Newton Stewart FLOOD PROTECTION SCHEME

Board 18: Upstream Storage at The Ghyll

Introduction

Considered as storage where steep-sided valley at Ghyll area can be impounded. Large impoundment structure would be needed (approx. 8 – 10m height) to facilitate option.

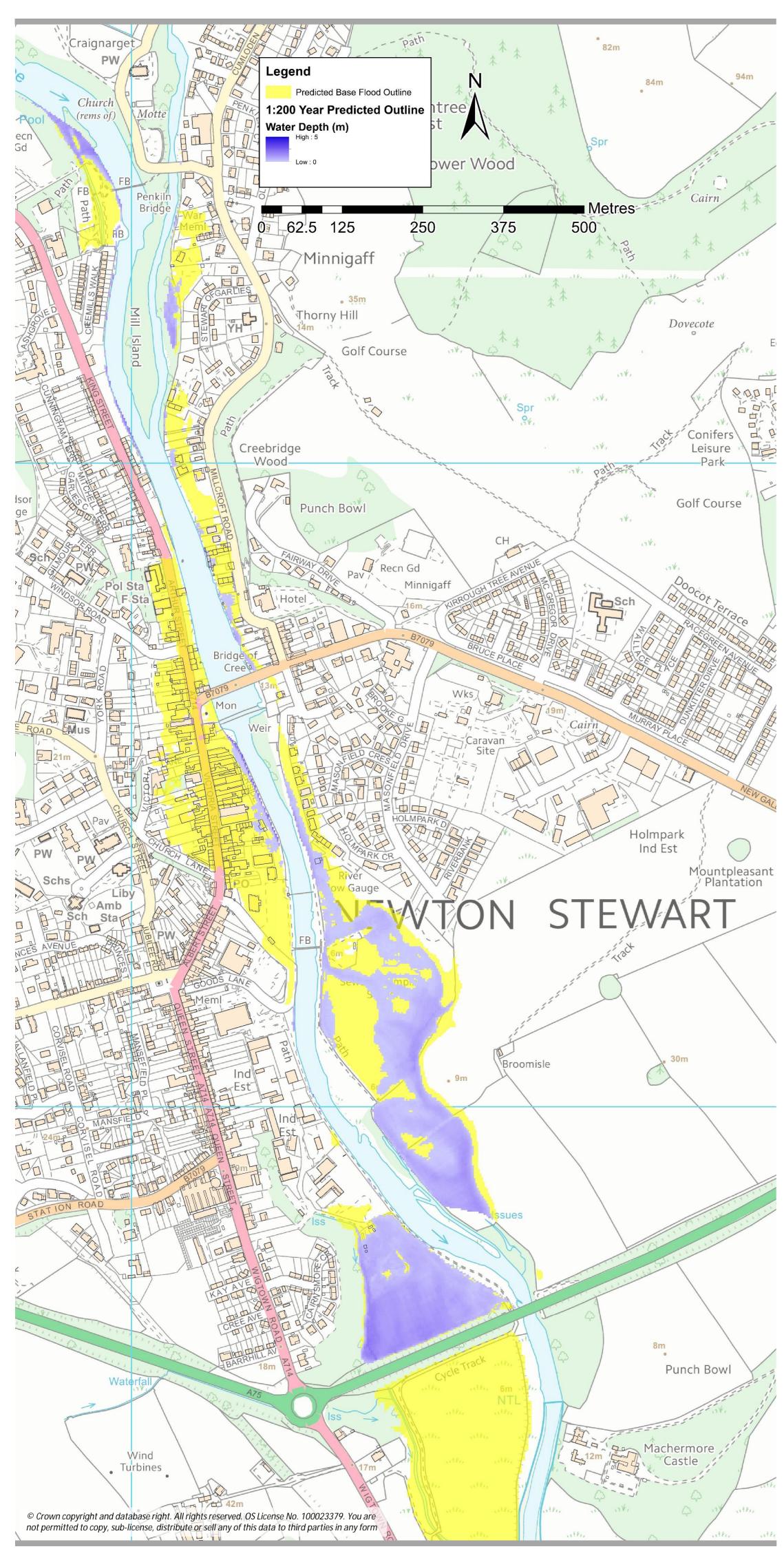


Figure 18-1: 1:200 Year Predicted Flood Outline – Upstream Storage at The Ghyll

Option Discussion

Stakeholder option discussion points:

Advantages of Option

- Large volume of storage available upstream of town
- High impact on flood risk downstream

Disadvantages of Option

- Requires diversion of nearby roads/bridges
- Inundated area may require purchase of up to 20 large properties upstream of the town
- Impoundment creates barrier to protected species of fish

Other Points Raised

• Former lead mine identified in inundation envelope, posing potential contamination risk.

Impact on Flood Risk

- Up 133 receptors brought out of risk at 1:200 year event
- BCR value of 0.54 found

Option Conclusion

Stakeholder option decision:

- Option not progressed
- Undesirable effects of relocating people in properties brought into inundation area
- High cost and significant work associated with dam construction and ancillary works

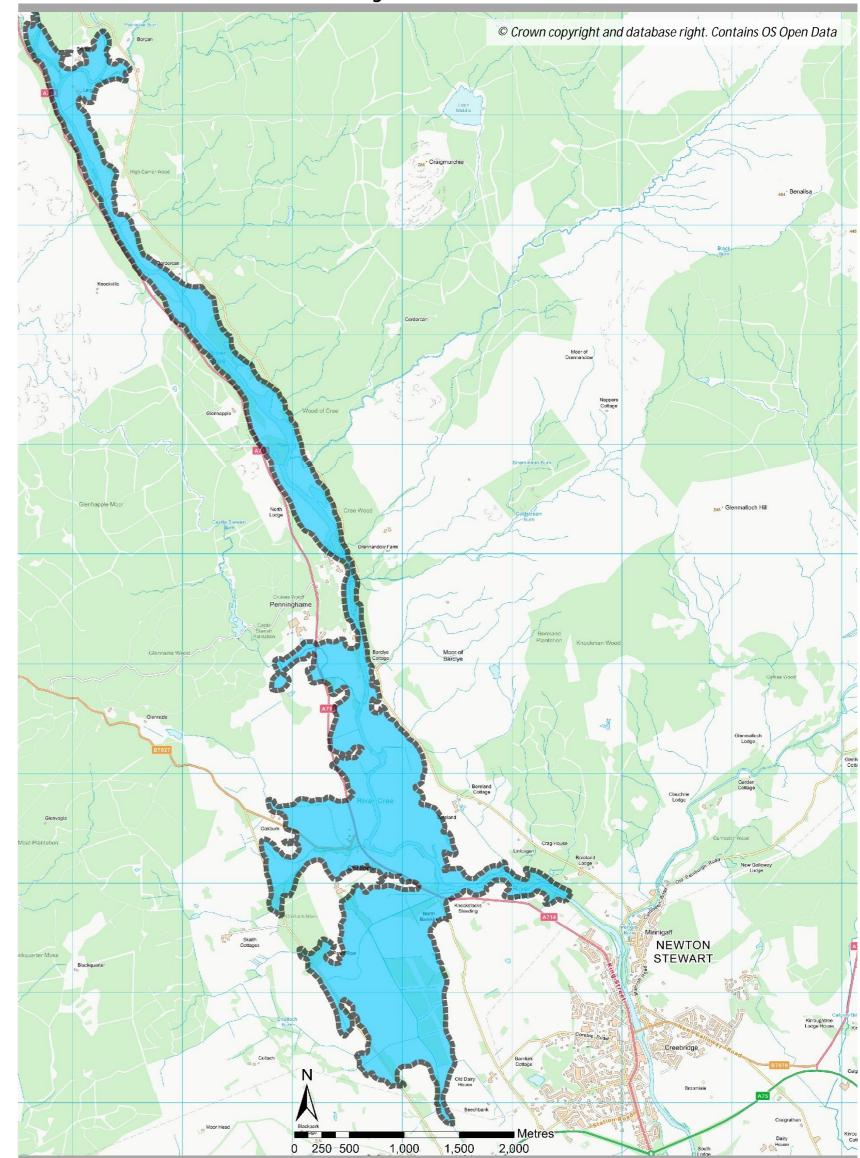


Figure 18-2: Potential Upstream Storage from The Ghyll