

Flood Risk Assessment (FRA)

9 Beck Close, Braystones, Cumbria CA21 2YH

Proposal: Single-storey bungalow extension

Applicant: John Reed

Local Planning Authority: Cumberland Council

Date: October 2025

1. Introduction

This Flood Risk Assessment (FRA) supports a householder planning application for a proposed single-storey extension to an existing bungalow at 9 Beck Close, Braystones. The FRA demonstrates that the development will be safe from flooding for its lifetime, will not increase flood risk elsewhere, and complies with the National Planning Policy Framework (NPPF) and Environment Agency (EA) guidance.

2. Site Description

The property is located within a small residential cul-de-sac in Braystones, a coastal village on the west coast of Cumbria, approximately 7 km south of Egremont.

The site is approximately 13–15 m AOD and lies about 150 m inland from the coastline and approximately 700 m west of the River Ehen.

The existing dwelling is a single-storey detached bungalow of traditional brick/block construction with a pitched roof. The proposed development involves two modest single-storey extension to the front/rear of the property to provide additional living accommodation.

3. Flood Risk Overview

The Environment Agency's mapping indicates the site has a low probability of flooding from both river and sea sources. There are no main rivers or tidal flood defences within the immediate site boundary.

4. Other Sources of Flooding

(a) Surface Water Flooding: Very Low Risk with some Low Risk ponding (<0.3 m) nearby during extreme rainfall.

(b) Groundwater Flooding: Moderate susceptibility in the wider area, but no recorded groundwater issues at this address.

(c) Sewer/Drainage Flooding: No known incidents of surcharge; risk is low.

(d) Tidal/Coastal Flooding: Property sits well above the highest recorded flood levels and is protected by natural ridges and the railway embankment.

5. Flood Risk Vulnerability and Planning Context

Under the NPPF, the proposed extension is “More Vulnerable” development, but no Sequential or Exception Test is required due to the low risk.

6. Flood History

No recorded flood history for the property or surrounding area.

7. Flood Mitigation and Design Measures

- Finished Floor Level (FFL): Equal to or 150 mm above existing floor level.
- Surface Water Drainage (SuDS): Soakaways, permeable paving, and maintained flow routes.
- Flood-Resilient Construction: Water-resistant materials up to 300 mm above ground, raised electrics.
- Site Access and Safety: Safe dry access via Beck Close and the B5345; residents to sign up for EA Flood Warnings.

8. Residual Risk

Residual risk from extreme or unforeseen events is very low due to elevation and mitigation measures.

9. Conclusion

- Low probability of flooding from all sources.
- Appropriate and safe development under NPPF guidance.
- No increase in flood risk to site or elsewhere.

Prepared by: John Reed

Date: 21st October 2025

For Planning Submission – Householder Extension, 9 Beck Close, Braystones, Cumbria CA21 2YH