

*Appendix L*

# **FLOOD WARNING NETWORK DETAILS BY SETTLEMENT**



Settlement	LGA	BOM forecast local	Riverine flood risk	Flash flood risk	Settlement details								Catchment details			Flood warning time			0-6hr from settlement			6-9hr from settlement			9-12hr from settlement			12-24hr from settlement			24-48hr from settlement			-48hr from settlement							
					Basin	Sub basin	BOM risk	DCS risk	Population (2011 census)	Settlement area (km2)	Settlement area within QFAO (km2)	% settlement within QFAO	% population within QFAO	Catchment area above settlement (km2)	Catchment mean slope (%)	Average annual rainfall	Desirable flood warning time (based on population)	Maximum feasible flood warning time (based on catchment)	Target flood warning time	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged				
BARRON RIVER DELTA	Cairns Regional	No	Yes	Not assessed	Barron	Barron River	Not Available	High	62	0.0	0.0	99%	100%	2,169	11.0	1,483	9	6	6	15	31205, 531061, 531072, 531037, 531048, 31170, 531049, 531041, 31171, 531019, 531036, 531040, 31173, 531027, 531039	100%	6	31075, 531017, 531030, 531034, 31188, 531033	78%	4	531028, 531098, 531066, 531065	49%	2	531064, 531070	63%	0	0	0%	0	0	0%				
BASIN POCKET	Ipswich City	No	No	Not assessed	Brisbane	Bremer River	Not Available	High	863	0.6	0.0	0%	0%	1,838	7.8	936	9	9	9	32	540195, 540065, 540316, 540217, 540062, 540210, 540574, 540180, 40816, 540505, 540550, 540314, 540502, 540216, 40549, 540193, 540388, 40701, 540194, 540583, 540248, 540669, 40838, 40836, 540313, 540147, 40831	100%	7	540068, 40445, 540154, 540387, 540157, 40702, 540064	56%	5	540057, 540058, 540151, 40440, 540317	61%	6	540364, 540474, 40135, 540513, 540365, 540549	54%	0	0	0%	0	0	0%				
BATTLE CREEK	Tablelands Regional	Yes	No	Not assessed	Herbert	Herbert River	Not Available	Very Low	42	0.2	0.0	0%	0%	5,200	7.6	1,242	9	9	9	4	32018, 531078, 531081, 531079	100%	0	0	30%	3	531060, 531021, 531015	45%	1	531059	8%	0	0	0%	0	0	0%				
BAUHINIA	Central Highlands Regional	No	No	Not assessed	Fitzroy	Dawson River	Not Available	Very Low	321	0.2	0.0	0%	0%	144	3.9	676	9	0	0	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%					
BEAUDESERT	Scenic Rim Regional	Yes	Yes	Yes	Logan-Albert	Logan River	High	Medium	7,409	8.8	1.7	19%	5%	1,450	14.4	1,084	24	6	6	14	40943, 540074, 40754, 40946, 40539, 40944, 540402, 40714, 40945, 540270, 540271, 540614, 540480, 40939	98%	6	540436, 40832, 540229, 540475, 540591, 40677	42%	1	540407	38%	0	0	0%	0	0	0%							
BEDOURIE	Diamantina Shire	Yes	Yes	Not assessed	Georgina	Eyre Creek	Medium	Extreme	146	0.7	0.7	100%	100%	163,125	0.0	211	9	48	9	1	38000	100%	0	0	82%	0	0	82%	1	38014	82%	4	38055, 538002, 38010, 537003	84%	2	37043, 37010	67%				
BEENLEIGH	Logan City	No	Yes	No	Logan-Albert	Albert River	High	Extreme	8,237	5.8	0.0	0%	0%	3,616	8.5	1,315	24	12	12	27	40544, 40738, 40938, 540691, 40762, 40940, 40761, 540214, 540515, 540689, 40542, 40935, 540596, 540688, 540598, 40723, 540644, 540645, 40709, 540675, 40665	100%	13	40937, 540073, 540614, 540480, 40939, 540607, 540481, 540615, 540512, 540530, 540590, 40710, 540690	91%	7	540375, 40936, 540303, 40714, 40945, 540270, 540271	81%	20	540436, 40943, 540074, 40754, 40946, 40539, 40832, 540407, 40944, 540402, 540229, 540475, 540591, 40677, 40841, 40947, 40729, 40949	71%	0	0	0%	0	0	0%				
BEERWAH	Sunshine Coast Regional	No	No	Not assessed	Maroochy	Maroochy River	High	Extreme	5,997	11.0	0.0	0%	0%	133	5.4	1,640	24	0	0	5	540536, 540401, 540533, 540243, 540242	69%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%				
BEGONIA	Maranoa Regional	Yes	No	Not assessed	Balonne-Condamine	Maranoa River	Not Available	High	155	0.2	0.0	0%	0%	19,320	3.3	578	9	24	9	1	44075	88%	0	0	70%	0	0	72%	5	43099, 43000, 43102, 43064, 543011	76%	3	43111, 543007, 43009	91%	0	0	0%				
BELVAH	Logan City	No	No	Not assessed	Logan-Albert	Albert River	Not Available	High	323	1.5	0.0	0%	0%	728	12.6	1,315	9	9	9	5	40544, 40738, 40938, 540691, 40761	97%	6	40936, 540303, 40937, 540073, 540614, 540480	69%	1	540375	15%	0	0	0%	0	0	0%	0	0	0%				
BELYANDO CROSSING	Charters Towers Regional	Yes	Yes	Not assessed	Burdekin	Suttor River	Not Available	Low	67	0.2	0.0	11%	0%	34,667	2.3	594	9	24	9	1	536007	100%	0	0	67%	1	536008	69%	0	0	47%	2	535102, 36083	63%	6	35236, 535296, 535146, 535145, 35229, 535053	47%				
BEMERSIDE	Hinchinbrook Shire	No	Yes	Not assessed	Herbert	Herbert River	Not Available	High	20	0.1	0.1	100%	100%	8,743	9.1	1,242	9	24	9	11	32149, 32173, 32171, 532012, 532027, 32094, 532067, 532028, 32091, 32174, 532006	99%	3	532011, 532010, 32184	90%	1	32170	97%	5	532080, 32169, 532066, 32018, 531078	84%	6	531081, 531079, 531060, 531021, 531015, 531059	56%	0	0	0%	0	0	0%	
BENARABY	Gladstone Regional	No	Yes	Not assessed	Boyerne	Boyerne River	Not Available	Medium	1,270	3.4	2.7	81%	79%	2,342	14.6	963	9	9	9	7	539084, 539140, 539087, 539130, 539086, 539131, 539125	97%	2	539036, 539129	49%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	
BERRINBA	Logan City	No	No	Not assessed	Logan-Albert	Logan River	Not Available	Extreme	1,034	2.8	0.0	0%	0%	65	4.0	1,084	9	0	0	2	540078, 540692	100%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%				
BETHANIA	Logan City	No	No	Not assessed	Logan-Albert	Logan River	Not Available	Extreme	4,920	3.7	0.0	0%	0%	2,844	7.9	1,084	24	12	12	20	540590, 40710, 40762, 40940, 540690, 540214, 540515, 540689, 40542, 40935, 540596, 540688, 540675, 40665, 40878, 540674, 540078, 540692, 540091, 540079	99%	8	540270, 540271, 40939, 540607, 540481, 540615, 540512, 540530	88%	4	40714, 40945, 540509, 540510	86%	18	540436, 40943, 540074, 40754, 40946, 40539, 40832, 540407, 40944, 540402, 540229, 540475, 540591, 40677, 40841, 40947, 40729, 40949	74%	0	0	0%	0	0	0%				
BIBOOHRA	Mareeba Shire	No	Yes	Not assessed	Mitchell	Mitchell River	Medium	Extreme	547	1.0	0.3	26%	24%	1,222	9.1	976	9	6	6	6	6	31075, 531017, 531030, 531034, 31188, 531033	69%	4	531028, 531098, 531066, 531065	64%	2	531064, 531070	93%	0	0	0%	0	0	0%	0	0	0%			
BIGGENDEN	North Burnett Regional	No	No	Not assessed	Burnett	Lower Burnett River	Not Available	High	1,020	2.0	0.3	12%	5%	310	12.2	816	9	0	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%						
BILWON	Mareeba Shire	No	Yes	Not assessed	Barron	Barron River	Not Available	Extreme	10	0.1	0.1	50%	60%	1,375	8.6	1,483	9	6	6	8	31075, 531017, 531030, 531034, 31188, 531033, 531019, 531036	93%	1	531065	53%	5	531064, 531070, 531028, 531098, 531066	82%	0	0	0%	0	0	0%	0	0	0%				
BIRDSVILLE	Diamantina Shire	Yes	Yes	Not assessed	Diamantina	Diamantina River	Medium	High	138	0.4	0.0	5%	10%	112,584	1.3	272	9	48	9	3	538004, 38002, 38020	100%	0	0	58%	0	0	58%	1	38031	59%	2	538007, 38015	63%	8	538003, 37122, 37029, 37018, 37026, 37046, 537005, 37082	70%				
BIVOUAC JUNCTION	Charters Towers Regional	No	Yes	Not assessed	Burdekin	Upper Burdekin River	Not Available	High	10	0.2	0.0	15%	0%	35,840	4.9	710	9	24	9	0	0	0	73%	0	0	77%	1	533096	80%	5	530017, 532085, 533107, 532086, 532063	65%	5	532016, 532017, 32063, 32122, 532103	78%	0	0	0%	0	0	0%
BLACK RIVER	Townsville City	No	No	Not assessed	Black	Black River	Not Available	High	1,476	9.2	7.5	82%	71%	279	5.6	1,361	9	0	0	2	532046, 532055	94%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%				
BLACKALL	Blackall Tambo Regional	Yes	Yes	No	Cooper Creek	Barcoo River	High	High	1,588	3.7	0.7	20%	12%	5,801	2.3	452	9	12	9	6	35049, 35259, 535126, 536003, 36155, 536009	98%	0	0	11%	0	0	12%	1	35284	14%	0	0	0%	0	0	0%				
BLACKBUTT	South Burnett Regional	No	No	Not assessed	Brisbane	Brisbane River	Medium	Not Available	1,967	26.4	0.0	0%	0%	644	10.5	928	9	6	6	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%						
BLACKROCK	Hinchinbrook Shire	No	No	Not assessed	Herbert	Herbert River	Not Available	High	330	0.2	0.2	100%	100%	177	1.0	1,242	9	0	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0%					









Settlement	Settlement details													Flood warning time			0.6hr from settlement			6.9hr from settlement			9.12hr from settlement			12.24hr from settlement			24.48hr from settlement			48hr from settlement								
	LGA	BOM forecast localio	Riverine flood risk	Flash flood risk	Basin	Sub basin	BOM risk	DCS risk	Population (2011 census)	Settlement area (km2)	Settlement area within QFAO (km2)	% settlement within QFAO	% population within QFAO	Catchment area above settlement (km2)	Catchment mean slope (%)	Average annual rainfall	Desirable flood warning time (based on population)	Maximum feasible flood warning time (based on catchment)	Target flood warning time	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged			
EINASLEIGH	Etheridge Shire	No	Yes	No	Gilbert	Einasleigh River	High	Medium	161	0.8	0.8	100%	100%	8.185	4.2	773	9	12	9	1	530007	100%	0	0	28%	3	530015, 530014, 530012	36%	2	30039, 30030	25%	0	0	0%	0	0	0%			
EL ARISH	Cassowary Coast Regional	No	No	Not assessed	Johnstone	South Johnstone River	Not Available	Low	459	0.8	0.5	63%	63%	44	7.7	3,268	9	0	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%		
ELECTRA (PINE CREEK)	Bundaberg Regional	No	Yes	Not assessed	Burnett	Lower Burnett River	Not Available	Extreme	86	0.2	0.1	32%	0%	31,902	7.2	816	9	24	9	15	539045, 539146, 539152, 39184, 539108, 539021, 539148, 539147, 39313, 539154, 39258, 539215, 539089, 539149, 539096	100%	0	0	97%	1	539150	99%	23	40827, 540696, 40428, 39191, 39323, 539191, 539049, 39193, 539151, 539186, 539055, 539200, 539052, 539193, 39000, 39319, 539218, 539039, 539204, 539201, 539198	99%	55	540042, 540231, 540025, 540053, 540090, 40834, 540531, 540362, 540361, 540077, 540056, 539073, 539077, 540055, 540262, 540698, 40722, 40837, 540075, 539042	109%	3	540041, 40500, 42059	70%			
EMERALD	Central Highlands Regional	Yes	Yes	No	Fitzroy	Nogoa River	High	Extreme	13,894	24.2	13.7	57%	65%	24,650	4.9	638	24	24	24	7	35241, 535019, 535101, 535076, 35260, 535017, 535098	100%	0	0	78%	6	535100, 535063, 535077, 35232, 35187, 535018	81%	9	35150, 535099, 535106, 535029, 35251, 535112, 535114, 535103, 535028	71%	2	535125, 534025	55%	0	0	0%			
EMU VALE	Southern Downs Regional	No	No	Yes	Balonne-Cooper Creek	Condamine River	High	High	337	0.3	0.0	15%	12%	159	17.8	673	9	0	0	2	541035, 41533	100%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
EROMANGA	Ouplie Shire	No	Yes	Not assessed	Cooper Creek	Cooper Creek	High	Extreme	265	0.3	0.3	100%	100%	2,003	1.2	252	9	6	6	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
ESK	Somerset	No	No	Yes	Brisbane	Brisbane River	High	Extreme	1,760	5.8	1.4	24%	21%	190	8.9	928	9	0	0	1	540441	97%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
EUDLO	Sunshine Coast Regional	No	No	Not assessed	Maroochy	Maroochy River	Not Available	Extreme	1,219	12.4	0.0	0%	0%	77	8.7	1,640	9	0	0	1	540222	25%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
EULO	Paroo Shire	Yes	Yes	No	Paroo	Paroo River	High	Extreme	115	0.8	0.3	39%	61%	15,010	1.6	308	9	24	9	1	44153	100%	0	0	66%	0	0	71%	3	44198, 44085, 44222	80%	1	44191	43%	0	0	0%			
EUMUNDI	Sunshine Coast Regional	No	No	Not assessed	Maroochy	Maroochy River	High	Extreme	6,937	29.2	0.4	2%	2%	111	6.1	1,640	24	0	0	2	540052, 540093	38%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
EURAMO	Cassowary Coast Regional	Yes	Yes	No	Tully	Tully River	High	Extreme	331	0.1	0.1	100%	100%	1,394	12.3	2,652	9	6	6	3	32115, 532095, 531057	100%	3	531085, 531104, 31085	83%	1	531095	25%	0	0	0%	0	0	0%	0	0	0%			
FERNVALE	Somerset Regional	No	Yes	Yes	Brisbane	Brisbane River	High	Extreme	2,804	9.8	3.2	33%	31%	10,087	11.6	928	12	12	12	23	540312, 540183, 540182, 40441, 40662, 540174, 40817, 540150, 540066, 540544, 540153, 540051, 540479, 540547, 540701, 540259, 540069, 540178, 40763, 540049, 540177, 540302, 540260	99%	12	540158, 540047, 540472, 540563, 540511, 540516, 540050, 540529, 540149, 540473, 540546, 540441	87%	13	40835, 540528, 540567, 40716, 540680, 540156, 40444, 540363, 540560, 40820, 540159, 540160, 540471	90%	36	40751, 540568, 540406, 540518, 540067, 540152, 540405, 540517, 540386, 40829, 540143, 540566, 540507, 540527, 540589, 540272, 540142, 540276, 540148, 40823, 40822, 540139, 540140	82%	4	540040, 540261, 540044, 540146	89%	0	0	0%			
FINCH HATTON FISHERY FALLS	Mackay Regional	No	No	Yes	Pioneer	Pioneer River	High	High	538	0.7	0.6	88%	78%	154	71.7	1,464	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
FLINTON	Western Downs Regional	Yes	Yes	No	Moonie	Moonie River	Medium	Not Available	253	0.5	0.5	100%	100%	5,438	1.3	557	9	12	9	2	42053, 42111	90%	0	0	57%	0	0	70%	2	42100, 41368	90%	1	41493	60%	0	0	0%			
FLYING FISH POINT	Cassowary Coast Regional	No	Yes	Not assessed	Johnstone	South Johnstone River	Medium	Low	675	0.7	0.7	93%	97%	1,631	10.8	3,268	9	9	9	16	32155, 32160, 32161, 532025, 532070, 32152, 32166, 532092, 532009, 532013, 32145, 32163, 32165, 532014, 532104, 532023	98%	0	0	18%	2	531084, 531103	29%	0	0	0%	0	0	0%	0	0	0%			
FOREST HILL	Lockyer Valley Regional	No	Yes	Yes	Brisbane	Lockyer Creek	High	Not Available	2,271	9.7	1.7	18%	18%	441	12.2	876	12	6	6	11	40835, 540528, 540567, 40716, 540158, 540047, 540472, 540563, 540680	78%	1	40751	83%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%
FORESDALE	Logan City	No	No	Not assessed	Brisbane	Brisbane River	Not Available	Medium	2,597	5.0	0.0	0%	0%	129	5.3	928	12	0	0	3	40719, 540097, 540646	60%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
FORSAYTH	Etheridge Shire	No	No	Not assessed	Gilbert	Einasleigh River	Not Available	Very Low	344	0.5	0.0	0%	1%	124	6.6	773	9	0	0	1	80055	96%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
FRESHWATER CREEK	Cairns Regional	No	Yes	Not assessed	Barron	Barron River	Not Available	Medium	2,129	1.3	0.0	1%	2%	2,169	11.1	1,483	12	6	6	17	31188, 531033, 31205, 531061, 531072, 531037, 531048, 31170, 531049, 531041, 31171, 531019, 531036, 531040, 31173, 531027, 531030	100%	5	531065, 31075, 531017, 531030, 531034	67%	4	531070, 531028, 531098, 531066	61%	1	531064	94%	0	0	0%	0	0	0%			
GATTON	Lockyer Valley Regional	Yes	Yes	Yes	Brisbane	Lockyer Creek	High	Not Available	7,803	13.0	4.7	36%	33%	1,558	13.0	876	24	9	9	12	540406, 540518, 540067, 540152, 540405, 540517, 540386, 540156, 40444, 540363, 40829, 540143	97%	1	540566	26%	0	0	34%	4	540568, 540507, 540527, 540589	51%	0	0	0%	0	0	0%			
GAYNDAH	North Burnett Regional	Yes	Yes	No	Burnett	Lower Burnett River	High	Extreme	1,857	5.5	2.3	41%	48%	22,874	6.6	816	9	12	9	19	40455, 539069, 539184, 39191, 539038, 539187, 39323, 539191, 539049, 539190, 39320, 539066, 539197, 39073, 39324, 539194, 539186, 539055, 539200	100%	7	540262, 540698, 40722, 39321, 539189, 539052, 539193	90%	8	540055, 39177, 539037, 539188, 39259, 39318, 539183, 539035	93%	17	540231, 540056, 539042, 539181, 539074, 539051, 539203, 39236, 39000, 39319, 539218, 539039, 539204, 539201, 539040	71%	10	42059, 539198, 539185, 539088, 539114, 539064, 539182, 539092, 539044, 539202	58%	0	0	0%			
GEORGETOWN	Etheridge Shire	No	Yes	No	Gilbert	Einasleigh River	High	High	247	2.7	1.2	44%	100%	1,624	5.1	773	9	0	6	4	30055, 530010, 530011, 530012	67%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
GILLIAT	Mackay Shire	No	No	Not assessed	Flinders	Cloncurry River	Medium	Not Available	40	0.2	0.0	0%	0%	189	0.0	442	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
GIN GIN	Bundaberg Regional	No	No	Not assessed	Kolan	Kolan River	Not Available	High	1,807	3.5	0.2	6%	0%	605	10.1	958	9	0	0	3	539206, 539046, 539210	88%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
GIRU	Burdekin Shire	Yes	Yes	No	Haughton	Haughton River	High	Extreme	628	1.2	1.2	100%	100%	1,892	7.3	903	9	9	9	7	533016, 533072, 33280, 533056, 33249, 33253, 533051	99%	3	533027, 533055, 33207	93%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
GLADSTONE	Gladstone Regional	No	No	Not assessed	Boyne	Boyne River	Medium	Medium	32,285	31.1	11.9	38%	17%	198	4.3	963	24	0	0	1	539033	28%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			



Settlement	LGA	BOM forecast local	Riverine flood risk	Flash flood risk	Settlement details								Catchment details			Flood warning time		0.6hr from settlement		6.9hr from settlement		9.12hr from settlement		12.24hr from settlement		24.48hr from settlement		~48hr from settlement													
					Basin	Sub basin	BOM risk	DCS risk	Population (2011 census)	Settlement area (km2)	Settlement area within OFAO (km2)	% settlement within OFAO	% population within OFAO	Catchment area above settlement (km2)	Catchment mean slope (%)	Average annual rainfall	Desirable flood warning time (based on population)	Maximum feasible flood warning time (based on catchment)	Target flood warning time	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged							
GLAMORGAN VALE	Somerset Regional	No	Yes	Not assessed	Brisbane	Brisbane River	Not Available	High	923	9.8	0.8	8%	6%	10,156	11.4	928	9	12	9	26	540312, 540529, 540257, 540149, 540183, 540182, 40441, 40662, 540174, 40817, 540150, 540066, 540544, 540153, 540051, 540479, 540547, 540701, 540259, 540069, 540178, 40763, 540049, 540177, 540302, 540260	100%	11	40716, 540158, 540047, 540472, 540563, 540680, 540511, 540516, 540050, 540473, 540546	86%	9	40751, 40835, 540528, 540567, 540156, 40444, 540363, 540441, 540560	90%	38	540568, 540406, 540518, 540067, 540152, 540405, 540517, 540386, 40829, 540143, 540566, 540507, 540527, 540589, 540272, 540142, 540276, 40820, 540159, 540160, 540471, 540148,	91%	5	40387, 540040, 540261, 540044, 540146	75%	0	0	0%	0	0%		
GLASS HOUSE MOUNTAINS	Sunshine Coast Regional	No	No	Not assessed	Maroochy	Maroochy River	Not Available	Extreme	4,848	11.0	0.0	0%	0%	117	4.5	1,640	24	0	0	3	540536, 540343, 540342	36%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GLENMORGAN	Western Downs Regional	Yes	No	Not assessed	Balonne-Mary	Condamine River	Medium	Not Available	97	0.4	0.3	81%	100%	535	1.8	673	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GLENWOOD	Fraser Coast Regional	No	No	Not assessed	Lower Mary	Lower Mary River	High	Not Available	188	0.6	0.0	0%	0%	17	5.5	1,047	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GOGANGO	Rockhampton Regional	No	No	Not assessed	Fitzroy	Fitzroy River	Not Available	Low	55	0.5	0.5	91%	64%	650	6.7	845	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GOLD COAST	Gold Coast City	Yes	No	Yes	South Coast	Coomera & Nerang Rivers	High	Not Available	337,401	167.9	0.0	0%	0%	1,187	17.8	1,657	24	0	0	40	540640, 540368, 540070, 540366, 540355, 540356, 540320, 540054, 540612, 540437, 540438, 540252, 540453, 540440, 540230, 40981, 540254, 540399, 540564, 540565, 540597, 540253, 40847, 540610, 40584, 40684, 540318,	81%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	
GOLDSBOROUGH VALLEY	Cairns Regional	No	No	Not assessed	Mulgrave-Russell	Mulgrave River	Not Available	Medium	725	1.5	0.0	0%	0%	509	23.9	2,658	9	0	0	2	531046, 531076	71%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GOODNA	Ipswich City	No	No	Not assessed	Brisbane	Brisbane River	Not Available	High	8,789	5.7	0.0	0%	0%	12,482	10.6	928	24	24	24	42	540666, 40792, 540501, 40985, 540062, 540210, 540180, 40795, 40816, 540505, 540664, 540550, 40873, 540502, 540216, 540672, 540248, 40838, 40874, 40872, 40836, 540670, 40875, 540147, 40831, 40101, 540250, 540201, 40812, 540200, 540249, 540081, 540504,	100%	19	540195, 40445, 540154, 540387, 540065, 540316, 540217, 540314, 40549, 540193, 540388, 540669, 540313, 540503, 540312, 540183, 540182, 540150, 540066	96%	21	40702, 540574, 40701, 540194, 540583, 40441, 40662, 540174, 40817, 540544, 540153, 540051, 540701, 540259, 540069, 540178, 40763, 540049, 540177, 540302, 540260	97%	60	540364, 540474, 40135, 540513, 540365, 540549, 540057, 540058, 540151, 40440, 540068, 540157, 540317, 40751, 540568, 40835, 540528, 540064, 540567, 40716, 540158, 540047,	83%	21	540566, 540507, 540527, 540589, 540276, 40822, 540139, 540140, 540446, 540045, 540141, 540151, 40440, 540482, 540373, 540046, 540059, 540188, 40387, 540040, 540261, 540044, 540146	82%	0	0	0%	0	0%		
GOODNIGHT SCOUR	Bundaberg Regional	No	No	Not assessed	Burnett	Lower Burnett River	Not Available	Medium	-	0.2	0.0	0%	0%	18	7.3	816	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GOOMBOORIAN	Gympie Regional	No	No	Not assessed	Mary	Lower Mary River	Not Available	Extreme	497	7.4	0.6	8%	12%	139	8.0	1,047	9	0	0	1	540288	72%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GOOMBURRA	Southern Downs Regional	No	No	Not assessed	Balonne-Condamine	Condamine River	Not Available	High	449	0.3	0.1	39%	7%	163	20.1	673	9	0	0	1	541101	100%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GOOMERI	Gympie Regional	No	No	Yes	Burnett	Barker & Dawson-Creek Rivers	High	Extreme	790	1.6	0.7	42%	38%	147	7.8	784	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GOONDIWINDI	Goondivindi Regional	Yes	Yes	No	Border Rivers	Macintyre & Weir Rivers	High	Extreme	6,411	14.8	14.8	100%	100%	23,020	5.8	599	24	24	24	7	41507, 53101, 553029, 41350, 41500, 541030, 541070	97%	0	0	92%	2	41506, 41360	93%	24	554015, 554002, 41403, 41548, 554014, 540035, 541065, 541556, 541066, 541067, 41519, 541095, 541094, 41137, 541109, 541033, 41457, 41406, 41520, 41123, 541107, 41391,	93%	38	556038, 556011, 556039, 556019, 554017, 554001, 554000, 54145, 54146, 54147, 41540, 56158, 41087, 556002, 541051, 541052, 54155, 41430, 541053, 541090, 541076, 541032,	81%	1	556035	81%	1	556035	3%	3%
GOOVIGEN	Banana Shire	No	Yes	Yes	Fitzroy	Dawson River	High	High	192	0.1	0.1	50%	0%	129	2.4	676	9	0	6	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GORDONVALE	Cairns Regional	Yes	Yes	Yes	Mulgrave-Russell	Mulgrave River	High	Low	6,240	9.4	5.4	57%	42%	602	21.6	2,658	24	0	6	6	531046, 531076, 531052, 531099, 531023, 531051	92%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%				
GRACEMERE	Rockhampton Regional	No	No	Not assessed	Fitzroy	Fitzroy River	Not Available	High	8,526	19.5	4.5	23%	22%	719	6.0	845	24	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GRANTHAM	Lockyer Valley Regional	No	Yes	Yes	Brisbane	Lockyer Creek	High	Not Available	482	1.9	0.8	44%	28%	960	10.7	876	9	6	6	8	540406, 540518, 540405, 540517, 540386, 40829, 540143, 540566	83%	0	0	5%	3	540507, 540527, 540589	12%	0	0	0%	0	0	0%	0	0	0%				
GREENBANK	Logan City	No	No	Not assessed	Logan-Albert	Logan River	Not Available	High	7,375	39.7	0.0	0%	0%	219	5.1	1,084	24	0	0	4	40719, 540097, 540646, 540625	37%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GREENVALE	Charters Towers Regional	No	Yes	Not assessed	Burdekin	Upper Burdekin River	Not Available	Very Low	290	0.8	0.4	52%	43%	982	4.1	710	9	6	6	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GREGORY RIVERS	Burke Shire	No	Yes	Not assessed	Nicholson	Nicholson River	Medium	Extreme	171	0.2	0.2	100%	100%	12,457	0.0	560	9	24	9	1	529009	100%	0	0	91%	1	29166	93%	0	0	0%	0	0	0%							
GROPER CREEK	Burdekin Shire	No	No	Not assessed	Burdekin	Lower Burdekin River	Not Available	Extreme	364	0.2	0.2	99%	100%	74	1.0	754	9	0	0	1	533049	1%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GUNMLU	Whitsunday Regional	No	No	Not assessed	Don	Don River	Not Available	Medium	12	0.1	0.0	0%	0%	164	5.8	940	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GUNPOWDER	Mount Isa City	No	No	Not assessed	Leichhardt	Leichhardt River	Medium	Medium	279	0.2	0.0	0%	0%	195	0.0	527	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GUTHALUNGRA	Whitsunday Regional	No	No	Yes	Don	Don River	High	Low	3	0.0	0.0	0%	0%	287	5.8	940	9	0	0	1	533033	100%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
GYMPIE	Gympie Regional	Yes	Yes	No	Mary	Lower Mary River	High	Extreme	25,093	84.0	11.2	13%	11%	3,010	12.6	1,047	24	6	6	14	40099, 40777, 40780, 40778, 40782, 540326, 40781, 540569, 540572, 540476, 540618, 540215, 40426, 40993	94%	11	40386, 540331, 40755, 540330, 40814, 540575, 540264, 40481, 540514, 540463, 540327	75%	4	540620, 540427, 40830, 540332	58%	3	540403, 540647, 540426	16%	0	0	0%	0	0	0%				
HALIFAX	Hinchinbrook Shire	Yes	Yes	No	Herbert	Herbert River	High	Extreme	517	0.7	0.7	100%	100%	8,779	8.8	1,242	9	24	9	11	32149, 32173, 32171, 532012, 532027, 32094, 532067, 32156, 32185, 532028, 32091	100%	3	532011, 32174, 532006	93%	3	532010, 32184, 32170	94%	4	532080, 32169, 532066, 32018	82%	7	531078, 531081, 531079, 531060, 531021, 531015, 531059	59%	0	0	0%	0	0%		
HARLIN	Somerset Regional	Yes	Yes	Not assessed	Brisbane	Brisbane River	Medium	Medium	30	0.1	0.1	65%	100%	3,692	11.9	928	9	9	9	7	540446, 540045, 540141, 540188, 40387, 540040, 540261	88%	2	540044, 540146	0%	0	0	0%	0	0	0%	0	0	0%							
HARRISVILLE	Scenic Rim Regional	Yes	Yes	Yes	Brisbane	Bremer River	High	High	444	0.7	0.2	31%	39%	620	10.7	936	9	6	6	7	540513, 540365, 540549, 540057, 540058, 540151,	75%	3	540364, 540474, 40135	72%	0	0	0%	0	0	0%	0	0	0%							

Settlement	Settlement details													Catchment details													Flood warning time		0.6hr from settlement		6.9hr from settlement		9.12hr from settlement		12.24hr from settlement		24.48hr from settlement		~48hr from settlement	
	LGA	BOM forecast localio	Riverine flood risk	Flash flood risk	Basin	Sub basin	BOM risk	DCS risk	Population (2011 census)	Settlement area (km2)	Settlement area within QFAO (km2)	% settlement within QFAO	% population within QFAO	Catchment area above settlement (km2)	Catchment mean slope (%)	Average annual rainfall	Desirable flood warning time (based on population)	Maximum feasible flood warning time (based on catchment)	Target flood warning time	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged			
HEBEL	Balonne Shire	Yes	Yes	No	Balonne-Condamine	Balonne River	High	Extreme	197	0.6	0.6	100%	100%	76,290	3.3	551	9	48	9	2	44155, 544016	100%	0	0	100%	0	0	100%	2	44117, 44154	100%	8	43104, 43053, 543004, 43103, 43090, 43100, 43107, 44075	98%	114	541138, 541151, 41494, 41535, 41463, 41537, 541039, 41477, 41532, 541144, 41046, 41536, 541137, 541035, 41533, 41343, 41530, 41503, 41357, 41534, 541037, 541055, 41445, 541036	88%			
HELIDON	Lockyer Valley Regional	No	No	Yes	Brisbane	Lockyer Creek	High	Not Available	1,070	4.3	0.5	12%	5%	684	9.9	876	9	0	0	9	540405, 540517, 540386, 40829, 540143, 540566, 540507, 540527, 540589	83%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%
HERBERTON	Tablelands Regional	No	No	Not assessed	Herbert	Herbert River	Not Available	Low	1,300	2.8	0.0	1%	1%	107	13.4	1,242	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
HERITAGE RANGY	Logan City	No	No	Not assessed	Logan-Albert	Logan River	Not Available	High	4,874	2.8	0.0	0%	0%	35	4.0	1,084	24	0	0	1	540692	58%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
HERVEY RANGE	Townsville City	No	No	Not assessed	Black	Black River	Not Available	Very Low	21	0.2	0.0	0%	0%	133	10.3	1,361	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
HIDDEN VALLEY	Charters Towers Regional	No	No	Not assessed	Burdekin	Upper Burdekin River	Not Available	Extreme	76	0.0	0.0	97%	99%	161	15.7	710	9	0	0	1	532063	7%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
HILLCREST	Logan City	No	No	Not assessed	Logan-Albert	Logan River	Not Available	Medium	5,141	2.8	0.0	0%	0%	123	5.3	1,084	24	0	0	3	40719, 540097, 540646	63%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
HOLLOWAYS BEACH	Cairns Regional	Yes	Yes	Not assessed	Barron	Barron River	Not Available	High	3,164	1.8	1.8	99%	99%	2,182	10.8	1,483	12	6	6	15	31205, 531061, 531072, 531037, 531048, 31170, 531049, 531041, 31171, 531019, 531036, 531040, 31173, 531027, 531039	99%	6	31075, 531017, 531030, 531034, 31188, 531033	82%	3	531098, 531066, 531065	48%	3	531064, 531070, 531028	87%	0	0	0%	0	0	0%			
HOLMVIEW	Logan City	No	No	Not assessed	Logan-Albert	Logan River	Not Available	High	1,398	2.5	0.0	0%	0%	2,854	7.8	1,084	9	12	9	20	540590, 40710, 40762, 40940, 540690, 540214, 540515, 540689, 40542, 40935, 540596, 540688, 540675, 40665, 40878, 540674, 540078, 540692, 540091, 540079	98%	8	540270, 540271, 40939, 540607, 540481, 540615, 540512, 540530	89%	5	540402, 40714, 40945, 540509, 540510	88%	17	540436, 40943, 540074, 40754, 40946, 40539, 40832, 540407, 40944, 540229, 540475, 540591, 40677, 40841, 40947, 40729, 40949	76%	0	0	0%	0	0	0%			
HOME HILL	Burdekin Shire	Yes	Yes	No	Burdekin	Lower Burdekin River	High	Extreme	3,028	3.9	3.9	100%	100%	127,740	3.9	754	12	48	12	8	33289, 33287, 533090, 33122, 33279, 33286, 33204, 33288	100%	0	0	98%	3	33278, 33291, 33205	99%	10	34097, 534001, 34029, 534013, 33292, 533094, 34094, 534010, 533011, 533075, 532085	97%	16	534016, 533123, 534008, 534012, 34087, 533094, 34094, 534010, 534017, 533015, 533102, 533096, 530017, 533107, 532086, 532063	83%	21	35236, 535296, 535146, 535145, 35229, 535053, 535102, 36083, 534024, 536008, 534019, 536007, 34022, 533032, 530021, 530003	82%			
HOMESTEAD	Charters Towers Regional	No	No	Not assessed	Burdekin	Suttor River	Not Available	Very Low	17	0.3	0.3	100%	100%	185	5.4	594	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
HOWARD	Fraser Coast Regional	Yes	Yes	Yes	Burrum	Burrum River	High	Extreme	2,245	9.9	1.6	16%	4%	737	3.4	1,040	12	0	6	4	40906, 540267, 540449, 40907	91%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
HUGHENDEN	Flinders Shire	No	Yes	Yes	Flinders	Flinders River	High	Extreme	1,402	6.0	2.6	44%	27%	2,508	3.5	515	9	12	9	2	30024, 530023	99%	0	0	86%	1	530030	93%	0	0	0%	0	0	0%	0	0	0%			
HULL HEADS	Cassowary Coast Regional	No	No	Not assessed	Tully	Tully River	Not Available	Extreme	14	0.0	0.0	90%	100%	79	4.4	2,652	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
HUNGERFORD	Bulloo Shire	Yes	Yes	No	Paroo	Paroo River	High	Low	161	0.3	0.1	29%	43%	21,724	1.4	308	9	24	9	1	44181	100%	0	0	97%	1	544015	98%	1	44153	73%	3	44198, 44085, 44222	54%	1	44191	54%			
IDERAWAY	North Burnett Regional	No	Yes	Not assessed	Burnett	Lower Burnett River	High	Medium	146	0.3	0.1	22%	8%	22,874	6.6	816	9	12	9	19	40455, 539069, 539184, 39191, 539038, 539187, 39323, 539191, 539049, 539190, 39320, 539066, 539197, 39073, 39324, 539194, 539186, 539055, 539200	100%	4	39321, 539189, 539052, 539193	89%	9	540262, 540698, 40722, 539037, 539188, 39259, 39318, 539183, 539035	97%	21	540056, 540055, 539042, 539181, 39177, 539074, 539051, 539203, 39236, 39000, 39319, 539218, 539039, 539204, 539201	87%	8	540231, 42059, 539114, 539064, 539182, 539092, 539044, 539202	58%	0	0	0%			
ILFRACOMBE	Longreach Regional	No	No	Not assessed	Cooper Creek	Thomson River	Not Available	Very Low	348	0.6	0.0	0%	0%	177	1.0	435	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
IMBIL	Gympie Regional	No	Yes	Yes	Mary	Upper Mary River	High	Extreme	983	5.2	1.2	24%	43%	618	15.6	1,354	9	6	6	6	540575, 540264, 40481, 540514, 40099, 40777	95%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
INGHAM	Hinchinbrook Shire	Yes	Yes	Yes	Herbert	Herbert River	High	Extreme	4,833	7.1	7.1	100%	100%	8,724	8.7	1,242	24	24	24	10	532011, 32149, 32173, 32171, 532012, 532067, 532028, 32091, 32174, 532006	99%	2	532010, 32184	93%	1	32170	99%	5	532080, 32169, 532066, 32018, 531078	85%	6	531081, 531079, 531060, 531021, 531015, 531059	56%	0	0	0%			
INGLEWOOD	Goondiwindi Regional	Yes	Yes	No	Border Rivers	Macintyre Brook	High	Extreme	1,072	3.2	2.3	72%	97%	3,379	4.5	653	9	9	9	14	41495, 541111, 41137, 541109, 541033, 41457, 541110, 41406, 41520, 41123, 541107, 41391	100%	2	41491, 541112	22%	0	0	0%	0	0	0%	0	0	0%						
INJUNE	Moray Regional	No	No	Yes	Fitzroy	Dawson River	High	Very Low	986	1.4	0.4	31%	48%	724	3.9	676	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
INNSFAIL	Cassowary Coast Regional	Yes	Yes	Yes	Johnstone	North Johnstone River	High	Extreme	8,558	8.3	6.6	79%	77%	1,621	11.0	2,850	24	6	6	16	32155, 32160, 32161, 532025, 532070, 32152, 32166, 532092, 532009, 532013, 32145, 32163, 32165, 532014, 532104, 532023	98%	2	531084, 531103	22%	0	0	0%	0	0	0%	0	0	0%						
INNOT HOT SPRINGS	Tablelands Regional	No	No	Not assessed	Herbert	Herbert River	Not Available	Low	287	0.4	0.0	10%	15%	78	7.3	1,242	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
IPSWICH	Ipswich City	Yes	Yes	Yes	Brisbane	Bremer River	High	Not Available	67,211	50.3	0.0	0%	0%	12,258	10.8	936	24	12	12	51	540195, 40445, 540154, 540387, 540065, 540316, 540217, 540666, 40792, 540062, 540210, 540574, 540180, 40816, 540505, 540550, 40873, 540314, 540502, 540216, 40549, 540193, 540388, 40701, 540194, 540583, 540248, 540669, 40838, 40872, 40836, 540313, 408	100%	22	540068, 540157, 40702, 540064, 540149, 40662, 540174, 40817, 540544, 540153, 540051, 540479, 540547, 540701, 540259, 540069, 540178, 40763, 540049, 540177, 540302, 540260	96%	21	540057, 540058, 540151, 40440, 540317, 40751, 40835, 540528, 540567, 40716, 540158, 540047, 540472, 540563, 540680, 540511, 540516, 540050, 540529, 540473, 540546	84%	46	540364, 540474, 40135, 540513, 540365, 540549, 540568, 540406, 540518, 540067, 540152, 540405, 540517, 540386, 540156, 40444, 540363, 40829, 540143, 540566, 540507, 540527	86%	8	540046, 540059, 540188, 40387, 540040, 540261, 540044, 540146	62%	0	0	0%			
IRVINEBANK	Mareeba Shire	No	No	Not assessed	Mitchell	Walsh River	Not Available	Extreme	347	0.4	0.0	0%	0%	31	20.0	873	9	0	0	2	531090, 531088	24%	0	0	0%	0	0	0%	0	0	0%	0	0	0%						





Settlement	LGA	BOM forecast localo	Riverine flood risk	Flash flood risk	Settlement details								Catchment details			Flood warning time		0.6hr from settlement		6.9hr from settlement		9.12hr from settlement		12.24hr from settlement		24.48hr from settlement		~48hr from settlement														
					Basin	Sub basin	BOM risk	DCS risk	Population (2011 census)	Settlement area (km2)	Settlement area within QFAO (km2)	% settlement within QFAO	% population within QFAO	Catchment area above settlement (km2)	Catchment mean slope (%)	Average annual rainfall	Desirable flood warning time (based on population)	Maximum feasible flood warning time (based on catchment)	Target flood warning time	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged								
MACKAY	Mackay Regional	Yes	Yes	Yes	Pioneer	Pioneer River	High	Extreme	21,882	13.6	5.1	38%	37%	1,564	10.3	1,464	24	9	9	9	533060, 33303, 33246, 533105, 33283, 33300, 33152, 533125, 533145	99%	9	33301, 533026, 33299, 33282, 33277, 533069, 33302, 33281, 33304	95%	7	533089, 533064, 533041, 533059, 533092, 33141, 533111	37%	0	0	0%	0	0	0%	0	0	0%					
MACKAY NORTH	Mackay Regional	No	Yes	Not assessed	Pioneer	Pioneer River	Not Available	Extreme	31,064	18.8	3.0	16%	7%	1,609	9.6	1,464	24	9	9	11	533060, 33303, 33246, 533105, 33283, 33300, 533061, 33152, 533125, 533145, 533144	98%	9	33301, 533026, 33299, 33282, 33277, 533069, 33302, 33281, 33304	95%	7	533089, 533064, 533041, 533059, 533092, 33141, 533111	37%	0	0	0%	0	0	0%	0	0	0%					
MACKNADE	Hinchinbrook Shire	No	Yes	Yes	Herbert	Herbert River	High	Extreme	308	0.6	0.6	100%	100%	8,779	8.8	1,242	9	24	9	13	32149, 32173, 32171, 532012, 532027, 32094, 532067, 32156, 32185, 532028, 32091, 32174, 532006	100%	3	532011, 532010, 32184	88%	1	32170	94%	4	532080, 32169, 532066, 32018	83%	7	531078, 531081, 531079, 531060, 531021, 531015, 531059	62%	0	0	0%	0	0	0%		
MALANDA	Tablelands Regional	No	No	Not assessed	Johnstone	North Johnstone River	Not Available	Medium	2,677	11.1	0.9	8%	7%	118	7.3	2,830	12	0	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%							
MALMOE	North Burnett Regional	No	Yes	Not assessed	Burnett	Upper Burnett River	Not Available	Medium	1	0.0	0.0	100%	100%	7,254	8.5	711	9	12	9	8	39321, 539189, 39259, 39318, 539183, 539035, 539052, 539193	96%	7	539074, 539051, 539203, 39236, 39000, 39319, 539218	75%	2	539039, 539204	37%	13	539201, 539040, 539196, 39165, 539198, 539185, 539088, 539114, 539064, 539182, 539092, 539044, 539202	41%	0	0	0%	0	0	0%	0	0	0%		
MANDALAY	Whitsunday Regional	No	No	Not assessed	Proserpine	Proserpine River	Not Available	Medium	306	0.6	0.0	0%	0%	15	32.5	1,451	9	0	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0	0	0%								
MANY PEAKS	Gladstone Regional	No	No	Not assessed	Boyne	Boyne River	Medium	Low	31	0.1	0.1	79%	100%	250	21.3	963	9	0	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0	0	0%								
MARBURG	Ipswich City	No	No	Not assessed	Brisbane	Brisbane River	Not Available	High	1,431	4.4	0.0	0%	0%	58	6.1	928	9	0	0	1	540312	29%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0%							
MAREEBA	Mareeba Shire	No	Yes	Yes	Barron	Barron River	Medium	High	10,209	21.0	2.9	14%	11%	1,164	9.8	1,483	24	0	6	9	531098, 531066, 531065, 31075, 531017, 531030, 531034, 31188, 531033	73%	3	531064, 531070, 531028	96%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0	0%			
MARIAN	Mackay Regional	No	No	Not assessed	Pioneer	Pioneer River	Medium	High	3,024	2.1	1.3	59%	34%	1,429	13.2	1,464	12	0	0	19	33301, 533026, 33299, 33282, 533089, 533064, 533041, 33277, 533069, 33302, 33281, 33304, 33152, 533125, 533145, 533059, 533092, 33141	97%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0	0%			
MAROOCHY NORTH SHORE	Sunshine Coast Regional	No	No	Not assessed	Maroochy	Maroochy River	Not Available	Extreme	10,001	5.5	0.0	0%	0%	527	7.1	1,640	24	0	0	26	540222, 540420, 540289, 540087, 540419, 540083, 540506, 540266, 540088, 540424, 540617, 540461, 540263, 540095, 540089, 540599, 540613, 540462, 540616, 540265, 540092	91%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0%	
MAROOCHYDOR E	Sunshine Coast Regional	Yes	No	Yes	Maroochy	Maroochy River	High	Extreme	14,451	7.4	0.0	0%	0%	526	6.7	1,640	24	0	0	26	540222, 540420, 540289, 540087, 540419, 540083, 540506, 540266, 540088, 540424, 540617, 540461, 540263, 540095, 540089, 540599, 540613, 540462, 540616, 540265, 540092	91%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0	0%
MARSDEN	Logan City	No	No	Not assessed	Logan-Albert	Logan River	Not Available	Extreme	11,262	6.3	0.0	0%	0%	2,765	8.4	1,084	24	12	12	18	540590, 40710, 40762, 40940, 540690, 540214, 540515, 540689, 40542, 40935, 540596, 540688, 540675, 40665, 40878, 540674, 540078, 540692	100%	8	540270, 540271, 40939, 540607, 540481, 540615, 540512, 540530	91%	4	40714, 40945, 540509, 540510	89%	18	540436, 40943, 540074, 40754, 40946, 40539, 40832, 540407, 40944, 540402, 540229, 540475, 540591, 40677, 40841, 40947, 40729, 40949	77%	0	0	0%	0	0	0%	0	0	0%		
MARTON	Cook Shire	No	No	Not assessed	Endeavour	Endeavour River	Not Available	Low	880	10.4	4.4	43%	43%	963	8.1	1,844	9	0	0	1	531069	36%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0	0%						
MARYBOROUGH	Fraser Coast Regional	Yes	Yes	No	Mary	Lower Mary River	High	Extreme	26,475	52.4	16.5	31%	51%	8,700	10.2	1,047	24	12	12	15	40679, 40833, 540678, 40203, 540706, 540251, 40896, 40390, 540686, 540677, 540039, 540027, 40443, 540708, 540637	100%	0	0	77%	6	540288, 540043, 540687, 40688, 40826, 40825	89%	29	40386, 540331, 40755, 540330, 40814, 540575, 540264, 40481, 540514, 40099, 40777, 540463, 540327, 40780, 40778, 40782, 540326, 40781, 540569, 540572, 540476, 540618	72%	7	540403, 540647, 540426, 540620, 540427, 40830, 540332	64%	0	0	0%	0	0	0%		
MARYFARMS	Mareeba Shire	No	No	Not assessed	Mitchell	Mitchell River	Not Available	Medium	4	0.0	0.0	0%	0%	92	21.0	976	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0%							
MARYVALE	Southern Downs Regional	No	No	Not assessed	Balonne-Candamino	Condamine River	Not Available	High	356	2.0	0.6	29%	24%	190	22.8	673	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0%							
MAXWELTON	Richmond Shire	No	No	Not assessed	Flinders	Flinders River	Medium	Not Available	107	4.3	4.3	100%	100%	260	0.0	515	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0%							
MCKINLAY	Mckinlay Shire	No	Yes	No	Flinders	Clincurry River	High	Low	148	0.2	0.1	72%	75%	111	0.0	442	9	0	6	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0%							
MEADOWBROOK	Logan City	No	No	Not assessed	Logan-Albert	Logan River	Not Available	Extreme	3,005	4.7	0.0	0%	0%	2,840	8.0	1,084	12	12	12	20	540590, 40710, 40762, 40940, 540690, 540214, 540515, 540689, 40542, 40935, 540596, 540688, 540675, 40665, 40878, 540674, 540078, 540692, 540091, 540079	99%	8	540270, 540271, 40939, 540607, 540481, 540615, 540512, 540530	88%	4	40714, 40945, 540509, 540510	85%	18	540436, 40943, 540074, 40754, 40946, 40539, 40832, 540407, 40944, 540402, 540229, 540475, 540591, 40677, 40841, 40947, 40729, 40949	72%	0	0	0%	0	0	0%					
MEANDARRA	Western Downs Regional	No	No	Not assessed	Balonne-Candamino	Condamine River	Medium	Medium	257	1.4	0.6	47%	83%	374	1.3	673	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0%							
MERINDA	Whitsunday Regional	No	No	Not assessed	Don	Don River	Not Available	Extreme	551	0.4	0.3	61%	71%	46	1.1	940	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0%							
MIARA	Bundaberg Regional	No	Yes	Not assessed	Kolan	Kolan River	Not Available	High	20	0.2	0.2	91%	0%	2,679	8.4	958	9	12	9	4	539047, 539205, 539091, 539211	93%	6	539046, 539210, 39011, 539050, 539207, 539113	90%	1	539206	59%	3	539048, 539214, 39137	53%	0	0	0%	0	0	0%	0	0	0%		
MIDDLETON	Winton Shire	No	No	Not assessed	Diamantina	Diamantina River	Not Available	Medium	52	0.2	0.2	100%	0%	40	1.3	272	9	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0%							
MILES	Western Downs Regional	No	Yes	No	Balonne-Candamino	Balonne River	High	Low	1,857	12.5	2.7	22%	41%	2,707	2.1	551	9	6	6	1	42049	100%	0	0	0%	0	0	0%	0	0	0%	0	0	0	0	0%						

















Settlement	LGA	BOM forecast localio	Riverine flood risk	Flash flood risk	Settlement details								Catchment details			Flood warning time		0.6hr from settlement		6.9hr from settlement		9.12hr from settlement		12.24hr from settlement		24.48hr from settlement		>48hr from settlement																
					Basin	Sub basin	BOM risk	DCS risk	Population (2011 census)	Settlement area (km2)	Settlement area within QFAO (km2)	% settlement within QFAO	% population within QFAO	Catchment area above settlement (km2)	Catchment mean slope (%)	Average annual rainfall	Desirable flood warning time (based on population)	Maximum feasible flood warning time (based on catchment)	Target flood warning time	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged	# stream gauges	Gauge IDs	% of upstream catchment gauged										
WOODFORD	Moreton Bay Regional	Yes	Yes	No	Brisbane	Stanley River	High	Not Available	High	5,628	19.4	2.6	13%	10%	331	8.9	1,264	24	0	6	6	40627, 540337, 540338, 540495, 540496, 540497, 540498, 540499	92%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%						
WOODHILL	Logan City	No	No	Not assessed	Logan-Albert	Logan River	Not Available	High	High	343	1.5	0.0	0%	0%	1,624	12.5	1,084	9	9	9	9	40944, 540402, 40714, 40945, 540270, 540271, 40939, 540607, 540481	88%	6	40943, 540074, 40754, 40946, 40539, 40832	71%	6	540436, 540407, 540229, 540475, 540591, 40677	21%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
WOODRIDGE	Logan City	No	No	Not assessed	Logan-Albert	Logan River	Not Available	High	High	12,779	4.4	0.0	0%	0%	27	4.0	1,084	24	0	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%								
WOODSTOCK	Townsville City	No	No	Not assessed	Haughton	Haughton River	Not Available	Medium	Medium	457	1.3	0.0	0%	0%	67	7.2	903	9	0	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%								
WOOLLOGA	Gympie Regional	No	No	Yes	Mary	Lower Mary River	High	Extreme	Extreme	276	0.5	0.2	50%	67%	694	11.8	1,047	9	0	0	2	40811, 40365	91%	0	0	0%	0	0	0%	0	0	0%	0	0	0%									
WOOMBYE	Sunshine Coast Regional	No	No	Not assessed	Maroochy	Maroochy River	Not Available	Extreme	Extreme	3,897	6.7	0.0	0%	0%	130	8.6	1,640	12	0	0	4	540222, 540420, 540419, 540427	74%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%						
WOORABINDA	Woorabinda Aboriginal Shire	No	Yes	Not assessed	Fitzroy	Dawson River	Medium	Not Available	Not Available	936	0.6	0.5	89%	92%	1,082	5.0	676	9	6	6	1	540627, 55083	97%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%						
WORREE	Cairns Regional	No	No	Not assessed	Mulgrave-Duroll	Mulgrave River	Not Available	Medium	Medium	4,800	4.2	2.1	50%	20%	45	13.6	2,658	24	0	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%								
WOWAN	Banana Shire	No	No	Yes	Fitzroy	Dawson River	High	High	High	238	0.5	0.5	100%	100%	112	4.0	676	9	0	0	1	539173	51%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%						
WYANDRA	Paroo Shire	Yes	Yes	No	Warrego	Warrego River	High	Extreme	Extreme	212	0.3	0.3	100%	100%	38,777	2.3	472	9	0	24	9	3	544014, 44158, 44157	100%	0	0	98%	0	0	99%	14	44188, 44206, 44233, 44189, 44230, 544021, 44224, 44213, 544028, 544020, 44156, 44205, 44229, 544027	99%	13	44193, 44232, 44201, 44208, 44209, 544011, 44118, 44200, 44006, 44052, 44199, 44190, 35283	60%	0	0	0%	0	0	0%		
YAAMBA	Livingstone Shire	Yes	Yes	No	Fitzroy	Fitzroy River	High	High	High	314	0.3	0.3	100%	100%	133,509	5.0	845	9	48	9	3	33076, 533029, 33285	100%	0	0	98%	0	0	98%	6	539056, 539104, 539102, 539041, 39044, 534031	98%	13	539068, 39308, 539057, 539062, 539173, 35270, 539219, 539090, 539016, 535113, 535024, 34096, 34082	98%	111	535013, 535111, 35273, 535142, 35271, 535032, 35115, 35282, 35096, 535044, 535045, 535055, 535049, 539163, 539070, 539065, 539164, 535110, 39315, 539166, 539172, 539175, 539043, 535054, 535052	98%	0	0	0%	0	0	0%
YABULU	Townsville City	No	No	Not assessed	Black	Black River	Not Available	High	High	704	2.0	2.0	100%	100%	96	5.4	1,361	9	0	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%								
YALBOROO	Mackay Regional	No	No	Not assessed	O'Connell	O'Connell River	Not Available	Medium	Medium	16	0.1	0.0	33%	25%	20	18.0	1,618	9	0	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%								
YANDINA	Sunshine Coast Regional	Yes	No	Not assessed	Maroochy	Maroochy River	Not Available	Extreme	Extreme	3,420	12.9	0.0	0%	0%	198	8.5	1,640	12	0	0	14	540617, 540461, 540263, 540089, 540599, 540613, 540462, 540616, 540265, 540092, 540460, 540608	57%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
YARAKA	Longreach Regional	No	No	Not assessed	Cooper Creek	Barcoo River	Not Available	Very Low	Very Low	44	0.2	0.2	100%	100%	49	0.0	452	9	0	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%								
YARRABILBA	Logan City	No	No	Not assessed	Logan-Albert	Logan River	Not Available	Medium	Medium	809	12.6	0.0	0%	0%	661	14.2	1,084	9	6	6	11	540375, 40936, 540303, 40937, 540073, 540614, 540480, 40544, 40738	87%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%			
YELARBON	Goondwindi Regional	No	Yes	No	Border Rivers	Macintyre Brook	High	Extreme	Extreme	495	1.0	0.5	56%	96%	175	1.0	653	9	0	6	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%								
YORKEYS KNOB	Cairns Regional	No	No	Not assessed	Barron	Barron River	Not Available	High	High	2,766	1.7	1.0	61%	39%	45	6.1	1,483	12	0	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%								
YOWAH	Paroo Shire	No	No	Not assessed	Paroo	Paroo River	Medium	Very Low	Very Low	109	0.5	0.0	0%	0%	46	2.3	308	9	0	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%								
YULEBA	Maranoa Regional	No	No	Yes	Balonne-Coedamine	Balonne River	High	Medium	Medium	362	1.7	0.2	13%	23%	992	2.8	551	9	0	0	0	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%								



Stream Gauge Type					Stream Gauge Communications							Rain gauge data	Rain gauge coverage				Rain Gauge Type					Rain Gauge Communications						
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment
11	0	1	2	13	12	0	11	1	2	1	26	31184, 531028, 31217, 531097, 531032, 531054, 31075, 531017, 531034, 31108, 31210, 531035, 31188, 531033, 31205, 531042, 31011, 531037, 531048	83	4	5	7	13	16	2	0	4	4	6	0	16	0	3	1
31	0	1	6	12	11	0	25	0	7	7	46	540681, 540456, 540474, 40135, 540173, 40198, 540365, 540549, 40867, 540058, 540151, 540195, 40094, 540068, 540154, 540387, 540157, 540065, 540316, 540217, 540317, 40493, 540668, 40702, 40912, 540062, 540574, 540180	40	3	4	6	9	33	1	0	5	7	6	1	26	0	5	8
1	0	0	1	6	6	0	1	0	1	0	16	32018, 31191, 531047, 31197, 531081, 531082, 531101, 531060, 31196, 31069, 31046, 531021, 531015, 31200	325	6	9	13	26	8	0	0	4	4	3	0	8	1	3	1
0	0	0	0	0	0	0	0	0	0	0	2	35007, 535135	72	4	6	10	17	1	0	0	1	0	0	0	0	0	1	1
7	0	0	2	12	12	0	7	0	2	0	29	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 40944, 540402, 540229, 540475, 40677, 540555, 40948, 40714, 40644, 40647, 40648, 40649	50	3	4	6	11	12	1	0	3	13	9	1	11	0	3	5
0	0	0	6	2	1	0	0	1	6	0	28	38000, 38014, 538002, 38003, 38010, 37109, 38032, 537003, 15618, 15560, 37106, 37034, 15534, 37107, 15584, 37041, 37043, 37058, 37019, 15587, 37063, 15019, 37069, 15004	5826	25	38	56	243	0	4	2	20	2	2	0	0	1	22	3
33	0	1	9	24	22	2	20	0	10	13	88	40167, 40942, 40933, 40932, 540436, 40931, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 540584, 40832, 540207, 40876, 40944, 40413, 40490, 540402, 540229, 540475,	41	3	4	5	11	50	1	1	11	25	16	1	37	0	12	22
4	0	0	0	1	1	0	2	0	0	2	7	540537, 540536, 540533, 540532, 540531, 540530	19	2	0	3	6	7	0	0	0	0	0	4	0	0	3	
0	0	0	6	3	0	1	0	0	6	2	12	44075, 44139, 43099, 43000, 43102, 43020, 543011, 43060, 54003, 43008, 43037, 54003	1610	14	21	28	47	0	0	1	8	3	0	1	0	0	8	3
6	0	0	1	5	3	2	5	0	1	1	18	40932, 40931, 540584, 40413, 40936, 40042, 40930, 40937, 540559, 540614, 540480, 40544, 40738, 40938, 40341,	40	3	4	5	8	11	0	0	3	4	2	0	10	0	3	3
2	0	0	3	5	4	1	2	0	3	0	21	35165, 35110, 35236, 535296, 535146, 535145, 535147, 35229, 35000, 535053, 535102, 36084, 36083, 34078, 35094, 36160, 536008, 36050	1651	14	21	29	58	3	0	0	13	5	4	1	3	0	12	1
10	0	0	4	12	12	0	10	0	4	0	38	532011, 32043, 32173, 32142, 32171, 532012, 532027, 32094, 532067, 32191, 532028, 32091, 32174, 532006, 32172, 532010, 32184, 32170, 532080, 32169, 32176, 32018, 31191, 32105,	230	6	9	12	26	19	0	0	9	10	8	0	19	2	7	2
5	0	0	0	4	4	0	0	0	0	5	17	539177, 39297, 539139, 539222, 39175, 539138, 539036, 539129, 539223, 539084, 539140, 539128,	138	4	6	8	15	12	0	0	2	3	3	0	0	0	1	13
2	0	0	0	0	0	0	1	0	0	1	6	540078, 540237, 540235, 540402, 40943, 540074	11	0	2	3	5	5	0	0	1	0	0	4	0	1	1	
24	0	1	6	19	19	0	15	0	7	9	66	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947,	43	3	4	5	11	36	1	0	8	21	14	1	27	0	8	16
2	0	0	1	9	9	0	2	0	0	1	14	31184, 531028, 31217, 531097, 531032, 531054, 31075, 531017, 531034,	87	4	5	7	13	6	1	0	3	4	5	0	6	0	2	1
0	0	0	0	0	0	0	0	0	0	0	3	540650, 40021, 40334	103	4	7	10	17	1	0	0	1	1	0	1	0	0	1	1
0	0	0	0	3	2	0	0	0	0	1	2	39290, 539111	336	5	8	10	18	0	0	0	1	1	1	0	0	0	1	0
3	0	0	1	10	10	0	3	0	0	1	15	31184, 531028, 31217, 531097, 531032, 531054, 31075, 531017, 531034,	92	4	5	7	13	7	1	0	3	4	5	0	7	0	2	1
0	0	1	9	4	1	0	0	2	10	1	27	38002, 38026, 38020, 38017, 38031, 38073, 538007, 38015, 38030, 538003, 37014, 37079, 37122, 37061, 37006, 37118, 37039, 37056, 37009, 37046, 537005, 37000, 37105, 37030	4170	22	35	51	101	0	2	1	21	3	3	0	0	2	18	4
1	0	0	2	8	1	0	1	7	2	0	29	34084, 30083, 30009, 533096, 530017, 30145, 30137, 30052, 30082, 30032, 532085, 533107, 32089, 532016, 532086, 532017, 32063, 32104, 532049, 532063, 30145, 30146, 30037, 30137	1236	11	16	22	41	3	0	1	17	8	1	0	3	7	16	2
1	0	0	0	1	1	0	1	0	0	0	5	33307, 532045, 532046, 532046, 32060	56	3	5	6	9	2	1	0	1	1	2	0	2	0	1	0
2	0	0	4	1	1	0	0	0	4	2	13	535117, 35049, 535043, 535119, 535121, 535115, 35049, 35259, 535126,	446	9	14	20	37	6	1	1	3	2	3	0	0	0	4	6
0	0	0	0	0	0	0	0	0	0	0	3	540705, 40020, 540493	215	5	7	9	16	1	0	0	1	1	0	0	1	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	532008, 32045	89	3	5	7	13	1	0	0	1	0	0	1	0	1	0	0

Stream Gauge Type					Stream Gauge Communications						Rain gauge data	Rain gauge coverage				Rain Gauge Type					Rain Gauge Communications							
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment
0	0	0	0	0	0	0	0	0	0	0	1	35003	746	8	11	15	21	0	0	0	1	0	0	0	0	0	1	0
0	0	0	0	1	1	0	0	0	0	0	1	533104	182	6	9	13	18	0	0	0	0	1	1	0	0	0	0	0
1	0	0	0	1	1	0	1	0	0	0	4	532047, 532048, 532007, 532082	53	3	4	6	10	3	0	0	0	1	1	0	3	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	535144	79	3	5	9	15	1	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	None	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	535033, 535082	75	3	5	7	11	1	0	0	0	1	0	1	1	0	0	0
0	0	1	1	1	1	0	0	0	2	0	6	44010, 544022, 44144, 44112, 44045, 44017	937	9	14	20	32	0	0	1	4	1	1	0	0	0	4	1
23	0	0	11	27	17	8	1	0	10	25	76	40113, 40922, 40138, 40671, 540697, 540055, 40177, 542013, 542011, 40722, 540694, 42036, 42075, 40708, 539042, 539181, 42059, 40455, 539069, 539184, 542015, 539179, 39191	301	7	10	14	31	36	2	2	21	15	8	8	0	0	17	43
9	0	0	11	37	34	0	0	2	11	10	116	35039, 35081, 43051, 535134, 35014, 43037, 535129, 535013, 35242, 535130, 535066, 535111, 35273, 535065, 35154, 43108, 35006, 535142, 35271, 535137, 43015, 43054, 535032, 35135	416	7	11	15	33	32	1	2	36	45	35	6	1	2	39	33
2	0	0	1	1	1	0	2	0	1	0	9	540207, 40876, 40490, 40841, 40947, 40139, 540455, 540306, 540308, 540639, 540309, 540632, 540207	40	0	3	4	7	5	0	0	2	2	1	0	5	0	2	1
3	0	0	1	1	1	0	2	0	1	1	7	540306, 540308, 540639, 540309, 540632, 540207	86	4	6	8	14	6	0	0	0	1	1	0	5	0	0	1
2	0	0	0	1	0	1	1	0	0	1	6	40793, 40786, 540646, 40659, 40784, 540725	19	2	0	3	5	5	0	0	1	0	0	0	4	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	None	3	4	5	8	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	1	1	0	0	0	1	0	7	538002, 38003, 37106, 37034, 37107, 37041, 37030	2,173	17	27	37	76	0	1	2	3	1	2	0	0	0	5	0
4	0	0	0	2	2	0	4	0	0	0	15	33270, 33306, 33263, 533135, 33269, 33110, 533028, 33265, 33266, 33267, 33147, 33268	75	3	5	7	14	9	0	1	2	3	2	0	9	1	3	0
6	0	0	0	4	4	0	0	0	0	6	18	539177, 39297, 539139, 539222, 39175, 539138, 539036, 539129, 539223, 539084, 539140, 539128	135	4	6	8	15	13	0	0	2	3	3	0	0	0	1	14
0	0	0	0	0	0	0	0	0	0	0	0	0	None	6	7	8	10	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	12	14	15	17	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	0	0	0	2	533109, 533117	43	2	3	4	7	2	0	0	0	0	0	0	2	0	0	0
169	0	2	16	57	49	3	135	0	18	39	333	540681, 540456, 540474, 40135, 540173, 40198, 540365, 540549, 40867, 540058, 540151, 540171, 540570, 540195, 540573, 40094, 540068, 540154, 540387, 540157, 540600, 540065, 40793, 540169, 540626, 40786, 540316, 540217, 540317, 40493	43	3	4	6	17	235	5	1	53	39	31	3	186	0	49	64
8	0	0	0	2	2	0	8	0	0	0	12	541083, 541082, 541081, 541085, 541086, 541084, 41095, 541087, 41175	43	3	5	7	11	9	1	1	0	1	2	0	9	0	1	0
0	0	0	0	1	1	0	0	0	0	0	1	41082	380	6	8	11	15	0	0	0	1	0	0	0	0	0	1	0
1	0	0	0	0	0	0	0	0	0	1	3	540235, 540692, 40964	10	1	2	3	4	2	0	0	1	0	0	0	1	0	1	1
21	0	1	6	19	19	0	12	0	7	9	58	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947	47	3	4	5	11	29	1	0	7	21	14	1	20	0	7	16
10	0	0	0	4	3	0	10	0	0	1	14	40999, 540346, 540603, 540344, 540026, 540350, 540348, 540339, 540222, 540422, 540421, 540220	19	0	2	3	5	12	0	0	1	1	1	0	12	0	0	1
0	0	0	0	0	0	0	0	0	0	0	3	539177, 39297, 539139	132	4	5	7	12	2	0	0	1	0	0	0	0	0	1	2
36	0	0	17	49	39	8	1	0	14	40	122	540454, 540041, 40158, 40113, 40500, 40922, 540551, 540042, 40138, 540025, 540090, 40251, 40671, 540697, 540055, 40177, 542013, 542011, 40722, 540694, 42036, 42075, 40708, 539042, 539181, 42059, 40455, 539069, 539184	266	6	10	14	33	55	3	3	31	30	18	13	0	0	24	67
38	0	1	6	12	11	0	30	0	7	9	51	540681, 540456, 540474, 40135, 540173, 40198, 540365, 540549, 40867, 540058, 540151, 540195, 40094, 540068, 540154, 540387, 540157, 540065, 540316, 540217, 540317, 40493, 540668, 540666, 40702, 40912, 40792, 540062	39	3	4	5	9	37	1	0	6	7	6	1	28	0	5	11



Stream Gauge Type					Stream Gauge Communications							Rain gauge data	Rain gauge coverage				Rain Gauge Type					Rain Gauge Communications						
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment
33	0	0	16	48	38	8	1	0	13	37	116	540454, 540041, 40158, 40113, 40500, 40922, 540551, 540042, 40138, 540025, 540090, 40251, 40671, 540697, 540055, 40177, 542013, 542011, 40722, 540694, 42036, 42075, 40708, 539042, 539181, 42059, 40455, 539069, 539184.	275	6	10	14	33	51	2	3	30	30	17	13	0	0	23	63
0	0	2	2	10	2	8	0	0	4	0	21	41128, 41521, 41169, 42027, 41112, 41366, 41162, 42097, 42104, 41489, 41124, 41348, 42116, 542004, 41152, 41488, 42115, 41546, 42102, 41508.	556	7	11	14	21	0	0	1	4	16	1	15	0	0	5	0
0	0	0	1	0	0	0	0	0	1	0	3	2170, 2907, 2904.	641	10	20	29	39	0	1	1	1	0	1	0	0	0	2	0
36	0	0	17	51	39	10	1	0	14	40	122	540454, 540041, 40158, 40113, 40500, 40922, 540551, 540042, 40138, 540025, 540090, 40251, 40671, 540697, 540055, 40177, 542013, 542011, 40722, 540694, 42036, 42075, 40708, 539042, 539181, 42059, 40455, 539069, 539184.	266	6	10	14	33	55	3	3	31	30	18	13	0	0	24	67
15	0	0	0	1	1	0	6	0	0	9	27	540623, 540508, 540619, 540245, 540242, 540358, 540654, 40979, 540558, 540542, 40774, 540208, 540357, 540660, 540243, 540627, 540633, 540624, 540588, 540624, 540588.	16	0	2	3	5	23	0	0	2	2	1	0	11	0	2	13
1	0	0	0	1	1	0	1	0	0	0	5	33307, 532045, 532046, 532055, 532082.	57	3	5	6	9	3	1	0	0	1	2	0	3	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	0	0	5	6	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	1	1	0	6	0	0	8	26	540508, 540619, 540245, 540242, 540358, 540654, 40979, 540558, 540542, 40774, 540208, 540357, 540660, 540243, 540627, 540633, 540624, 540588.	15	0	2	3	5	22	0	0	2	2	1	0	11	0	2	12
0	0	0	0	2	1	0	0	0	0	1	6	31040, 531018, 31063, 31222, 31166, 33219.	49	3	4	5	9	0	1	0	4	1	1	0	0	0	4	1
0	0	0	0	3	2	0	0	0	0	1	1	539111	751	6	9	12	17	0	0	0	1	1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	10	11	12	13	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	41011, 541077	68	4	5	7	9	0	0	1	1	1	0	0	0	1	0	
0	0	0	1	0	0	0	0	0	1	0	2	37010, 37115.	1484	19	28	38	54	0	0	0	2	0	0	0	0	0	2	0
0	0	0	0	0	0	0	0	0	0	0	1	33323	54	3	4	5	8	0	0	1	0	0	0	0	0	1	0	
1	0	0	0	1	0	1	1	0	0	0	3	540584, 40042, 40937.	35	2	4	5	7	1	0	0	1	1	0	0	1	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	None	19	21	23	27	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	35016, 535128	307	6	10	13	20	1	0	0	1	0	0	0	0	1	1	
8	0	1	2	12	11	0	8	1	2	1	22	31184, 531028, 31217, 531097, 531032, 531054, 31075, 531017, 531034, 31108, 31210, 531035, 31188, 531033, 531037, 531048.	93	4	5	7	12	13	1	0	4	4	5	0	13	0	3	1
34	0	1	9	24	22	2	21	0	10	13	91	40167, 40942, 40933, 40932, 540436, 40931, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 540584, 40832, 540207, 40876, 40944, 40413, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841.	41	3	4	5	10	52	1	1	12	25	16	1	39	0	13	22
0	0	0	0	2	1	0	0	1	0	0	3	33012, 533091, 533126	476	7	10	14	24	0	0	1	2	1	0	0	1	1	0	
1	0	0	0	1	0	0	0	0	0	2	1	32004	31	3	4	6	8	0	0	1	0	0	0	0	0	1	0	
0	0	0	0	1	1	0	0	0	0	0	2	33071, 533014	51	2	4	6	10	0	0	1	1	1	0	0	0	1	0	
1	0	0	0	0	0	0	1	0	0	0	2	532065, 532099	38	3	4	5	9	1	0	0	0	1	1	0	1	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	8	10	12	16	0	0	0	0	0	0	0	0	0	0	0
18	0	1	14	18	16	0	11	0	15	9	68	541063, 41022, 541061, 41494, 41535, 541139, 41537, 41085, 41056, 41477, 41532, 41438, 541064, 541144, 41046, 540700, 41536, 540582, 541135, 541136, 541137, 541035, 41533, 41530, 41503, 41120, 41525, 41534, 41445, 541062, 41464.	111	4	6	9	20	29	1	1	25	12	9	2	16	0	21	20
6	0	0	1	5	3	2	5	0	1	1	18	40932, 40931, 540584, 40413, 40936, 40042, 40930, 40937, 540559, 540614, 540480, 40544, 40738, 40938, 40341.	40	3	4	5	8	11	0	0	3	4	2	0	10	0	3	3
13	0	1	4	17	17	0	10	0	5	3	50	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947.	47	3	4	6	11	22	1	0	6	21	14	1	18	0	6	11
0	0	0	0	0	0	0	0	0	0	0	1	40768	44	2	3	4	7	0	0	1	0	0	0	0	0	1	0	
10	0	0	3	10	5	5	0	0	2	11	24	539183, 539052, 539193, 39000, 39319, 539218, 539039, 539204, 539201, 39104, 539196, 539198, 539176, 539185, 539088, 539177, 39272, 539064.	160	5	8	10	17	13	0	1	3	7	1	5	0	0	2	16

Stream Gauge Type					Stream Gauge Communications						Rain gauge data	Rain gauge coverage				Rain Gauge Type				Rain Gauge Communications								
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment
17	0	1	5	19	19	0	11	0	6	6	55	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947,	49	3	4	5	11	26	1	0	7	21	14	1	19	0	7	14
4	0	2	6	5	2	3	0	0	8	4	31	544030, 544031, 544029, 544026, 44213, 544028, 44021, 544034, 44229, 544033, 544027, 544032, 44212, 44232, 44201, 44234, 44002, 544011, 44200, 44006, 44012, 44009, 44003, 44007,	522	9	14	20	39	12	1	0	11	7	3	5	0	0	11	12
0	0	0	0	0	0	0	0	0	0	0	1	54084	93	3	5	6	9	0	0	1	0	0	0	0	0	0	1	0
0	0	0	2	8	8	0	0	0	1	1	8	540454, 540041, 40158, 40500, 540551, 540042, 540000, 540000,	299	6	8	11	22	0	0	0	3	5	3	1	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	30140	104	5	10	13	16	0	0	0	1	0	0	0	0	0	0	1
27	0	2	23	34	24	2	14	0	24	22	133	541063, 41022, 541061, 41494, 41535, 541139, 41537, 41085, 41056, 41477, 41532, 41438, 541064, 541144, 41046, 540700, 41536, 540582, 541135, 541136, 541137, 541035, 41533, 41530, 41503, 41120, 41525, 41534, 41445, 541062, 41464, 541103, 41415, 541080	163	5	7	10	35	50	5	1	52	25	13	7	24	0	45	44
12	0	0	12	30	16	3	12	10	10	3	111	35165, 35110, 35236, 535296, 535146, 535145, 535147, 35229, 35000, 535053, 535102, 36084, 36083, 34078, 35094, 36160, 534024, 34015, 34024, 536008, 36050, 36122, 36010, 534019, 533136,	1,147	12	18	26	57	30	0	2	53	26	13	1	30	11	49	7
4	0	1	0	4	3	1	4	0	1	0	15	540400, 40848, 40607, 40882, 540054, 40524, 540612, 540437, 540438, 540287,	16	2	3	4	8	8	0	0	3	4	3	1	8	0	3	0
0	0	0	0	3	3	0	0	0	0	0	5	35019, 535103, 535028, 36122, 534025,	275	7	11	14	25	0	1	0	1	3	3	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	2	41018, 41075	304	5	7	9	14	0	0	0	2	0	0	0	0	0	2	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	4	5	6	8	0	0	0	0	0	0	0	0	0	0	0
0	0	0	2	1	1	0	0	0	2	0	7	529030, 29129, 29161, 529028, 29008, 529011, 29141,	843	11	17	22	32	0	1	0	3	3	2	1	0	2	2	0
0	0	0	0	0	0	0	0	0	0	0	1	27005	172	5	9	15	21	0	0	0	1	0	0	0	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0	1	33013	235	5	8	10	15	0	0	1	0	0	0	0	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	6	0	7	8	0	0	0	0	0	0	0	0	0	0	0
6	0	0	1	5	3	0	3	2	1	3	32	535054, 35194, 35090, 535052, 35189, 535123, 535108, 535107, 35206, 35145, 535109, 35129, 535060, 535010, 535090, 35051, 35063, 535059,	503	8	13	18	37	10	1	1	9	11	9	0	6	2	10	5
27	0	2	25	36	26	2	14	0	26	22	135	541063, 41022, 541061, 41494, 41535, 541139, 41537, 41085, 41056, 41477, 41532, 41438, 541064, 541144, 41046, 540700, 41536, 540582, 541135, 541136, 541137, 541035, 41533, 41530, 41503, 41120, 41525, 41534, 41445, 541062, 41464, 541103, 41415, 541080	178	5	8	11	35	50	5	1	53	26	14	7	24	0	46	44
0	0	0	0	0	0	0	0	0	0	0	0	0	None	16	0	17	18	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	1	0	0	0	0	0	3	31209, 531069, 31129	336	6	10	15	28	0	1	0	1	1	2	0	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	26	32	36	42	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	0	0	0	4	540221, 540499, 540218, 540221,	22	2	0	3	6	4	0	0	0	0	0	4	0	0	0	
8	0	0	0	2	1	1	8	0	0	0	18	40845, 40844, 540230, 40376, 540290, 540291, 40930, 40335, 40197, 540693, 40166, 540292, 540293, 40516,	27	2	3	4	7	14	0	0	3	1	1	0	13	0	3	1
22	0	0	4	16	14	0	17	0	4	7	63	540171, 540570, 540573, 540600, 540169, 540626, 540519, 40751, 540568, 540166, 540556, 541106, 540528, 40310, 540523, 540571, 540170, 540526, 540567, 40716, 40883, 540158, 540047, 540472,	47	3	4	5	11	39	1	1	7	15	9	0	29	0	8	17
3	0	0	0	1	0	0	3	1	0	0	7	540325, 540638, 540328, 540462, 540224, 40390,	38	2	3	4	8	6	0	0	0	1	0	0	5	1	0	1
1	0	0	0	0	0	0	1	0	0	0	4	540136, 40953, 540325, 540638,	23	2	3	4	9	3	0	0	1	0	0	0	2	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	None	6	8	9	12	0	0	0	0	0	0	0	0	0	0	0
11	0	0	5	12	12	0	11	0	5	0	42	532011, 32043, 32173, 32078, 32142, 32171, 532012, 532027, 32094, 532067, 32032, 32023, 32185, 32191, 532028, 32091, 32174, 532006, 32172, 532010, 32184, 32170, 532080, 32169,	209	6	9	12	25	20	0	1	11	10	8	0	20	2	10	2

Stream Gauge Type					Stream Gauge Communications							Rain gauge data	Rain gauge coverage				Rain Gauge Type				Rain Gauge Communications							
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment
0	0	0	0	0	0	0	0	0	0	0	0	0	None	31	32	33	35	0	0	0	0	0	0	0	0	0	0	0
25	0	1	7	19	19	0	15	0	8	10	69	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947,	42	3	4	5	11	38	1	1	8	21	14	1	28	0	9	17
1	0	0	0	2	2	0	0	0	0	1	2	531026, 532116	155	4	6	8	11	1	0	0	0	1	1	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	1	539161	50	3	5	7	10	1	0	0	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0	2	3	540235, 540692, 40964	16	0	2	3	5	2	0	0	1	0	0	1	0	1	1	
0	0	0	0	0	0	0	0	0	0	0	1	29012	35	2	3	5	9	0	0	1	0	0	0	0	0	1	0	
0	0	0	0	0	0	0	0	0	0	0	1	533108	5	1	0	2	3	1	0	0	0	0	0	1	0	0	0	
6	0	3	15	10	6	4	0	0	18	6	55	44026, 44174, 544014, 44157, 44029, 44188, 44206, 44233, 44189, 44231, 44050, 544030, 44230, 544021, 544031, 44070, 544029, 44044, 544026, 44213, 544028, 44021, 544034, 44229,	801	11	16	22	42	15	1	2	27	10	5	6	0	0	28	16
4	0	0	0	1	0	0	3	0	1	1	9	31127, 531029, 540078, 540237, 540235, 540692, 40964, 540091,	599	8	13	18	29	0	0	0	1	1	0	0	0	1	1	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	24	26	29	33	0	0	0	0	0	0	0	0	0	0	0
10	0	0	11	29	15	3	10	10	10	2	102	35165, 35110, 35236, 535296, 535146, 535145, 535147, 35229, 35000, 535053, 535102, 36084, 36083, 34078, 35094, 36160, 534024, 34015, 34024, 536008, 36050, 36122, 36010, 534019, 533136,	1,212	12	19	26	57	23	0	2	51	26	13	1	23	11	48	6
21	0	1	19	30	22	0	14	0	19	16	100	541063, 41022, 541061, 41494, 41535, 541139, 41537, 41085, 41056, 41477, 41532, 41438, 541064, 541144, 41046, 540700, 41536, 540582, 541135, 541136, 541137, 541035, 41533, 41530, 41503, 41120, 41525, 41534, 41445, 541062, 41464, 541103, 41415, 541080,	132	4	6	9	24	36	5	1	39	19	13	2	23	0	32	30
0	0	0	0	0	0	0	0	0	0	0	0	0	None	4	6	7	9	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	5	4	0	3	0	0	2	21	32162, 532100, 532070, 32020, 31168, 31182, 32152, 32166, 532092, 31181, 32165, 532104, 532023, 31185, 532115, 31167, 31187,	48	3	4	6	9	12	0	0	3	6	5	0	9	0	2	5
3	0	0	0	2	2	0	2	0	0	1	7	540545, 540484, 540410, 540100, 540430, 540400,	28	2	3	4	7	7	0	0	0	0	0	4	0	0	3	
4	0	0	0	2	1	0	3	1	0	1	13	531075, 31021, 531046, 531076, 31104, 531077, 531092, 531052, 531099,	63	3	5	8	12	6	0	0	3	4	3	0	5	1	3	1
0	0	0	0	1	1	0	0	0	0	0	1	531080	1,229	8	13	20	31	0	0	0	1	1	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	12	16	19	25	0	0	0	0	0	0	0	0	0	0	0
27	0	2	44	51	30	10	14	0	44	26	187	541063, 41022, 541061, 41494, 41535, 541139, 41537, 41085, 41056, 41477, 41532, 41438, 541064, 541144, 41046, 540700, 41536, 540582, 541135, 541136, 541137, 541035, 41533, 41530, 41503, 41120, 41525, 41534, 41445, 541062, 41464, 541103, 41415, 541080,	405	8	13	19	44	51	8	4	85	39	18	14	24	0	78	53
0	0	0	1	0	0	0	0	0	1	0	2	14720, 29163	7,302	29	43	56	79	0	0	0	2	0	0	0	0	0	2	0
0	0	0	0	0	0	0	0	0	0	0	1	35026	988	15	20	25	31	0	0	0	1	0	0	0	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0	1	42010	163	5	7	9	13	0	0	0	1	0	0	0	0	1	0	
0	0	0	0	5	5	0	0	0	0	0	9	539054, 539219, 539016, 539056, 539104, 539109,	67	4	5	7	12	0	0	0	1	8	8	0	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	13	14	16	18	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	534023	588	11	19	24	30	1	0	0	0	0	0	1	0	0	0	0
33	0	1	9	24	22	2	20	0	10	13	89	40167, 40942, 40933, 40932, 540436, 40931, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40413, 40490, 540402, 540229, 540475,	41	3	4	5	10	51	1	1	11	25	16	1	38	0	12	22
0	0	0	0	0	0	0	0	0	0	0	1	31222	17	2	3	4	5	0	1	0	0	0	0	0	0	0	0	1
24	0	1	6	19	19	0	15	0	7	9	66	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947,	43	3	4	5	11	36	1	0	8	21	14	1	27	0	8	16
0	0	0	0	0	0	0	0	0	0	0	1	31063	92	3	5	6	9	0	0	0	1	0	0	0	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0	2	39036, 539178	51	3	4	5	8	1	0	0	1	0	0	0	0	0	1	1

Stream Gauge Type					Stream Gauge Communications					Rain gauge data					Rain gauge coverage					Rain Gauge Type					Rain Gauge Communications				
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	
0	0	0	2	4	0	0	0	2	1	3	7	30088, 30039, 30030, 530015, 530012, 53006, 530007	1,169	11	17	23	35	0	0	0	4	3	0	0	0	2	3	2	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	7	9	10	11	0	0	0	0	0	0	0	0	0	0	0	
33	0	0	16	48	38	8	1	0	13	37	116	540454, 540041, 40158, 40113, 40500, 40922, 540551, 540042, 40138, 540025, 540090, 40251, 40671, 540697, 540055, 40177, 542013, 542011, 40722, 540694, 42036, 42075, 40708, 539042, 539181, 42059, 40455, 539069, 539184	275	6	10	14	33	51	2	3	30	30	17	13	0	0	23	63	
11	0	0	4	9	7	0	8	1	3	5	55	35289, 535038, 35079, 535087, 35064, 535083, 535040, 535086, 35293, 535125, 535037, 35042, 35225, 35150, 535099, 535106, 535085, 35205, 35139, 535029, 35251, 35292	448	8	12	16	34	26	3	0	15	11	6	4	22	1	14	8	
1	0	0	0	1	1	0	1	0	0	0	4	541135, 541136, 541035, 44522	40	4	5	6	10	3	0	0	0	1	1	0	1	0	0	2	
0	0	0	0	0	0	0	0	0	0	0	2	45011, 45006	1,001	11	16	23	39	0	0	0	2	0	0	0	0	0	2	0	
0	0	0	0	1	1	0	0	0	0	0	2	540489, 40075	95	4	6	7	10	1	0	0	1	0	0	0	1	0	1	0	
1	0	0	0	0	0	0	1	0	0	0	2	540026, 540222	38	2	3	4	5	2	0	0	0	0	0	0	2	0	0	0	
0	0	0	4	1	0	0	0	0	4	1	8	44153, 44198, 44192, 44222, 44001, 44075, 44009, 44012	1,876	13	21	29	51	0	0	0	7	1	0	0	0	0	7	1	
1	0	0	0	1	1	0	1	0	0	0	7	540052, 540093, 40076, 540124, 40063, 540021	16	2	0	3	5	4	0	0	2	1	1	0	4	0	2	0	
2	0	0	2	3	0	0	1	1	2	3	16	532058, 32042, 532057, 532095, 532056, 532064, 531057, 31083, 531058	87	4	6	8	16	10	0	1	2	3	0	1	8	0	2	5	
48	0	0	8	32	28	1	43	0	8	8	148	540171, 540570, 540573, 540600, 540169, 540626, 540519, 40751, 540568, 540166, 540556, 541106, 540528, 40310, 540523, 540571, 540170, 540526, 540567, 40716, 40883, 540158, 540047, 40503, 540472, 540563, 540525, 540518, 540680, 540553, 540067, 540152	68	3	5	7	15	95	1	1	26	25	16	1	77	0	25	29	
0	0	0	0	0	0	0	0	0	0	0	4	533039, 533037, 533084	39	3	4	6	9	3	0	0	0	1	0	0	3	1	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	3	4	5	6	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	5	0	0	0	0	0	5	0	8	42050, 42094, 42111, 42118, 42100, 43268, 41500, 41482	680	9	14	19	37	0	0	1	7	0	0	0	0	0	8	0	
11	0	1	0	6	5	0	10	0	1	2	33	32164, 31186, 32155, 32160, 32037, 32162, 532100, 32161, 532025, 532070, 32020, 31168, 31182, 32152, 32166, 532092, 532009, 32025, 32163, 31181, 32165, 532014, 532104, 532023, 31185	49	3	4	6	13	20	1	1	4	7	7	0	17	0	4	5	
6	0	0	2	4	4	0	4	0	2	2	16	540573, 540169, 540626, 40751, 540528, 40310, 540523, 540526, 540567	28	2	3	4	7	9	0	0	3	4	2	0	7	0	3	4	
2	0	0	0	1	0	1	1	0	0	1	6	40793, 40786, 540646, 40659, 40204, 40200	21	2	0	3	5	5	0	0	1	0	0	0	4	0	1	1	
0	0	0	1	0	0	0	0	0	1	0	1	30055	124	7	9	12	16	0	0	0	1	0	0	0	0	0	1	0	
11	0	1	2	13	12	0	11	1	2	1	26	31184, 531028, 31217, 531097, 531032, 531054, 31075, 531017, 531034, 31108, 31210, 531035, 31188, 531033, 31205, 531042, 31011, 531037, 531048	83	4	5	7	13	16	2	0	4	4	6	0	16	0	3	1	
9	0	0	1	7	6	0	7	0	1	3	33	540171, 540570, 540600, 540519, 540568, 540166, 540556, 541106, 540571, 540170, 40883, 540525, 540518, 540553, 540067, 540152, 540521, 540540, 540517, 540386, 540156, 540363, 40083, 540602	47	3	4	5	10	24	0	1	1	7	4	0	16	0	2	11	
23	0	0	11	27	17	8	1	0	10	25	76	40113, 40922, 40138, 40671, 540697, 540055, 40177, 542013, 542011, 40722, 540694, 42036, 42075, 40708, 539042, 539181, 42059, 40455, 539069, 539184, 542015, 539179, 39191	301	7	10	14	31	36	2	2	21	15	8	8	0	0	17	43	
0	0	0	2	2	2	0	0	0	2	0	4	30055, 530010, 30124, 530011	406	7	11	16	28	0	1	0	1	2	2	0	0	0	2	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	12	15	18	27	0	0	0	0	0	0	0	0	0	0	0	
2	0	0	0	1	1	0	0	0	0	2	4	539209, 39040, 539206, 530210	151	4	6	9	15	3	0	0	1	0	0	0	0	0	1	3	
4	0	0	3	3	3	0	4	0	3	0	17	533073, 533027, 533055, 33207, 533052, 533053, 533016, 533072, 33280, 533056, 33226, 533070	111	4	6	8	18	10	0	0	4	3	3	0	10	0	4	0	
0	0	0	0	1	0	0	0	0	0	1	3	39326, 39123, 539127	66	4	6	9	13	1	2	0	0	0	2	0	0	0	0	1	

Stream Gauge Type					Stream Gauge Communications						Rain gauge data	Rain gauge coverage				Rain Gauge Type				Rain Gauge Communications									
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	
49	0	0	8	32	28	1	44	0	8	8	148	540171, 540570, 540573, 540600, 540169, 540626, 540519, 40751, 540568, 540166, 540556, 541106, 540528, 40310, 540523, 540571, 540170, 540526, 540567, 40716, 40883, 540158, 540047, 40503, 540472, 540563, 540525, 540518, 540680, 540553, 540067, 540152,	69	3	5	7	17	95	1	1	26	25	16	1	77	0	25	29	
3	0	0	0	0	0	0	2	0	0	1	5	540537, 540536, 540343, 540342, 540241	23	2	3	4	6	5	0	0	0	0	0	0	3	0	0	2	
0	0	0	0	0	0	0	0	0	0	0	1	42012	535	9	14	17	25	0	0	0	1	0	0	0	0	0	1	0	
0	0	0	0	0	0	0	0	0	0	0	0	None	0	4	5	7	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	1	39349	650	7	9	12	20	0	0	0	0	1	0	1	0	0	0	0	0
29	0	1	1	9	5	4	25	0	2	4	56	540354, 40899, 540581, 540400, 540640, 540497, 40848, 40607, 40717, 540366, 40845, 540356, 540320, 40882, 540353, 540054, 40524, 540612, 540437, 540438, 540252, 40844, 540352, 540440, 40606, 540230, 40981, 540254	21	2	3	4	12	40	1	0	9	6	5	1	37	0	9	4	
1	0	0	0	1	0	0	1	1	0	0	4	531075, 531046, 531076, 531072	127	4	7	9	12	3	0	0	0	1	0	0	3	1	0	0	
101	0	1	15	46	41	1	84	0	16	21	219	540681, 540456, 540474, 40135, 540173, 40198, 540365, 540549, 40867, 540058, 540151, 540171, 540570, 540195, 540573, 40094, 540068, 540154, 540387, 540157, 540600, 540065, 540169, 540626, 540316, 540217, 540317, 40493, 540519, 40751, 540668, 540666,	57	3	5	7	17	147	2	1	35	34	24	2	115	0	33	45	
0	0	0	0	0	0	0	0	0	0	0	0	None	5	8	9	10	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	1	1	0	0	0	0	0	3	40686, 540304, 40893	46	3	4	6	8	1	0	0	1	1	0	1	1	0	0	1	
1	0	0	0	0	0	0	0	0	0	1	2	541101, 541105	81	3	5	8	11	2	0	0	0	0	0	0	0	0	0	2	
0	0	0	0	0	0	0	0	0	0	0	0	None	11	13	14	19	0	0	0	0	0	0	0	0	0	0	0	0	
16	0	0	10	46	19	6	10	0	7	30	92	56139, 556037, 556015, 556035, 556038, 56128, 556014, 556036, 556025, 556011, 556013, 56237, 56111, 556039, 556008, 56242, 56018, 56013, 56243, 54076, 54065, 56008, 554017, 54121, 56009, 556004, 556010, 54146, 41540,	250	6	10	13	30	22	2	9	15	44	11	8	11	0	19	43	
0	0	0	0	0	0	0	0	0	0	0	0	None	6	8	10	15	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	0	0	2	1	0	3	1	0	1	10	531075, 531046, 531076, 531077, 531052, 531099,	60	4	6	9	12	6	0	0	2	2	1	0	5	1	2	1	
0	0	0	0	0	0	0	0	0	0	0	2	39328, 39049	359	5	8	10	20	0	0	0	2	0	0	0	0	0	1	1	
6	0	0	0	5	4	0	5	0	0	2	19	540166, 541106, 540170, 40883, 540518, 540521, 540540, 540517, 540386, 540602, 40829, 540143, 540162, 540566, 540385,	51	3	4	5	9	15	0	1	0	3	2	0	11	0	1	5	
3	0	0	0	1	0	1	1	0	0	2	5	40793, 40786, 540646, 40659, 40704,	44	2	3	4	7	4	0	0	1	0	0	0	3	0	1	1	
0	0	0	0	0	0	0	0	0	0	0	2	30115, 30160	491	13	21	31	40	0	0	2	0	0	0	0	0	0	2	0	
0	0	0	0	2	1	0	0	1	0	0	8	29047, 29040, 14713, 29066, 30144, 30061, 532009, 30100	1,557	14	22	30	49	0	0	0	6	2	1	0	0	2	5	0	
1	0	0	0	0	0	0	1	0	0	0	1	533049	74	4	5	6	9	1	0	0	0	0	0	1	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	None	13	15	17	21	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	None	10	14	16	23	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	1	1	0	0	0	0	0	1	533033	287	10	13	15	20	0	0	0	0	1	1	0	0	0	0	0	
13	0	0	5	14	10	2	10	1	5	4	47	540621, 540336, 540335, 40121, 540425, 40850, 540426, 540620, 540427, 540334, 540333, 540594, 540085, 40123, 40651, 40830, 540332, 540367, 40106, 540331, 540643, 40755,	64	3	5	6	13	27	2	1	6	11	7	4	19	1	6	10	
11	0	0	5	12	12	0	11	0	5	0	42	532011, 32043, 32173, 32078, 32142, 32171, 532012, 532027, 32094, 532067, 32032, 32023, 32185, 32191, 532028, 32091, 32174, 532006, 32172, 532010, 32184, 32170, 532080, 32169,	209	6	9	12	25	20	0	1	11	10	8	0	20	2	10	2	
4	0	0	1	4	4	0	4	0	1	0	24	41042, 540492, 540172, 540144, 540705, 540446, 540045, 540141, 40886, 540494, 540188, 40020, 540493, 40387, 540040, 540261, 40268, 5403145,	154	5	7	9	16	14	0	0	5	5	4	0	14	0	5	1	
3	0	0	2	5	5	0	2	0	2	1	12	540681, 540456, 540474, 40135, 540173, 40198,	52	3	5	6	9	6	0	0	3	3	2	1	4	0	3	2	

Stream Gauge Type					Stream Gauge Communications							Rain gauge data	Rain gauge coverage				Rain Gauge Type				Rain Gauge Communications							
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment
27	0	2	45	52	30	11	14	0	45	26	188	44042, 541063, 41022, 541061, 41494, 41535, 541139, 41537, 41085, 41056, 41477, 41532, 41438, 541064, 541144, 41046, 540700, 41536, 540582, 541135, 541136, 541137, 541035, 41533, 41530, 41503, 41120, 41525, 41534, 41445, 541062, 41464, 541103, 41415,	406	8	13	19	44	51	8	4	86	39	18	14	24	0	79	53
5	0	0	0	4	3	0	4	0	0	2	16	540170, 40883, 540521, 540540, 540517, 540386, 540602, 40829, 540143, 540162, 540566, 540385,	43	3	4	5	7	12	0	1	0	3	2	0	9	0	1	4
0	0	0	0	0	0	0	0	0	0	0	2	31029, 31198	53	3	5	6	9	1	0	0	1	0	0	1	0	1	0	
1	0	0	0	0	0	0	0	0	0	1	3	540235, 540692, 40964	12	0	2	3	5	2	0	0	1	0	0	1	0	1	1	
0	0	0	0	0	0	0	0	0	0	0	2	33307, 532045	66	3	5	6	8	1	1	0	0	0	1	0	1	0	0	
1	0	0	0	0	0	0	1	0	0	0	1	532063	161	4	7	11	16	1	0	0	0	0	0	1	0	0	0	
2	0	0	0	1	0	1	1	0	0	1	7	40793, 40786, 540646, 40659, 40794, 540725, 40788	18	2	0	3	5	6	0	0	1	0	0	5	0	1	1	
11	0	1	2	13	12	0	11	1	2	1	26	31184, 531028, 31217, 531097, 531032, 531054, 31075, 531017, 531034, 31108, 31210, 531035, 31188, 531033, 31205, 531042, 31011, 531037, 531048	84	4	5	7	12	16	2	0	4	4	6	0	16	0	3	1
24	0	1	6	19	19	0	15	0	7	9	66	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947,	43	3	4	5	11	36	1	0	8	21	14	1	27	0	8	16
14	0	0	13	31	17	3	14	10	11	3	114	35165, 35110, 35236, 535296, 535146, 535145, 535147, 35229, 35000, 535053, 535102, 36084, 36083, 34078, 35094, 36160, 534024, 34015, 34024, 536008, 36050, 36122, 36010, 534019, 533136, 536007, 534016, 34022,	1,121	12	18	26	57	32	0	2	54	26	13	1	32	11	50	7
0	0	0	0	0	0	0	0	0	0	0	1	30023	185	11	16	19	26	0	0	0	1	0	0	0	0	1	0	
3	0	0	0	1	1	0	3	0	0	0	6	40902, 540552, 40906, 540268, 540410, 40907	123	4	6	8	13	5	0	0	0	1	0	0	5	0	0	1
0	0	1	0	2	1	0	0	0	1	1	5	30024, 30022, 530023, 530020, 30128	502	9	14	18	35	0	1	1	1	2	2	0	0	0	2	1
0	0	0	0	0	0	0	0	0	0	0	1	532074	79	4	6	7	9	1	0	0	0	0	0	1	0	0	0	
0	0	0	5	2	0	1	0	0	5	1	9	44181, 44153, 44198, 44192, 44222, 44191, 44025, 44129,	2,414	16	25	34	63	0	0	0	8	1	0	0	0	0	8	1
23	0	0	11	27	17	8	1	0	10	25	76	40113, 40922, 40138, 40671, 540697, 540055, 40177, 542013, 542011, 40722, 540694, 42036, 42075, 40708, 539042, 539181, 42059, 40455, 539069, 539184, 542015, 539179, 39191,	301	7	10	14	29	36	2	2	21	15	8	8	0	0	17	43
0	0	0	0	0	0	0	0	0	0	0	0	0	None	16	20	24	30	0	0	0	0	0	0	0	0	0	0	0
1	0	0	2	3	2	1	0	0	2	1	9	540594, 40651, 540643, 540595, 540575, 540264,	69	3	5	6	8	4	1	0	2	2	2	1	0	0	2	4
9	0	0	3	12	12	0	9	0	3	0	39	532011, 32043, 532008, 32173, 32045, 32078, 32142, 32171, 532012, 532067, 32191, 532028, 32091, 32174, 532006, 32172, 532010, 32184, 32170, 532080, 32169, 32176, 32018, 31191, 32105,	224	6	9	12	25	19	0	1	9	10	8	0	19	2	8	2
6	0	0	3	7	6	1	0	0	2	7	20	541113, 41376, 41495, 541111, 41491, 541112, 41034, 541033, 41457, 541116, 541110, 41047,	169	5	8	11	18	10	0	0	5	5	4	1	0	0	4	11
0	0	0	0	0	0	0	0	0	0	0	3	43108, 43015, 43054	241	7	10	12	19	0	0	1	0	2	0	2	0	1	0	
11	0	1	0	6	5	0	10	0	1	2	33	32164, 31186, 32155, 32160, 32037, 32162, 532100, 32161, 532025, 532070, 32020, 31168, 31182, 32152, 32166, 532092, 532009, 32025, 32163, 31181, 32165, 532014, 532104, 532023, 31185,	49	4	6	7	9	20	1	1	4	7	7	0	17	0	4	5
0	0	0	0	0	0	0	0	0	0	0	1	31069	78	4	6	8	12	0	0	0	1	0	0	0	0	0	0	1
88	0	1	14	45	40	1	76	0	15	16	200	540681, 540456, 540474, 40135, 540173, 40198, 540365, 540549, 40867, 540058, 540151, 540171, 540570, 540195, 540573, 40094, 540068, 540154, 540387, 540157, 540600, 540065, 540169, 540626, 540316, 540217, 540317, 40493, 540519, 40751, 540668, 540666,	61	3	5	7	15	132	2	1	32	33	23	2	106	0	31	38
0	0	0	0	2	0	0	0	0	0	2	1	531088	31	2	0	3	5	0	0	0	0	1	0	0	0	0	0	1

Stream Gauge Type					Stream Gauge Communications							Rain gauge data	Rain gauge coverage				Rain Gauge Type				Rain Gauge Communications								
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	
2	0	0	10	3	2	0	1	0	10	2	29	535122, 535117, 35069, 535043, 536011, 535116, 535119, 535121, 36144, 535115, 35049, 35259, 535126, 535120, 536003, 36034, 536009, 36143, 36134, 535120, 535117, 35069	1.086	12	18	26	62	11	1	2	11	4	4	0	1	0	13	11	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	10	12	13	16	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	8	6	0	0	1	0	1	14	539106, 539105, 539099, 39089, 39240, 539112, 539100, 39106, 39172,	255	5	8	11	19	1	1	0	5	7	5	0	0	1	6	2	
3	0	0	0	0	0	0	0	0	0	3	11	541099, 541122, 41145, 41131, 541119, 41091, 41050,	80	4	5	8	15	6	0	0	4	1	0	0	0	0	4	7	
0	0	0	2	1	0	0	1	0	2	0	3	535104, 35286, 35256,	652	13	22	28	36	0	0	0	2	1	0	0	1	0	2	0	
1	0	0	0	1	1	0	1	0	0	0	3	533074, 533093, 533116	367	5	7	9	15	2	0	0	0	1	1	0	2	0	0	0	
14	0	1	4	19	19	0	10	0	5	4	51	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947,	49	3	4	5	11	23	1	0	0	6	21	14	1	18	0	6	12
0	0	0	0	0	0	0	0	0	0	0	2	41551, 41005	328	6	9	13	18	1	0	0	1	0	0	0	1	0	1	0	
0	0	0	0	0	0	0	0	0	0	0	2	540594, 40651	38	3	4	5	7	1	1	0	0	0	1	0	0	0	0	1	
0	0	0	0	8	2	0	0	0	0	6	16	41529, 541150, 41349, 41096, 541058, 541146, 541147, 41512, 541031, 41359,	92	3	5	7	11	1	3	0	5	7	3	0	1	0	5	7	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	0	5	0	6	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	9	12	14	16	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	1	1	0	0	0	0	0	1	529006	1274	11	17	21	33	0	0	0	0	1	1	0	0	0	0	0	
0	0	0	6	5	2	0	0	3	6	0	27	38012, 37040, 537004, 37073, 537007, 36123, 36031, 36161, 536005, 36013, 36004, 36022, 37104, 37101, 36076, 36037, 536006, 36074, 36011, 36172, 36092, 36096, 36095, 36073	3,356	18	26	35	68	0	1	0	20	6	3	0	0	3	17	4	
7	0	0	2	12	12	0	7	0	2	0	31	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 40944, 540402, 540229, 540475, 40677, 540555, 40948, 40714, 40947,	53	3	4	6	11	12	1	0	0	3	15	9	1	11	0	3	7
0	0	0	0	0	0	0	0	0	0	0	1	541046	131	5	7	8	12	1	0	0	0	0	0	0	1	0	0	0	
0	0	0	1	3	1	1	0	1	0	1	8	29130, 29126, 29127, 529014, 29131, 29131, 529031, 29133	807	10	16	23	43	0	2	0	4	2	2	0	0	1	3	2	
0	0	0	0	0	0	0	0	0	0	0	1	40867	28	2	3	5	6	0	0	0	0	1	0	1	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	1	539177	49	4	6	7	10	1	0	0	0	0	0	0	0	0	0	1	
10	0	1	2	13	12	0	10	1	2	1	24	31184, 531028, 31217, 531097, 531032, 531054, 31075, 531017, 531034, 31108, 31210, 531035, 31188, 531033, 31205, 531042, 531097, 531049, 531034	90	4	5	7	12	15	1	0	4	4	5	0	15	0	3	1	
7	0	0	4	8	6	1	5	0	4	3	32	540621, 540336, 540335, 40121, 540425, 40850, 540426, 540620, 540427, 540334, 540333, 540594, 540085, 40123, 40651, 40830, 540332, 540367, 40106, 540331, 540643, 40755,	61	3	4	6	10	18	1	1	6	6	3	3	12	0	6	8	
93	0	1	15	46	41	1	80	0	16	17	208	540681, 540456, 540474, 40135, 540173, 40198, 540365, 540549, 40867, 540058, 540151, 540171, 540570, 540195, 540573, 40094, 540068, 540154, 540387, 540157, 540600, 540065, 540169, 540626, 540316, 540217, 540317, 40493, 540519, 40751, 540668, 540666,	59	3	5	7	15	136	2	1	35	34	24	2	109	0	33	40	
0	0	0	0	0	0	0	0	0	0	0	2	41415, 41344	55	2	3	5	8	0	0	0	1	1	0	1	0	0	1	0	
0	0	0	6	8	1	0	0	0	6	7	13	529026, 29016, 29023, 529051, 29154, 529046, 29012, 529047, 529012,	3,741	21	33	45	75	0	1	1	4	7	2	0	0	0	5	6	
8	0	0	0	3	2	0	8	0	0	1	11	40999, 540346, 540603, 540344, 540026, 540350, 540348, 540339, 540422,	17	0	2	3	5	9	0	0	1	1	1	0	9	0	0	1	
4	0	0	1	3	2	0	3	0	1	2	17	540621, 540336, 540335, 40121, 540425, 40850, 540426, 540620, 540427, 540334, 540333, 540085,	42	3	4	5	9	12	0	1	3	1	0	0	10	0	3	4	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	3	4	5	8	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	3	4	5	7	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	1	3	0	0	0	1	1	2	4	30088, 30039, 530015, 530013	410	6	9	13	23	0	0	0	2	2	0	0	0	1	2	1	
1	0	0	0	1	1	0	1	0	0	0	6	540163, 40110, 540373, 40122, 540401, 540391	72	4	6	8	15	3	0	0	2	1	1	0	3	0	2	0	
0	0	0	0	1	1	0	0	0	0	0	1	40111	484	7	11	15	22	0	0	0	1	0	0	0	0	0	1	0	
3	0	0	2	2	1	0	1	0	2	3	9	541139, 41537, 41085, 41056, 541064, 541144, 41046, 540366, 540365	18	2	3	4	8	5	0	0	3	1	0	0	2	0	2	5	
0	0	0	0	0	0	0	0	0	0	0	1	40922	506	5	8	9	14	0	1	0	0	0	1	0	0	0	0	0	

Stream Gauge Type					Stream Gauge Communications							Rain gauge data	Rain gauge coverage				Rain Gauge Type				Rain Gauge Communications							
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment
22	0	1	6	19	19	0	13	0	7	9	63	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947.	44	3	4	5	11	33	1	0	8	21	14	1	24	0	8	16
4	0	0	1	10	10	0	4	0	0	1	16	31184, 531028, 31217, 531097, 531032, 531054, 31075, 531017, 531034.	109	4	6	7	13	8	1	0	3	4	5	0	8	0	2	1
0	0	0	0	0	0	0	0	0	0	0	0	0	None	16	21	25	33	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	1	0	0	0	0	0	1	533066	133	5	6	8	12	0	0	0	0	1	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	40865, 40941	88	3	4	6	9	1	0	0	0	1	0	1	1	0	0	0
0	0	1	0	0	0	1	0	0	0	0	1	29038	276	16	30	39	44	0	0	1	0	0	0	1	0	0	0	0
5	0	0	1	11	10	0	5	1	0	1	18	31184, 531028, 31217, 531097, 531032, 531054, 31075, 531017, 531034, 31108, 31210, 531035, 31188.	108	4	5	7	12	10	1	0	3	4	5	0	10	0	2	1
0	0	0	0	0	0	0	0	0	0	0	1	40113	323	6	8	11	17	0	0	0	1	0	0	0	0	0	0	1
6	0	0	1	12	11	0	6	1	0	1	20	31184, 531028, 31217, 531097, 531032, 531054, 31075, 531017, 531034, 31108, 31210, 531035, 31188.	100	4	5	7	12	11	1	0	4	4	5	0	11	0	3	1
0	0	0	0	0	0	0	0	0	0	0	1	532097	214	6	7	9	11	0	0	0	0	1	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	45	50	54	65	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	0	16	17	18	0	0	0	0	0	0	0	0	0	0	0
6	0	0	2	4	4	0	4	0	2	2	16	540573, 540169, 540626, 40751, 540528, 40310, 540523, 540526, 540567.	26	2	3	4	7	9	0	0	3	4	2	0	7	0	3	4
0	0	0	0	0	0	0	0	0	0	0	1	528010	36	2	4	9	12	0	0	0	0	1	1	0	0	0	0	0
4	0	0	2	8	8	0	4	0	2	0	22	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 40944, 540402, 540229, 540475.	56	3	4	6	11	9	0	0	3	10	6	1	8	0	3	4
0	0	0	0	1	1	0	0	0	0	0	3	528010, 528004, 28000	626	11	17	23	36	0	0	0	1	2	2	0	0	0	1	0
2	0	0	1	1	1	0	0	0	1	2	8	41415, 541080, 41344.	52	3	4	5	8	4	0	0	2	2	1	1	1	0	2	3
2	0	0	1	2	2	0	2	0	1	0	14	540705, 40020, 540493, 40387, 540040, 540261, 40258, 540145, 540044.	145	5	7	9	16	8	0	0	3	3	2	0	8	0	3	1
3	0	0	0	0	0	0	2	0	0	1	8	540078, 540237, 540235, 540692, 40964, 540079.	12	0	2	3	5	7	0	0	1	0	0	0	6	0	1	1
20	0	1	6	19	19	0	12	0	7	8	57	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947.	47	3	4	5	11	28	1	0	7	21	14	1	20	0	7	15
17	0	1	5	19	19	0	11	0	6	6	55	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947.	48	3	4	5	11	26	1	0	7	21	14	1	19	0	7	14
25	0	1	7	19	19	0	15	0	8	10	68	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947.	42	3	4	5	11	37	1	1	8	21	14	1	27	0	9	17
22	0	1	6	19	19	0	13	0	7	9	63	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947.	44	3	4	5	11	33	1	0	8	21	14	1	24	0	8	16
0	0	0	0	0	0	0	0	0	0	0	2	36123, 36031	849	10	14	21	37	0	1	0	1	0	1	0	0	0	0	1
2	0	0	0	1	1	0	0	0	0	2	7	539085, 539132, 39327, 540229, 540229, 540573.	207	5	8	10	17	4	0	0	2	1	1	0	0	0	2	4
46	0	0	8	31	27	1	41	0	8	8	144	540171, 540570, 540573, 540600, 540169, 540626, 540519, 40751, 540568, 540166, 540556, 541106, 540528, 40310, 540523, 540571, 540170, 540526, 540567, 40716, 40883, 540158, 540047, 540472, 540563, 540525, 540518, 540680, 540553, 540067, 540152, 540521.	68	3	5	7	15	92	1	1	25	25	16	1	74	0	24	29
0	0	0	0	0	0	0	0	0	0	0	2	40793, 40786	18	2	3	4	5	2	0	0	0	0	0	2	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	3	41469, 41551, 41005	272	6	9	12	18	1	0	0	2	0	0	1	0	2	0	0



Stream Gauge Type					Stream Gauge Communications							Rain gauge data	Rain gauge coverage				Rain Gauge Type				Rain Gauge Communications							
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment
10	0	0	3	12	10	0	10	1	3	1	28	533040, 33301, 533026, 33299, 33045, 533023, 533100, 533089, 533041, 533112, 533060, 33303, 33277, 33302, 533131, 33300, 33304, 33068, 33060, 533154, 533061, 533145, 533145	56	3	4	6	17	16	1	0	2	9	7	0	15	2	0	4
12	0	0	3	12	10	0	11	1	3	2	30	533040, 33301, 533026, 33299, 533100, 533089, 533041, 533112, 533060, 33303, 33277, 33302, 533131, 33300, 33304, 33068, 33060, 533061, 533145, 533145	54	3	4	6	17	18	0	0	3	9	6	0	17	2	0	5
11	0	0	5	12	12	0	11	0	5	0	42	532011, 32043, 32173, 32078, 32142, 32171, 532012, 532027, 32094, 532067, 32032, 32023, 32185, 32191, 532028, 32091, 32174, 532006, 32172, 532010, 32184, 32170, 532080, 32169, 31183, 31220	209	6	9	12	25	20	0	1	11	10	8	0	20	2	10	2
0	0	0	0	0	0	0	0	0	0	0	2	31183, 31220	59	3	4	6	10	1	0	1	0	0	0	1	0	0	1	
12	0	0	5	13	6	6	1	0	4	13	33	39321, 539189, 39259, 39036, 539178, 539183, 539052, 539193, 539192, 539203, 39236, 39000, 39319, 539218, 539039, 539204, 539201, 39204, 39104, 539196, 539198, 539176, 539185	220	6	9	12	23	17	0	1	7	8	2	5	0	0	6	20
0	0	0	0	0	0	0	0	0	0	0	0	0	None	0	5	6	7	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	5	7	8	12	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	0	0	0	2	40503, 540312	29	2	3	5	8	2	0	0	0	0	0	2	0	0	0	
2	0	0	1	9	9	0	2	0	0	1	14	31184, 531028, 31217, 531097, 531032, 531054, 31075, 531017, 531034	83	4	5	7	13	6	1	0	3	4	5	0	6	0	2	1
7	0	0	2	10	8	0	7	1	2	1	21	533040, 33301, 533026, 33299, 533100, 533089, 533041, 33277, 33302, 533131, 33304, 33068, 533154, 533145, 533059, 533026, 533030, 533151	68	3	5	7	17	12	0	0	1	8	5	0	12	2	0	2
17	0	0	0	9	9	0	16	0	0	1	33	540222, 540219, 40695, 540420, 540434, 540419, 540083, 540506, 40988, 540137, 40157, 40861, 540424, 540642, 540617, 540461, 40525, 540095, 540599, 540613, 540462	16	2	0	3	6	20	2	0	5	6	8	0	18	0	3	4
17	0	0	0	9	9	0	16	0	0	1	33	540222, 540423, 540219, 40695, 540420, 540434, 540419, 540083, 540506, 40988, 540137, 40157, 540424, 540642, 540617, 540461, 40525, 540095, 540599, 540613, 540462	16	2	0	3	6	21	1	0	5	6	7	0	19	0	3	4
22	0	1	6	19	19	0	13	0	7	9	63	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947	44	3	4	5	11	33	1	0	8	21	14	1	24	0	8	16
0	0	0	0	1	1	0	0	0	0	0	3	31209, 531069, 31129	321	6	10	16	28	0	1	0	1	1	2	0	0	0	1	0
20	0	1	10	26	20	3	10	1	10	13	76	540621, 540336, 540335, 40121, 540425, 40850, 540426, 540620, 540427, 540334, 540333, 540594, 540085, 40123, 40651, 40830, 540332, 540367, 40106, 540331, 540643, 40755, 540330, 40814, 540595, 540575, 540264, 40481	114	4	6	10	22	33	4	1	18	20	12	9	20	1	14	20
0	0	0	0	0	0	0	0	0	0	0	0	0	None	9	11	13	15	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	41229, 41456	95	3	4	5	7	0	0	2	0	0	0	0	0	1	1	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	9	14	20	29	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	29034	111	6	10	13	18	0	0	1	0	1	0	0	0	0	0	0
24	0	1	6	19	19	0	15	0	7	9	66	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947	43	3	4	5	11	36	1	0	8	21	14	1	27	0	8	16
0	0	0	0	0	0	0	0	0	0	0	1	42022	374	9	16	21	28	0	0	0	1	0	0	0	0	1	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	3	5	7	9	0	0	0	0	0	0	0	0	0	0	0
6	0	1	1	6	6	0	0	0	2	6	18	539209, 39040, 539206, 539210, 540699, 539121, 39011, 539047, 539205, 539207, 539091, 539211	149	5	7	9	16	11	0	0	3	4	3	0	0	0	3	12
0	0	0	0	0	0	0	0	0	0	0	0	0	None	29	30	32	35	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	0	0	1	0	5	42023, 42112, 42004, 42000, 540912	541	8	12	17	27	1	1	1	2	0	1	0	0	0	3	1



Stream Gauge Type					Stream Gauge Communications							Rain gauge data				Rain gauge coverage				Rain Gauge Type					Rain Gauge Communications				
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	
33	0	1	8	24	22	2	20	0	9	13	87	40167, 40942, 40933, 40932, 540436, 40931, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 540584, 40832, 540207, 40876, 40944, 40413, 40490, 540402, 540229, 540475,	41	3	4	5	10	50	1	0	11	25	16	1	37	0	11	22	
1	0	0	0	0	0	0	0	0	0	1	2	530145, 30071	226	7	10	14	20	1	0	0	1	0	0	0	0	0	1	1	
3	0	0	0	1	1	0	3	0	0	0	8	32164, 31186, 32155, 32160, 32032, 33141, 532026, 31149	63	3	5	7	14	5	1	0	1	1	2	0	5	0	1	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	5	7	8	12	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	18	20	22	25	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	2	2	0	5	0	0	0	13	540400, 40848, 40607, 540353, 540054, 40524, 540612, 540352, 540440,	13	0	2	3	5	9	0	0	3	1	1	0	9	0	3	0	
4	0	0	2	4	3	1	0	0	1	5	12	39104, 539196, 539198, 539176, 39222, 539064,	102	4	6	8	14	6	0	1	2	3	1	1	0	0	1	9	
1	0	0	1	1	1	0	1	0	1	0	5	540573, 540169, 540626, 40754, 540508	34	2	4	5	7	2	0	0	1	2	0	0	2	0	1	2	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	6	7	8	9	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	1	1	0	3	0	0	0	8	32164, 31186, 32155, 32160, 32032, 33141, 532026, 31149	66	3	5	7	14	5	1	0	1	1	2	0	5	0	1	0	
4	0	0	1	5	3	2	4	0	1	0	14	40932, 40931, 540584, 40413, 40936, 40042, 40930, 40937, 540559, 540614, 540480,	39	3	4	5	8	7	0	0	3	4	2	0	7	0	3	2	
20	0	0	10	24	14	8	1	0	9	22	66	40113, 40922, 40138, 40671, 540697, 540055, 40177, 542013, 542011, 40722, 540694, 42036, 42075, 40708, 539042, 539181, 42059, 40455, 539069, 539184, 542015, 539179, 539187,	322	7	10	14	29	31	1	1	20	13	6	7	0	0	15	38	
0	0	0	1	0	0	0	0	0	1	0	1	44056	555	8	13	18	27	0	0	0	1	0	0	0	0	0	1	0	
16	0	2	13	62	24	14	10	0	12	33	113	56139, 556037, 556015, 556035, 556038, 56128, 556014, 556036, 556025, 556011, 556013, 56237, 56111, 556039, 556008, 56242, 56018, 56013, 56243, 54076, 54065, 56008, 554017, 54121, 56009, 556004, 556010, 54146, 41540, 554015, 56032, 541149, 41087, 556	330	7	10	14	38	22	2	10	19	60	12	23	11	0	23	44	
2	0	0	0	1	0	1	0	0	0	2	4	539198, 539044, 539202, 530106	62	4	6	7	11	3	0	0	0	1	0	1	0	0	0	0	3
15	0	1	5	19	19	0	11	0	6	4	53	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947,	49	3	4	5	11	24	1	0	7	21	14	1	19	0	7	12	
0	0	0	2	8	8	0	0	0	1	1	9	540454, 540041, 40158, 40500, 540551, 540042,	292	6	8	11	22	0	0	1	3	5	3	1	0	0	2	3	
0	0	0	0	0	0	0	0	0	0	0	3	32064, 532026, 32101	42	2	4	5	8	1	0	0	2	0	0	0	1	0	2	0	
0	0	0	0	1	1	0	0	0	0	0	1	531080	697	7	9	12	21	0	0	0	0	1	1	0	0	0	0	0	0
0	0	0	1	1	0	0	0	1	1	0	13	36076, 36037, 536006, 36074, 36011, 36172, 36003, 36006, 36046, 36023, 37025, 530016,	3,105	16	25	34	71	0	0	0	11	2	0	0	0	1	10	2	
6	0	0	1	12	11	0	6	1	0	1	20	31184, 531028, 31217, 531097, 531032, 531054, 31075, 531017, 531034, 31108, 31210, 531035, 31188,	100	4	5	7	13	11	1	0	4	4	5	0	11	0	3	1	
1	0	0	0	1	1	0	0	0	0	1	8	539177, 39297, 539139, 540219, 40695, 540420, 540419, 540083, 40988,	128	4	5	8	12	5	0	0	2	1	1	0	0	0	1	6	
4	0	0	0	1	1	0	4	0	0	0	9	540219, 40695, 540420, 540419, 540083, 40988,	14	0	2	3	5	6	1	0	2	0	1	0	5	0	1	2	
0	0	0	1	1	1	0	0	0	1	0	4	540454, 540041, 40158, 40500	225	5	8	11	18	0	0	0	2	2	1	1	0	0	2	0	
0	0	0	0	1	1	0	0	0	0	0	2	33054, 533103	141	7	14	16	21	0	0	1	0	1	1	0	0	0	1	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	28	30	31	34	0	0	0	0	0	0	0	0	0	0	0	0
4	0	1	0	4	3	1	4	0	1	0	15	540400, 40848, 40607, 40882, 540054, 40524, 540612, 540437, 540438, 540287,	18	2	3	4	8	8	0	0	3	4	3	1	8	0	3	0	
1	0	0	0	1	0	1	1	0	0	0	2	40793, 40786	54	3	0	4	6	2	0	0	0	0	0	0	2	0	0	0	0
0	0	0	8	1	1	0	0	0	8	0	12	44194, 42050, 42103, 42094, 42111, 42118, 42100, 41368,	863	9	14	19	37	0	0	1	11	0	0	0	0	0	11	1	
0	0	0	0	0	0	0	0	0	0	0	1	41075	31	2	3	4	5	0	0	0	1	0	0	0	0	0	1	0	
0	0	0	1	0	0	0	0	0	1	0	2	45057, 45024	4,725	25	35	45	66	0	0	0	2	0	0	0	0	0	2	0	
6	0	0	2	1	1	0	5	0	2	1	12	540224, 40995, 540310, 40908, 540309, 540306, 540308, 540639, 540209,	67	3	5	7	14	9	1	0	1	1	2	0	8	0	1	1	
5	0	0	2	1	1	0	4	0	2	1	11	540224, 540310, 40908, 540309, 540306, 540308,	71	3	5	7	14	9	1	0	0	1	2	0	8	0	0	1	1
0	0	0	1	1	0	0	0	0	1	1	2	540224, 540310, 40908, 540309, 540306, 540308,	24	2	3	4	6	0	1	0	0	1	1	0	0	0	0	1	1
15	0	1	5	19	19	0	11	0	6	4	53	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947,	48	3	4	5	11	24	1	0	7	21	14	1	19	0	7	12	

Stream Gauge Type					Stream Gauge Communications						Rain gauge data	Rain gauge coverage				Rain Gauge Type				Rain Gauge Communications								
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment
0	0	0	0	0	0	0	0	0	0	0	0	0	None	10	12	14	18	0	0	0	0	0	0	0	0	0	0	0
5	0	0	1	11	10	0	5	1	0	1	18	31184, 531028, 31217, 531097, 531032, 531054, 31075, 531017, 531034, 31108, 31210, 531035, 31188	108	4	5	7	13	10	1	0	3	4	5	0	10	0	2	1
0	0	0	0	0	0	0	0	0	0	0	0	0	None	3	4	5	7	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	5	2	0	0	0	0	3	12	41529, 541150, 41369, 41096, 541058, 541146, 541147, 541058, 541146, 541147	87	3	5	7	11	1	3	0	4	4	3	0	1	0	4	4
0	0	0	0	0	0	0	0	0	0	0	0	0	None	16	20	25	34	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	22	26	29	34	0	0	0	0	0	0	0	0	0	0	0
16	0	0	8	21	16	2	10	1	8	8	64	540621, 540336, 540335, 40121, 540425, 40850, 540426, 540620, 540427, 540334, 540333, 540594, 540085, 40123, 40651, 40830, 540332, 540367, 40106, 540331, 540643, 40755, 540330, 40814, 540595, 540575, 540264, 40481	112	4	6	10	22	30	2	1	13	18	10	7	19	1	13	14
4	0	0	0	2	2	0	4	0	0	0	8	40902, 540552, 40906, 40907, 40905, 40904, 40903, 38202	172	4	6	9	14	6	0	0	1	1	0	0	6	0	1	1
0	0	0	0	0	0	0	0	0	0	0	1	532079	10	0	0	2	3	1	0	0	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	0	7	8	10	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	3	0	0	0	5	540222, 540219, 40695, 540420, 540082	20	2	3	4	5	4	0	0	1	0	0	0	4	0	1	0
0	0	0	0	0	0	0	0	0	0	0	2	532049, 32064	7	1	0	2	3	1	0	0	1	0	0	0	1	0	1	0
18	0	1	5	19	19	0	11	0	6	7	55	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947	49	3	4	5	11	26	1	0	7	21	14	1	19	0	7	14
15	0	1	5	19	19	0	11	0	6	4	53	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947	49	3	4	5	11	24	1	0	7	21	14	1	19	0	7	12
1	0	0	0	1	1	0	1	0	0	0	3	540341, 40169, 540662	41	2	3	4	6	2	0	0	1	0	0	0	1	0	1	1
2	0	0	0	0	0	0	2	0	0	0	2	540195, 540065	79	3	4	6	9	2	0	0	0	0	0	0	2	0	0	0
0	0	0	0	1	0	0	0	0	0	1	2	30040, 530021	151	8	14	21	31	0	0	0	1	1	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	None	11	13	14	15	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	0	0	0	5	540325, 540638, 540328, 540422, 540274	32	2	3	4	6	5	0	0	0	0	0	0	4	0	0	1
0	0	0	0	1	0	0	0	0	0	1	2	31204, 31052	14	0	2	3	5	0	0	0	2	0	0	0	0	0	2	0
0	0	0	0	1	0	0	0	1	0	0	1	528007	809	8	12	15	35	0	0	0	0	1	0	0	0	1	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	0	24	0	25	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	7	11	14	17	0	0	0	0	0	0	0	0	0	0	0
13	0	1	6	9	7	0	9	0	7	6	39	541063, 41022, 541061, 41494, 41535, 541139, 41537, 41085, 41056, 41477, 41532, 41438, 541064, 541144, 41046, 540700, 41536, 540582, 541135, 541136, 541137, 541035, 41533	76	4	5	8	17	21	1	1	12	4	4	0	13	0	10	12
0	0	0	0	0	0	0	0	0	0	0	3	540380, 540381, 540382	15	0	2	3	4	3	0	0	0	0	0	0	3	0	0	0
0	0	0	2	4	4	0	0	0	1	1	8	33247, 533133, 33158, 33127, 33272, 33264, 533141, 533000	108	4	6	8	14	0	1	0	4	3	3	0	0	1	3	1
0	0	0	0	0	0	0	0	0	0	0	1	40177	41	2	3	4	6	0	0	0	1	0	0	0	0	0	1	0
0	0	0	3	1	0	1	0	0	3	0	5	545007, 45066, 45043, 36137, 36164	3.102	18	28	36	60	0	0	0	4	1	0	1	0	0	4	0
0	0	0	0	0	0	0	0	0	0	0	2	532042, 532054	27	2	3	4	6	2	0	0	0	0	0	2	0	0	0	0
1	0	0	0	17	14	0	0	2	0	2	34	539106, 539105, 539099, 39089, 39240, 539112, 539100, 39106, 39172, 539174, 39290, 539120, 539111, 39054, 539107, 539068, 539057, 539119, 539062, 539116, 539170	195	5	8	11	24	4	1	0	7	22	19	0	0	2	8	5
2	0	0	1	6	6	0	2	0	1	0	14	40167, 40942, 540436, 540578, 540580, 540707, 40754, 40946, 40178, 40832	38	3	4	5	9	5	0	0	3	6	4	0	4	0	3	3
0	0	0	0	1	1	0	0	0	0	0	1	31200	151	5	7	8	12	1	0	0	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	533076, 33062	20	2	3	4	8	1	0	0	1	0	0	0	1	0	1	0
10	0	1	2	13	12	0	10	1	2	1	24	31184, 531028, 31217, 531097, 531032, 531054, 31075, 531017, 531034, 31108, 31210, 531035, 31188, 531033, 31205, 531042, 531027, 531048, 531026	90	4	5	7	12	15	1	0	4	4	5	0	15	0	3	1
1	0	0	0	0	0	0	0	0	0	1	3	540235, 540692, 40964	8	1	2	3	4	2	0	0	1	0	0	1	0	1	1	1
2	0	0	0	1	1	0	0	0	0	2	4	539186, 539055, 539200, 539217	174	5	8	10	16	3	0	0	0	1	1	0	0	0	0	3
0	0	1	2	6	2	0	0	1	3	3	12	30024, 30022, 530031, 530023, 530164, 30045, 30044, 530008, 530009	1.543	14	23	32	65	0	2	1	3	6	4	0	0	1	4	3
1	0	0	0	0	0	0	1	0	0	0	1	533057	24	2	3	4	6	1	0	0	0	0	0	0	1	0	0	0

Stream Gauge Type					Stream Gauge Communications							Rain gauge data	Rain gauge coverage				Rain Gauge Type				Rain Gauge Communications								
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	
19	0	0	9	22	13	8	1	0	8	20	64	40113, 40922, 40138, 40671, 540697, 540055, 40177, 542013, 542011, 40722, 540694, 42036, 42075, 40708, 539042, 539181, 42059, 40455, 539069, 539184, 542015, 539179, 539187,	330	7	10	14	29	30	1	1	19	13	6	7	0	0	14	37	
0	0	0	0	0	0	0	0	0	0	0	2	540233, 540382	16	0	2	3	4	2	0	0	0	0	0	2	0	0	0	0	
31	0	0	25	80	65	4	15	9	24	19	267	35039, 35081, 43051, 535134, 35014, 43037, 535129, 535013, 35242, 535130, 535066, 535111, 35273, 535065, 35154, 43108, 35006, 535142, 35271, 535137, 43015, 43054, 535032, 35135, 35182, 35070, 35115, 35282, 539162, 543009, 535136, 35068, 35096, 535055	514	8	12	16	37	78	8	5	81	95	72	13	37	9	85	51	
3	0	0	2	4	1	0	2	1	2	3	18	532059, 32167, 532058, 32042, 532057, 532095, 532056, 532064, 531057, 31083, 531058, 531104,	81	4	6	8	16	11	0	1	2	4	1	1	9	0	2	5	
3	0	0	1	2	0	0	0	2	1	3	10	535054, 35194, 35090, 535052, 35189, 535108,	696	10	16	22	37	3	1	0	4	2	0	0	0	2	4	4	
1	0	0	0	0	0	0	1	0	0	0	1	532091	78	4	6	8	11	1	0	0	0	0	0	1	0	0	0	0	
0	0	0	1	3	1	1	0	0	1	1	8	543010, 43091, 43033, 43105,	334	6	9	13	22	0	1	0	0	7	2	3	0	0	0	3	
0	0	0	0	0	0	0	0	0	0	0	2	539145, 39084	31	2	3	4	6	1	0	0	1	0	0	0	0	1	1		
0	0	0	0	0	0	0	0	0	0	0	0	0	None	5	6	7	9	0	0	0	0	0	0	0	0	0	0	0	
11	0	0	3	2	1	0	9	0	3	3	17	540068, 540157, 540317, 40493, 40702, 40912, 540574, 540314, 540193, 540388, 540667, 540194, 540583, 540669, 540313, 540064	32	2	3	5	9	13	0	0	2	2	1	0	10	0	2	4	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	11	13	15	18	0	0	0	0	0	0	0	0	0	0	0	
1	0	0	0	1	1	0	1	0	0	0	3	35230, 535063, 535077	14	2	3	4	6	1	0	0	1	1	1	0	1	0	1	0	
1	0	0	0	0	0	0	0	0	0	1	1	533144	43	2	3	4	7	1	0	0	0	0	0	0	0	0	0	1	
0	0	0	0	0	0	0	0	0	0	0	3	31222, 31166, 31218	14	2	3	4	5	0	1	0	2	0	0	0	0	2	1		
1	0	0	0	0	0	0	1	0	0	0	1	540416	27	2	3	4	6	1	0	0	0	0	0	1	0	0	0	0	
2	0	0	0	1	0	0	1	0	0	2	3	535100, 535112, 535114	188	5	8	12	20	2	0	0	0	1	0	0	1	0	0	2	
1	0	0	0	0	0	0	0	0	0	1	2	33059, 533143	65	4	7	10	13	1	0	0	1	0	0	0	0	0	0	2	
1	0	0	0	1	1	0	1	0	0	0	3	532047, 532048, 532007	67	3	4	6	10	2	0	0	0	1	1	0	2	0	0	0	
2	0	0	3	9	2	0	2	7	3	0	31	34084, 34085, 533075, 30083, 30009, 533096, 530017, 30145, 30137, 30052, 30082, 30032, 532085, 533107, 32089, 532016, 532086, 532017, 32063, 32104,	1,156	11	16	22	40	4	0	1	18	8	1	0	4	7	17	2	
24	0	1	6	19	19	0	15	0	7	9	66	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947,	43	3	4	5	11	36	1	0	8	21	14	1	27	0	8	16	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	2	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	2	2	0	0	0	0	1	2	531026, 532116	137	5	7	8	11	1	0	0	0	1	1	0	0	0	0	1	
1	0	0	0	2	1	0	1	0	0	1	6	532059, 32167, 32042,	25	3	4	5	10	3	0	0	1	2	1	0	3	0	1	1	
24	0	1	6	19	19	0	15	0	7	9	66	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947,	43	3	4	5	11	36	1	0	8	21	14	1	27	0	8	16	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	3	0	4	7	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	1	4	4	0	7	0	1	0	22	40189, 540159, 540160, 540185, 540246, 540657, 540486, 540487, 540337, 540338, 540163, 40887, 40110, 40924, 540373,	60	3	4	6	15	15	0	0	6	1	1	0	12	0	5	4	
34	0	0	16	49	39	8	1	0	13	38	117	540454, 540041, 40158, 40113, 40500, 40922, 540551, 540042, 40138, 540025, 540090, 40251, 40671, 540697, 540055, 40177, 542013, 542011, 40722, 540694, 42036, 42075, 40708, 539042, 539181, 42059, 40455, 539069, 539184,	274	6	10	14	33	52	2	3	30	30	17	13	0	0	23	64	
2	0	0	0	1	1	0	2	0	0	0	7	32164, 31186, 32155, 32160, 32022, 32161, 32168	70	3	5	7	14	4	1	0	1	1	2	0	4	0	1	0	

Stream Gauge Type					Stream Gauge Communications						Rain gauge data	Rain gauge coverage				Rain Gauge Type				Rain Gauge Communications								
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment
33	0	0	16	48	38	8	1	0	13	37	117	540454, 540041, 40158, 40113, 40500, 40922, 540551, 540042, 40138, 540025, 540090, 40251, 40671, 540697, 540055, 40177, 542013, 542011, 40722, 540694, 42036, 42075, 40708, 539042, 539181, 42059, 40455, 539069, 539184	275	6	10	14	33	52	2	3	30	30	17	13	0	0	23	64
15	0	1	5	19	19	0	11	0	6	4	53	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947, 532074	48	3	4	5	11	24	1	0	7	21	14	1	19	0	7	12
0	0	0	0	0	0	0	0	0	0	0	1	532074	30	3	5	7	8	1	0	0	0	0	0	0	1	0	0	0
31	0	0	24	79	65	3	15	9	23	19	263	35039, 35081, 43051, 535134, 35014, 43037, 535129, 535013, 35242, 535130, 535066, 535111, 35273, 535065, 35154, 43108, 35006, 535142, 35271, 535137, 43015, 43054, 535032, 35135, 35182, 35070, 35115, 35282, 539162, 543009, 535136, 35068, 35096, 535055	515	8	12	16	37	78	7	5	78	95	71	13	37	9	83	50
0	0	0	3	0	0	0	0	0	3	0	4	42100, 41368, 41509, 41493	666	8	13	19	37	0	0	0	4	0	0	0	0	0	4	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	6	0	7	9	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	35065, 535042	23	2	3	4	6	0	0	1	0	1	0	0	0	0	1	0
1	0	0	0	0	0	0	1	0	0	0	2	540079, 540233	15	0	2	3	4	2	0	0	0	0	0	2	0	0	0	0
27	0	2	42	51	30	10	14	0	42	26	185	541063, 41022, 541061, 41494, 41535, 541139, 41537, 41085, 41056, 41477, 41532, 41438, 541064, 541144, 41046, 540700, 41536, 540582, 541135, 541136, 541137, 541035, 41533, 41530, 41503, 41120, 41525, 41534, 41445, 541062, 41464, 541103, 41415, 541080	398	7	12	19	44	51	8	4	83	39	18	14	24	0	76	53
0	0	0	0	0	0	0	0	0	0	0	3	33210, 33065, 33170	102	4	7	10	16	0	1	1	1	0	1	0	0	0	2	0
0	0	0	0	0	0	0	0	0	0	0	0	0	None	29	30	32	34	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	2	2	0	8	0	0	0	12	541083, 541082, 541081, 541085, 541086, 541084, 41095, 541087, 41175	38	3	4	6	11	9	1	1	0	1	2	0	9	0	1	0
0	0	0	0	0	0	0	0	0	0	0	1	39328	513	6	9	11	20	0	0	0	1	0	0	0	0	0	1	0
15	0	1	5	19	19	0	11	0	6	4	53	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947, 532011	49	3	4	5	11	24	1	0	7	21	14	1	19	0	7	12
0	0	0	0	1	1	0	0	0	0	0	1	532011	186	4	6	10	15	0	0	0	0	1	1	0	0	0	0	0
0	0	0	1	0	0	0	0	0	1	0	1	37040	894	20	28	33	42	0	0	0	1	0	0	0	0	0	1	0
0	0	0	2	4	4	0	0	0	1	1	6	533133, 33158, 33273, 33254, 532141, 532020	83	4	6	7	11	0	0	0	3	3	2	0	0	1	2	1
17	0	0	0	5	5	0	14	0	0	3	35	540520, 40147, 540416, 40693, 40977, 540467, 540655, 540060, 540205, 540415, 540625, 40960, 540444, 540414, 40308, 540651, 540413, 540418, 540562, 540439, 540656, 540412, 540202, 540277, 0	19	2	3	4	6	29	0	0	5	1	1	0	19	0	4	11
0	0	0	0	0	0	0	0	0	0	0	0	0	None	5	6	7	9	0	0	0	0	0	0	0	0	0	0	0
27	0	2	30	40	26	6	14	0	31	22	154	541063, 41022, 541061, 41494, 41535, 541139, 41537, 41085, 41056, 41477, 41532, 41438, 541064, 541144, 41046, 540700, 41536, 540582, 541135, 541136, 541137, 541035, 41533, 41530, 41503, 41120, 41525, 41534, 41445, 541062, 41464, 541103, 41415, 541080	264	6	10	15	35	51	6	3	67	27	15	8	24	0	62	45
0	0	2	2	10	2	8	0	0	4	0	21	41128, 41521, 41169, 42027, 41112, 41366, 41162, 42097, 42104, 41489, 41124, 41348, 42116, 542004, 41152, 41488, 42115, 41546, 42102, 41508	556	7	11	14	21	0	0	1	4	16	1	15	0	0	5	0
0	0	0	1	0	0	0	0	0	1	0	3	535117, 35069, 535043	218	11	16	21	30	1	0	1	0	1	1	0	0	0	1	1
5	0	0	1	5	3	2	4	0	1	1	16	40932, 40931, 540584, 40413, 40936, 40042, 40930, 40937, 540559, 540614, 540480	42	3	4	5	8	9	0	0	3	4	2	0	8	0	3	3

Stream Gauge Type					Stream Gauge Communications							Rain gauge data	Rain gauge coverage				Rain Gauge Type				Rain Gauge Communications								
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	
24	0	1	6	19	19	0	15	0	7	9	66	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 540207, 40876, 40944, 40490, 540402, 540229, 540475, 40677, 540555, 40948, 40841, 40947, 0	43	3	4	5	11	36	1	0	8	21	14	1	27	0	8	16	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	20	21	22	24	0	0	0	0	0	0	0	0	0	0	0	
6	0	0	0	4	4	0	0	0	0	6	18	539177, 39297, 539139, 539222, 39175, 539138, 539036, 539129, 539223, 539084, 539140, 539128, 0	132	4	6	8	14	13	0	0	2	3	3	0	0	0	1	14	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	1	41099	364	7	10	13	21	0	0	1	0	0	0	0	0	0	1	0	
1	0	0	3	4	4	0	0	0	3	1	29	35039, 35081, 43051, 535134, 35014, 43037, 535129, 535013, 35242, 535130, 535066, 535111, 35273, 35154, 43108, 535142, 35271, 43015, 43054, 535032, 35135, 43015, 43054, 535032, 35135, 0	534	8	11	16	32	4	0	2	9	14	7	6	0	0	11	5	
5	0	0	2	1	1	0	4	0	2	1	10	540310, 40908, 540309, 540306, 540308, 540639, 540639, 540639, 540639, 0	73	3	5	8	14	8	1	0	0	1	2	0	7	0	0	1	
10	0	0	4	12	7	1	10	0	3	5	35	56008, 56009, 556004, 54146, 41540, 56032, 541149, 41087, 556002, 541052, 41547, 41116, 41430, 541053, 41454, 541078, 541090, 541076, 41338, 541091, 41548, 41100, 541083, 541082, 541081, 0	216	6	9	13	25	11	1	3	7	13	6	3	11	0	8	7	
0	0	0	9	2	2	0	0	0	9	0	12	44194, 42050, 42103, 42094, 42111, 42118, 42100, 41368, 44194, 42050, 42103, 42094, 0	971	9	14	20	36	0	0	1	11	0	0	0	0	0	11	1	
0	0	0	0	1	0	0	0	1	0	0	3	539106, 539099, 39089	197	5	7	8	14	0	1	0	0	2	1	0	0	1	1	0	
0	0	0	5	2	0	2	0	0	5	0	7	45025, 45003, 545007, 45066, 45042, 36327, 36366, 0	4,302	20	30	41	69	0	1	0	5	1	1	1	0	0	5	0	
5	0	0	5	11	11	0	0	0	5	5	55	35039, 35081, 43051, 535134, 35014, 43037, 535129, 535013, 35242, 535130, 535066, 535111, 35273, 535065, 35154, 43108, 35006, 535142, 35271, 535137, 43015, 43054, 535032, 35135, 0	485	7	11	15	32	19	0	2	17	17	10	6	0	0	19	20	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	5	6	7	9	0	0	0	0	0	0	0	0	0	0	0	
15	0	0	8	21	16	2	10	1	8	7	63	540621, 540336, 540335, 40121, 540425, 40850, 540426, 540620, 540427, 540334, 540333, 540594, 540085, 40123, 40651, 40830, 540332, 540367, 40106, 540331, 540643, 40755, 540330, 40814, 540595, 0	108	4	6	10	22	29	2	1	13	18	10	7	19	1	13	13	
0	0	0	0	0	0	0	0	0	0	0	1	535089	74	3	5	7	10	1	0	0	0	0	0	0	1	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	1	32183	394	5	6	9	14	1	0	0	0	0	0	0	1	0	0	0	
0	0	2	2	10	2	8	0	0	4	0	21	41128, 41521, 41169, 42027, 41112, 41366, 41162, 42097, 42104, 41489, 41124, 41348, 42116, 542004, 41152, 41488, 42115, 41546, 42102, 41508, 0	556	7	11	14	21	0	0	1	4	16	1	15	0	0	5	0	
4	0	0	0	1	1	0	4	0	0	0	11	540299, 541057, 541068, 40170, 540298, 540142, 0	52	3	4	5	9	7	0	0	3	1	1	0	7	0	2	1	
1	0	0	0	1	1	0	1	0	0	0	4	532047, 532048, 532007, 532002, 0	25	3	4	5	9	3	0	0	0	1	1	0	3	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	1	532084	29	3	6	7	10	1	0	0	0	0	0	0	1	0	0	0	
1	0	0	0	3	2	0	1	0	0	1	7	540602, 41529, 41369, 42032, 42004, 420602, 0	60	3	5	6	10	3	1	0	2	1	2	0	2	0	2	1	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	31	35	37	42	0	0	0	0	0	0	0	0	0	0	0	
16	0	0	0	2	1	0	16	0	0	1	35	533043, 533044, 533022, 533007, 533045, 532040, 532020, 532101, 532041, 532036, 532038, 532042, 532035, 532109, 532044, 532076, 532108, 532030, 532043, 532015, 532029, 532039, 532112, 532111, 532088, 532037, 532102, 0	33	3	4	5	11	33	1	0	0	1	2	0	0	33	0	0	0
3	0	0	0	1	0	0	3	1	0	0	7	540325, 540638, 540328, 540442, 540224, 40394, 0	39	0	3	4	8	6	0	0	0	1	0	0	5	1	0	1	
8	0	0	3	11	11	0	8	0	3	0	34	532011, 32043, 32173, 32142, 532067, 32191, 532028, 32091, 32174, 532006, 32172, 532010, 32184, 32170, 532080, 32169, 32176, 32018, 31191, 32105, 531047, 31197, 531081, 531082, 531101, 0	254	6	9	12	25	17	0	0	8	9	7	0	17	2	6	2	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	3	4	5	7	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	3	4	5	7	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	1	0	0	0	0	0	1	4	32042, 532057, 532095, 532044, 0	37	3	4	5	10	2	0	0	1	1	0	0	2	0	1	1	
3	0	0	2	4	1	0	2	1	2	3	18	532059, 32167, 532058, 32042, 532057, 532095, 532056, 532064, 531057, 31083, 531058, 531104, 0	84	4	6	8	16	11	0	1	2	4	1	1	9	0	2	5	
0	0	0	0	0	0	0	0	0	0	0	4	539177, 39297, 539139, 539222, 0	169	4	6	8	12	3	0	0	1	0	0	0	0	0	1	3	
0	0	0	0	0	0	0	0	0	0	0	1	540233	19	0	2	3	4	1	0	0	0	0	0	0	1	0	0	0	





Stream Gauge Type					Stream Gauge Communications						Rain gauge data	Rain gauge coverage				Rain Gauge Type				Rain Gauge Communications								
# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment	# rain gauges	Gauge IDs	Density (km2 per gauge)	25% coverage radius (km)	50% coverage radius (km)	75% coverage radius (km)	100% coverage radius (km)	# ALERT in catchment	# AWS in catchment	# Manual in catchment	# ROT in catchment	# TM in catchment	# 3G in catchment	# Fixed line in catchment	# Radio in catchment	# Satellite in catchment	# None in catchment	# Not determined in catchment
3	0	0	1	2	2	0	3	0	1	0	8	540657, 540337, 540338, 540339, 540340, 540341	41	2	3	4	6	6	0	0	2	0	0	0	3	0	2	3
7	0	0	2	12	12	0	7	0	2	0	31	40167, 40942, 40933, 540436, 540578, 40943, 540074, 540580, 540707, 40754, 40946, 40178, 40832, 40944, 540402, 540229, 540475, 40677, 540555, 40948, 40714, 40645, 40677, 40943, 540376	52	3	4	6	11	12	1	0	4	14	9	1	11	0	4	6
0	0	0	0	0	0	0	0	0	0	0	1	540233	27	0	2	3	4	1	0	0	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	533054	67	3	4	5	8	1	0	0	0	0	0	0	1	0	0	0
0	0	0	1	1	1	0	0	0	1	0	2	40111, 40365	347	6	9	14	22	0	0	0	2	0	0	0	0	0	2	0
4	0	0	0	0	0	0	4	0	0	0	7	540222, 540219, 40695, 540430, 540410, 540092	19	2	0	3	5	5	1	0	1	0	1	0	5	0	1	0
0	0	0	1	0	0	0	0	0	1	0	2	35083, 35186	541	10	16	22	30	1	0	0	1	0	0	1	0	1	0	
0	0	0	0	0	0	0	0	0	0	0	2	31222, 31166	22	2	3	4	5	0	1	0	1	0	0	0	0	1	1	
1	0	0	0	0	0	0	0	0	0	1	4	539170, 39102, 539173	28	2	3	4	8	3	0	0	1	0	0	0	0	1	3	
6	0	3	13	8	4	4	0	0	16	6	53	544014, 44157, 44029, 44188, 44206, 44233, 44189, 44231, 44050, 544030, 44230, 544021, 544031, 44070, 544029, 44044, 544026, 44213, 544028, 44021, 544034, 44229, 544033	732	10	15	21	42	15	1	1	26	10	5	6	0	0	26	16
31	0	0	24	78	65	2	15	9	23	19	261	35039, 35081, 43051, 535134, 35014, 43037, 535129, 535013, 35242, 535130, 535066, 535111, 35273, 535065, 35154, 43108, 35006, 535142, 35271, 535137, 43015, 43054, 535032, 35135, 35182, 35070, 35115, 35282, 539162, 543009, 535136, 35068, 35096, 535055	512	8	12	16	37	78	7	5	78	93	70	12	37	9	83	50
0	0	0	0	0	0	0	0	0	0	0	0	0	None	3	5	7	10	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	0	13	14	15	0	0	0	0	0	0	0	0	0	0	
7	0	0	0	7	7	0	6	0	0	1	17	540617, 540461, 40525, 540599, 540613, 540462, 540616, 540265, 540092, 540460, 540608, 540052	12	2	3	4	6	8	0	0	3	6	6	0	7	0	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	None	35	37	38	41	0	0	0	0	0	0	0	0	0	0	
5	0	0	1	5	3	2	4	0	1	1	15	40932, 40931, 540584, 40413, 40936, 40042, 40930, 40937, 540559, 540614, 540480	44	3	4	5	8	8	0	0	3	4	2	0	7	0	3	3
0	0	0	0	0	0	0	0	0	0	0	0	0	None	8	10	11	14	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	3	4	5	7	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	None	27	28	30	33	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	1	43043	992	11	16	20	31	0	0	0	1	0	0	0	0	1	0	