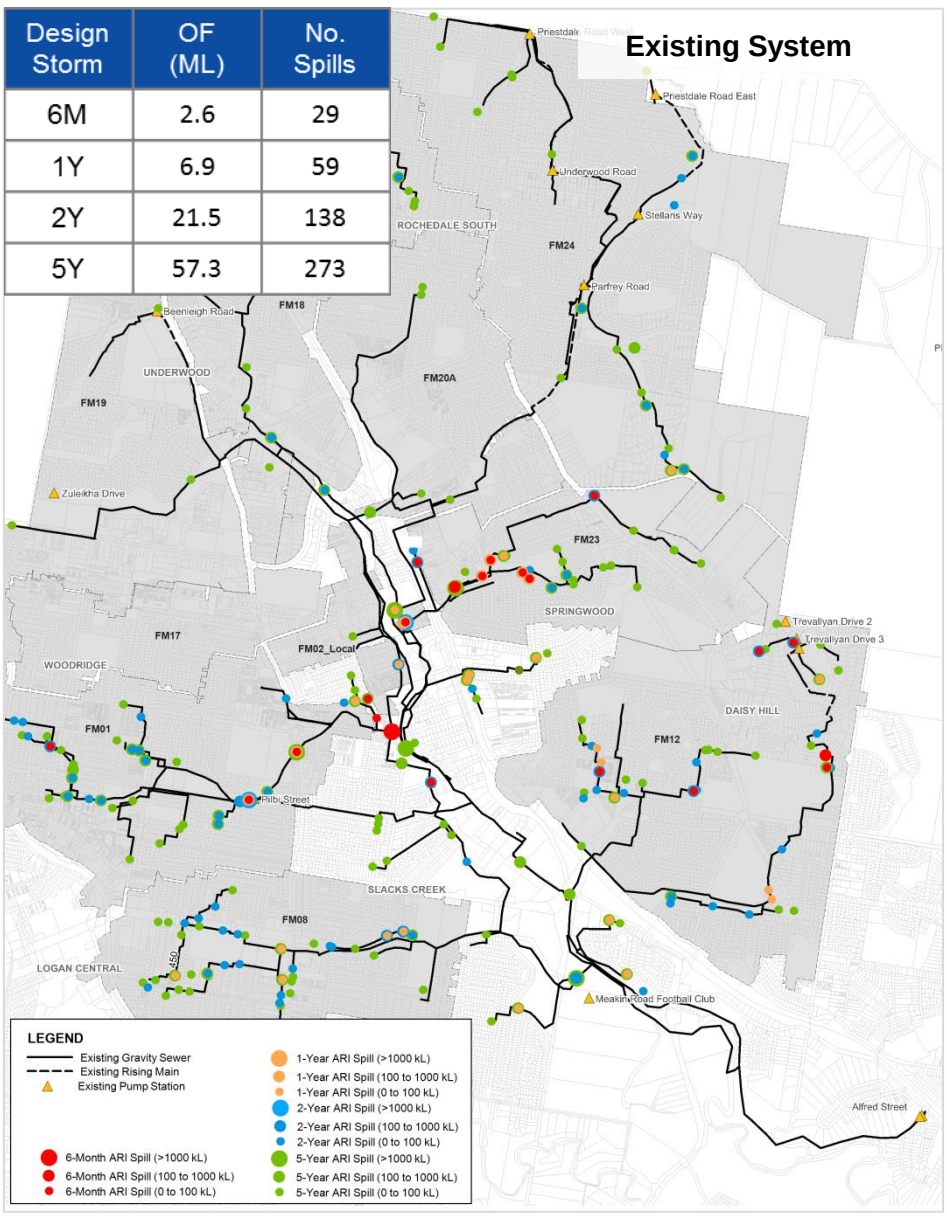
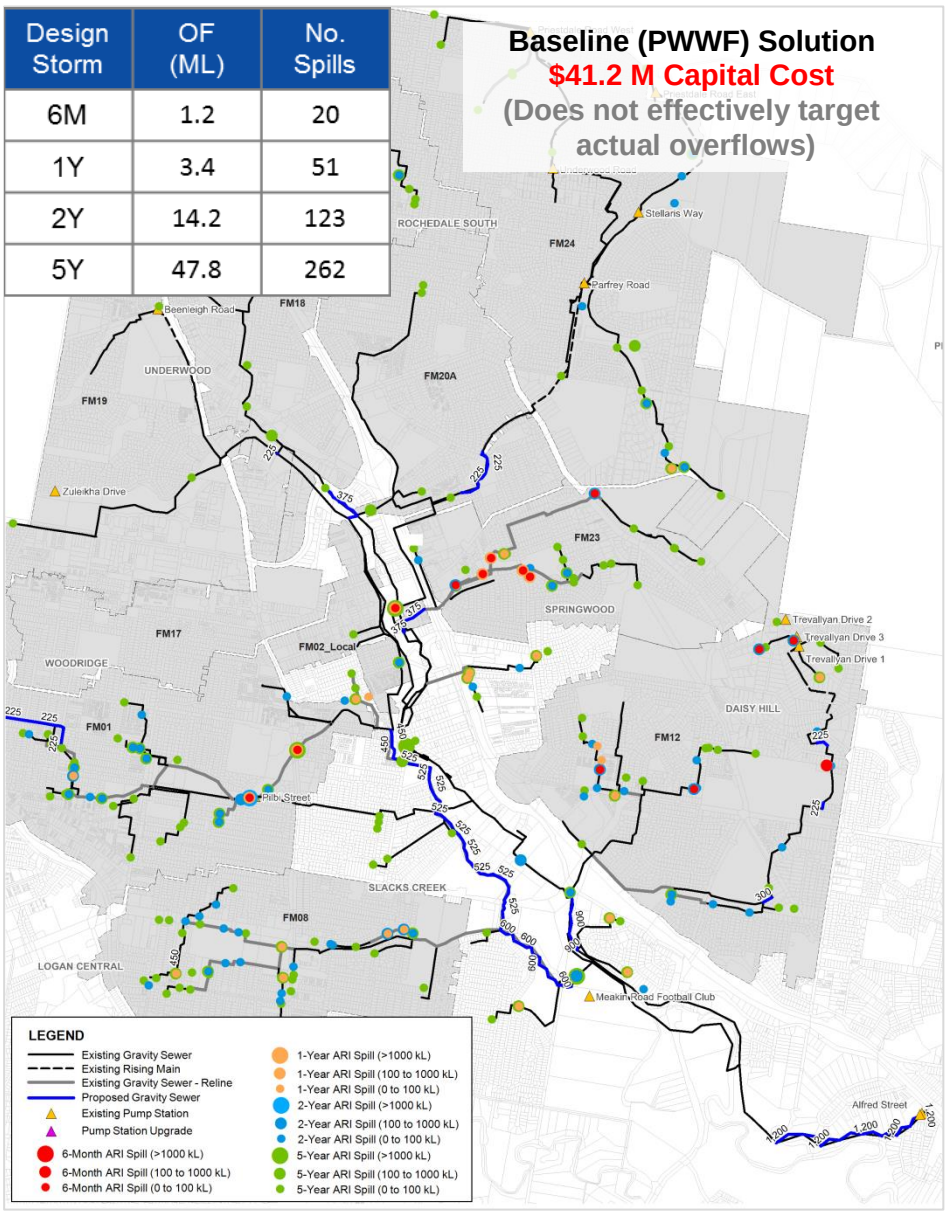
Project Example – Logan Water, Queensland *(Project Team – Parsons Brinckerhoff and WCS Engineering)*

- Optimisation of Slacks Creek Trunk Sewer Network.
- Performance assessment of the steady-state 1,300 L/EP/Day PWWF (Baseline) solution under calibrated model scenarios.
- Optimised solutions developed for 6-month, 1-year, 2-year and 5-year design storm scenarios.
- Alternatives evaluated include conveyance, storage and I/I removal.
- The Baseline (PWWF) Solution does not effectively reduce overflows (achieving only a 30% reduction in 6-month design storm overflows).
- The Optimised 1-Year Solution is 40% lower in cost than the Baseline Solution, eliminates overflows 1-year design storms, and significantly reduces overflows in the 2-year and 5-year events.
- The Optimised 1-Year Solution is $10M (30%) lower in cost than the Conveyance-Only 1-Year Solution (i.e. significant value achieved through effective placement of wet weather flow control facilities).

Design Storm	OF (ML)	No. Spills
6M	2.6	29
1Y	6.9	59
2Y	21.5	138
5Y	57.3	273



Design Storm	OF (ML)	No. Spills
6M	1.2	20
1Y	3.4	51
2Y	14.2	123
5Y	47.8	262



Design Storm	OF (ML)	No. Spills
6M	0	0
1Y	0	0
2Y	3.6	38
5Y	16.3	140