

				Undertended																				Defended									
Map Reference	Model Node Reference	Easting	Northing	Data	20 % AEP (1 in 5 year)	10 % AEP (1 in 10 year)	5 % AEP (1 in 20 year)	4 % AEP (1 in 25 year)	3.33 % AEP (1 in 30 year)	2 % AEP (1 in 50 year)	1.33 % AEP (1 in 75 year)	1 % AEP (1 in 100 year)	1 % AEP (1 in 100 year) + 30% Increase Flow	1 % AEP (1 in 100 year) + 35% Increase Flow	1 % AEP (1 in 100 year) + 70% Increase Flow	0.5 % AEP (1 in 200 year)	0.1 % AEP (1 in 1000 year)	0.1 % AEP (1 in 1000 year) + 30% Increase Flow	20 % AEP (1 in 5 year)	10 % AEP (1 in 10 year)	5 % AEP (1 in 20 year)	4 % AEP (1 in 25 year)	3.33 % AEP (1 in 30 year)	2 % AEP (1 in 50 year)	1.33 % AEP (1 in 75 year)	1 % AEP (1 in 100 year)	1 % AEP (1 in 100 year) + 30% Increase Flow	1 % AEP (1 in 100 year) + 35% Increase Flow	1 % AEP (1 in 100 year) + 70% Increase Flow	0.5 % AEP (1 in 200 year)	0.1 % AEP (1 in 1000 year)	0.1 % AEP (1 in 1000 year) + 30% Increase Flow	
1	ea013_0243_MERS04_5068	385556	389873	Modelled Water Level (m aodN)	32.84	33.13	33.33	33.49	33.47	33.65	33.78	33.86	34.44	34.55	35.01	34.00	35.12	35.76	33.05	33.32	33.67	33.76	33.82	33.95	34.04	34.12	34.72	34.84	35.21	34.27	35.32	35.89	
				Modelled Flow (cumecs)	211.02	249.50	275.18	298.47	296.31	319.94	337.07	350.98	370.67	370.89	379.23	375.78	383.16	381.89	220.67	250.86	286.44	297.98	307.81	333.70	351.52	366.64	401.27	402.91	398.67	385.63	403.87	425.33	
2	ea013_0243_MERS04_4990	385489	389611	Modelled Water Level (m aodN)	32.70	32.98	33.18	33.25	33.32	33.50	33.63	33.70	34.33	34.45	34.92	33.85	35.03	35.71	32.94	33.19	33.54	33.64	33.69	33.82	33.91	34.00	34.68	34.80	35.17	34.16	35.29	35.85	
				Modelled Flow (cumecs)	211.02	248.46	275.11	286.45	296.37	319.35	335.39	348.67	364.03	364.70	371.28	369.62	374.89	373.33	220.18	250.89	285.38	296.36	305.99	329.61	344.98	357.04	381.53	382.45	383.05	370.77	388.34	407.16	
3	ea013_0243_MERS04_4403d	385237	389410	Modelled Water Level (m aodN)	32.20	32.44	32.61	32.66	32.71	32.87	32.99	33.08	33.72	33.86	34.50	33.31	34.64	35.42	32.54	32.76	33.09	33.20	33.27	33.47	33.60	33.69	34.26	34.34	34.86	33.88	35.00	35.62	
				Modelled Flow (cumecs)	232.24	269.29	299.79	308.37	318.71	347.22	369.66	388.78	490.81	497.59	515.09	435.19	516.87	529.77	242.17	271.74	310.99	323.15	334.02	361.89	382.37	395.88	467.96	485.42	520.73	416.15	521.46	543.04	
4	ea013_0243_MERS04_4222u	385058	389397	Modelled Water Level (m aodN)	32.05	32.26	32.42	32.45	32.51	32.65	32.76	32.85	33.37	33.45	33.85	33.05	33.94	34.50	32.42	32.63	32.97	33.07	33.15	33.33	33.45	33.54	34.04	34.11	34.43	33.69	34.51	34.96	
				Modelled Flow (cumecs)	232.23	269.16	299.71	308.52	318.46	346.94	369.67	389.66	505.11	522.02	602.39	435.49	619.66	754.32	242.93	271.68	309.75	323.49	333.69	362.02	381.11	396.60	478.63	494.94	565.96	421.83	566.75	708.57	
5	ea013_0243_MERS04_3784	384622	389388	Modelled Water Level (m aodN)	31.60	31.74	31.84	31.86	31.89	31.96	32.02	32.06	32.32	32.39	32.75	32.15	32.84	33.30	32.18	32.50	32.58	32.65	32.81	32.90	32.97	33.34	33.37	33.50	33.14	33.53	33.69		
				Modelled Flow (cumecs)	217.85	249.07	274.69	282.15	290.74	315.05	332.85	348.88	443.78	457.27	523.03	388.92	537.56	644.42	243.20	271.68	309.44	323.54	333.74	361.93	381.06	396.79	488.97	508.13	589.18	422.81	611.28	738.07	

Map Reference	Model Node Reference	Easting	Northing	Data	Undertended					Defended				
					1 % AEP (1 in 100 year) + 30% increase in flow	1 % AEP (1 in 100 year) + 35% increase in flow	1 % AEP (1 in 100 year) + 70% increase in flow	0.1 % AEP (1 in 1000 year)	0.1 % AEP (1 in 1000 year) + 30% increase in flow	1 % AEP (1 in 100 year) + 35% increase in flow	1 % AEP (1 in 100 year) + 70% increase in flow	1 % AEP (1 in 100 year) + 70% increase in flow	0.1 % AEP (1 in 1000 year)	0.1 % AEP (1 in 1000 year) + 30% increase in flow
6	2D Levels	385363	389692	Modelled Water Level (m aodN)	34.01	34.11	34.71	34.85	35.55	34.03	34.28	35.00	35.14	35.73
7		385364	389672	Modelled Water Level (m aodN)	34.01	34.11	34.71	34.84	35.54	34.32	34.28	35.00	35.13	35.72

Model data taken from Upper Mersey 2017

AEP - Annual Exceedence Probability

m aodN - metres above ordnance datum Newlyn

cumecs - cubic metres per second

Notes:

*Climate Change Scenario - 30%, 35% and 70% increases in flow calculated for the 2080's (2070 - 2115). Please see <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances> for more information regarding the new climate change guidance. The location of the site and the type (vulnerability) of development determine the climate change allowances to consider in any flood risk assessment.

Flood Defences

Start Date	Asset Type	Asset ID	Standard of Protection	Upstream Actual Crest Level (m aod)	Downstream Actual Crest Level (m aod)
01/01/2005	Embankment	122331	50	34.03	32.93
01/01/2005	Embankment	122332	100	34.27	33.59
01/01/2005	Wall	37537	50	35.73	35.64
01/01/2005	Embankment	37538	50	35.63	35.82
Unknown	High Ground	185314	75	31.25	30.63
01/01/2005	Wall	178849	50	34.63	35.17
01/01/2005	Embankment	59337	50	33.14	33.28
Unknown	High Ground	71380	75	30.52	29.63
Unknown	High Ground	175225	75	30.34	30.52
Unknown	Embankment	175224	75	30.73	30.92
Unknown	High Ground	146506	75	29.22	30.40
Unknown	High Ground	146505	75	29.63	29.22
Unknown	High Ground	146504	75	31.25	33.17
Unknown	High Ground	146503	75	33.13	33.17
Unknown	High Ground	146502	75	33.17	33.17
01/01/2005	Wall	146508	100	32.81	32.81
Unknown	High Ground	146507	75	30.40	29.59
Unknown	High Ground	144884	75	33.17	33.17
Unknown	High Ground	144885	75	33.17	33.17
Unknown	High Ground	144886	75	30.33	30.49
01/01/2005	Embankment	120925	50	33.47	31.95