

2.0 Physical Catchment Descriptors:

AREA	=	105.10
MSL	=	18.67
J50K	=	36.00
J1inch	=	36.57
Fs	=	0.80
H10	=	
H85	=	
S1085	=	8.88
LAKE	=	0.00
Urban Area	=	
URBAN	=	0.01
SAAR	=	1163
SOIL	=	0.30

3.0 Mean Annual Flood (Rural)

$$Qbar (rural, PCD) = 0.00042 \times AREA^{0.95} \times Fs^{0.22} \times SOIL^{1.18} \times SAAR^{1.05} \times (1+LAKE)^{-0.93} \times S1085^{0.16}$$

<i>Qbar (rural, PCD)</i>	=	18.89 m ³ /s
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4.0 Adjustment for Urbanisation

CWI	=	125.00	Catchment Wetness Index
PR	=	$(102.4 \times SOIL) + 0.28 \times (CWI-125)$	
PR	=	30.72	

$$Qu\ bar/Qr\ bar = (1 + URBAN)^{1.5} (1 + 0.3 \times URBAN \times (70/PR-1))$$

Qu bar/Qr bar	=	1.01
Qbar_urban	=	19.11 m ³ /s

5.0 Standard Factorial Error

Standard Factorial Error	=	1.5
Qbar (68% Confidence)	=	28.67 m ³ /s

Job Title	Midleton FRS
Job Number	252803
Calculation	Flood Studies Report

1.0 Subcatchment: 19 1955 7

2.0 Physical Catchment Descriptors:

AREA	=	105.87
MSL	=	19.17
J50K	=	36.00
J1inch	=	36.57
Fs	=	0.80
H10	=	
H85	=	
S1085	=	8.90
LAKE	=	0.00
Urban Area	=	
URBAN	=	0.01
SAAR	=	1162
SOIL	=	0.30

3.0 Mean Annual Flood (Rural)

$$Q_{bar} (rural, PCD) = 0.00042 \times AREA^{0.95} Fs^{0.22} SOIL^{1.18} SAAR^{1.05} (1+LAKE)^{-0.93} S1085^{0.16}$$

$Q_{bar} (rural, PCD)$	=	18.98 m ³ /s
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4.0 Adjustment for Urbanisation

CWI	=	125.00	Catchment Wetness Index
PR	=	$(102.4 \times SOIL) + 0.28 \times (CWI-125)$	
PR	=	30.72	
$Q_{u\ bar}/Q_{r\ bar}$	=	$(1 + URBAN)^{1.5} (1 + 0.3 \times URBAN \times (70/PR-1))$	
$Q_{u\ bar}/Q_{r\ bar}$	=	1.02	
Q_{bar_urban}	=	19.38	m ³ /s

5.0 Standard Factorial Error

Standard Factorial Error	=	1.5
Q_{bar} (68% Confidence)	=	29.07 m ³ /s

Job Title	Midleton FRS
Job Number	252803
Calculation	Flood Studies Report

1.0 Subcatchment: 19_1955_7 + 19_1957_6

2.0 Physical Catchment Descriptors:

AREA	=	158.51
MSL	=	19.17
J50K	=	51.00
J1inch	=	51.63
Fs	=	0.74
H10	=	
H85	=	
S1085	=	9.39
LAKE	=	0.00
Urban Area	=	
URBAN	=	0.01
SAAR	=	1147
SOIL	=	0.30

3.0 Mean Annual Flood (Rural)

$$Q_{bar} (rural, PCD) = 0.00042 \times AREA^{0.95} \times Fs^{0.22} \times SOIL^{1.18} \times SAAR^{1.05} \times (1+LAKE)^{-0.93} \times S1085^{0.16}$$

$Q_{bar} (rural, PCD)$	=	27.27 m ³ /s
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4.0 Adjustment for Urbanisation

CWI	=	125.00	Catchment Wetness Index
PR	=	$(102.4 \times SOIL) + 0.28 \times (CWI-125)$	
PR	=	30.72	
$Q_{u\ bar}/Q_{r\ bar}$	=	$(1 + URBAN)^{1.5} (1 + 0.3 \times URBAN \times (70/PR-1))$	
$Q_{u\ bar}/Q_{r\ bar}$	=	1.02	
Q_{bar_urban}	=	27.85 m ³ /s	

5.0 Standard Factorial Error

Standard Factorial Error	=	1.5
Q_{bar} (68% Confidence)	=	41.78 m ³ /s