

10: Economic Appraisal

Scheme Economic Appraisal

In managing flood risk, the Council must have regard to the economic impact of its actions. The cost of the flood scheme can't exceed the benefits, i.e. the benefit/cost ratio must be greater than 1.0.

An economic appraisal (or cost benefit analysis) was carried out and the estimated outline cost and predicted benefits offered over time by the flood scheme were assessed.

Industry-standard, 'best practice' techniques were used to estimate the potential flood damages and costs.

Estimated Flood Damages

Estimates of damage due to flooding consider the following:

- Damage to residential properties;
- Damage to non-residential (e.g. commercial/industrial) properties;
- Impacts of road closures on the local economy;
- Cost of residential evacuation;
- Damage to vehicles due to submergence;
- Emergency services costs; and
- Impacts on health.

Estimated Costs

The construction cost of the flood scheme has been estimated using standard industry techniques. Other elements contributing to the overall scheme cost (e.g. design, operation, maintenance, etc) have also been taken into account.

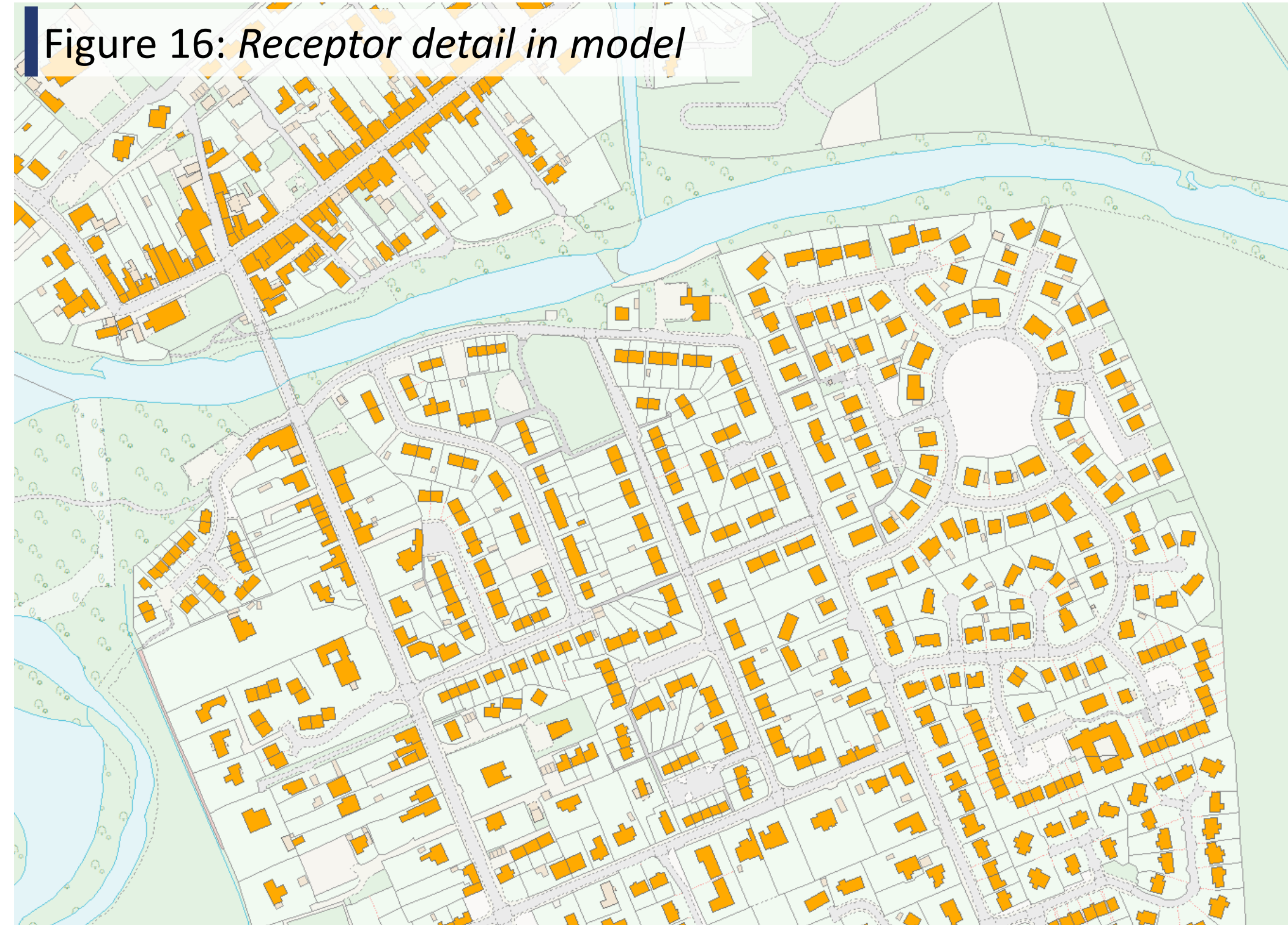
Until feedback is sought from the community and key organisations such as SEPA, SNH and public utility companies, it is not possible to define an accurate cost at this stage. Construction costs could also change as the scheme is developed further during detailed design and as more information is obtained about the site. As there are many risks and uncertainties, a contingency amount (known as an 'optimism bias') is also applied to the calculations.

The current project budget is £25.7M including this contingency amount.

Benefit-Cost Ratio

The current benefit cost ratio is 1.6 and so the scheme remains economically viable.

Figure 16: Receptor detail in model



Flood Risk Management (Scotland) Act Funding

A flood scheme at Comrie has been included within the national priority list of flood schemes and forms part of the current Tay Flood Risk Management Strategy and Local Flood Risk Management Plan. The Council and the Scottish Government have agreed in principle to fund the Scheme for Comrie. Perth and Kinross Council will provide 20% towards the overall capital cost and the Scottish Government will contribute the remaining 80%, assuming that the Scheme remains economically viable.

Although funding is provisionally secured, it is important to note that implementation of a scheme is still likely to be some time away and is not yet certain, due to the need to secure statutory consents and other approvals.

Figure 17: Example of road closure and vehicle damage

