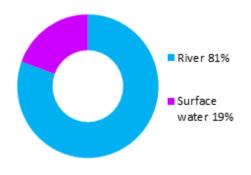
# **Kinloch Rannoch (Potentially Vulnerable Area 08/02)**

| Local Plan District | Local authority           | Main catchment           |
|---------------------|---------------------------|--------------------------|
| Tay                 | Perth and Kinross Council | Loch Rannoch (River Tay) |

#### **Summary of flooding impacts**



#### At risk of flooding

- 30 residential properties
- 20 non-residential properties
- £94,000 Annual Average Damages

(damages by flood source shown left)

#### Summary of objectives to manage flooding

Objectives have been set by SEPA and agreed with flood risk management authorities. These are the aims for managing local flood risk. The objectives have been grouped in three main ways: by reducing risk, avoiding increasing risk or accepting risk by maintaining current levels of management.

Many organisations, such as Scottish Water and energy companies, actively maintain and manage their own assets including their risk from flooding. Where known, these actions are described here. Scottish Natural Heritage and Historic Environment Scotland work with site owners to manage flooding where appropriate at designated environmental and/or cultural heritage sites. These actions are not detailed further in the Flood Risk Management Strategies.

#### Summary of actions to manage flooding

The actions below have been selected to manage flood risk.

| Flood<br>protection<br>scheme/works    | Natural flood<br>management<br>works  | New flood<br>warning      | Community<br>flood action<br>groups | Property level protection scheme | Site protection plans    |
|--|---------------------------------------|---------------------------|-------------------------------------|----------------------------------|--------------------------|
| Flood<br>protection<br>study           | Natural flood<br>management<br>study  | Maintain flood<br>warning | Awareness<br>raising                | Surface water plan/study         | Emergency plans/response |
| Maintain flood<br>protection<br>scheme | Strategic<br>mapping and<br>modelling | Flood<br>forecasting      | Self help                           | Maintenance                      | Planning policies        |

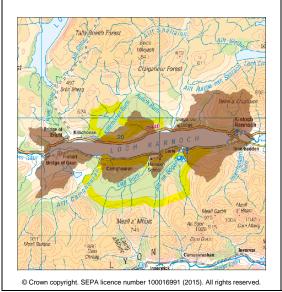
31 Section 2 Tay Local Plan District

# Kinloch Rannoch (Potentially Vulnerable Area 08/02)

| Local Plan District | Local authority           | Main catchment              |
|---------------------|---------------------------|-----------------------------|
| Тау                 | Perth and Kinross Council | Loch Rannoch<br>(River Tay) |

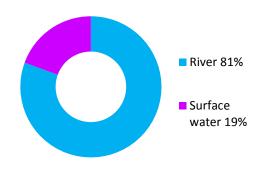
### **Background**

This Potentially Vulnerable Area is 77km² (shown below). It is situated in the upper reaches of the River Tay catchment and includes Kinloch Rannoch. It includes Loch Rannoch and the many burns that drain into it. The main watercourse is the River Tummel.



The area has a risk of river and surface water flooding. The majority of damages are caused by river flooding.

There are approximately 30 residential properties and 20 non-residential properties at risk of flooding. The Annual Average Damages are approximately £94,000.



**Figure 1**: Annual Average Damages by flood source

## Summary of flooding impacts

Work carried out since the National Flood Risk Assessment in 2011 has concluded that the risk of flooding in this Potentially Vulnerable Area is now relatively low. The designation of this Potentially Vulnerable Area will be reviewed in the next flood risk management planning cycle.

The main area at risk of flooding is Kinloch Rannoch which is at risk from Loch Rannoch and the River Tummel. Otherwise, flood risk is low and widely dispersed across the area.

The risk of flooding to people, property, as well as to community facilities, utilities, the transport network, designated sites and agricultural land is summarised in Table 1. The damages associated with floods of different likelihood are shown in Figure 2. For this Potentially Vulnerable Area the highest damages are to residential properties followed by damages to non-residential properties. The location of the impacts of flooding is shown in Figure 3.

The figures presented for Annual Average Damages include damages to residential properties, non-residential properties, transport and agriculture.

|  | 1 in 10<br>High likelihood  | 1 in 200<br>Medium likelihood | 1 in 1000<br>Low likelihood |
|--|-----------------------------|-------------------------------|-----------------------------|
| Residential properties (total 220)         | 10                          | 30                            | 30                          |
| Non-residential properties (total 160)     | <10                         | 20                            | 20                          |
| People                                     | 20                          | 60                            | 70                          |
| Community facilities                       | 0                           | 0                             | <10                         |
| Utilities assets                           | <10                         | <10                           | <10                         |
| Transport links (excluding minor roads)    | 1 B road<br>at 19 locations | 1 B road<br>at 22 locations   | 1 B road<br>at 23 locations |
| Environmental<br>designated areas<br>(km²) | 18.6                        | 18.7                          | 18.7                        |
| Designated cultural heritage sites         | 0                           | 0                             | 0                           |
| Agricultural land (km²)                    | 0.7                         | 1.0                           | 1.0                         |

Table 1: Summary of flooding impacts

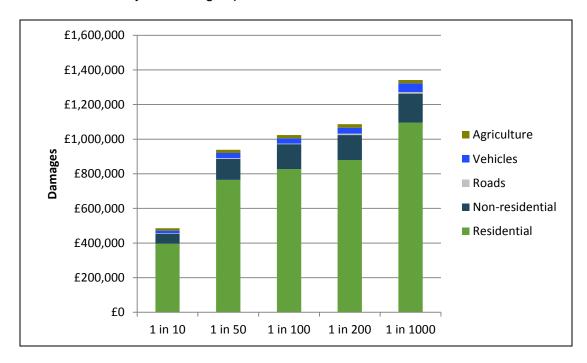


Figure 2: Damages by flood likelihood

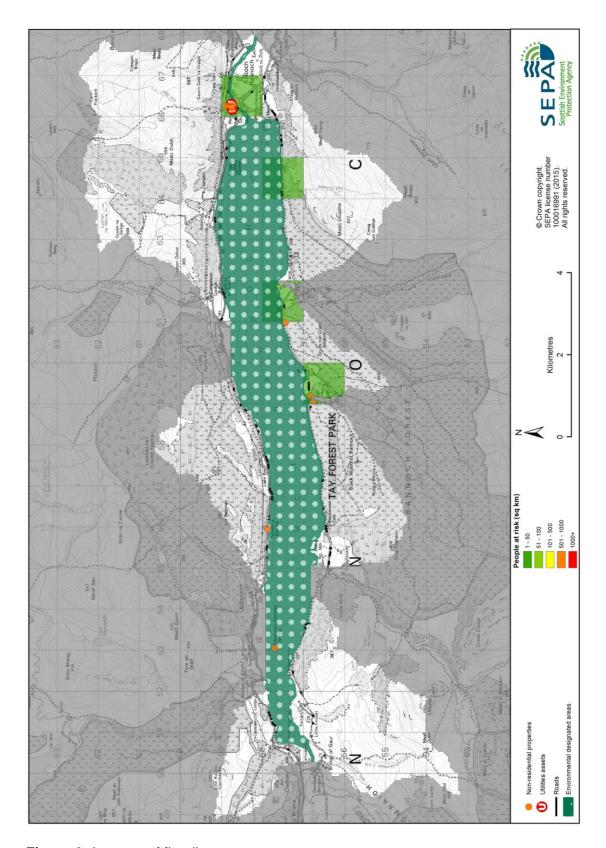


Figure 3: Impacts of flooding

# History of flooding

No significant floods have been recorded in this Potentially Vulnerable Area.

## Objectives to manage flooding in Potentially Vulnerable Area 08/02

Objectives provide a common goal and shared ambition for managing floods. These objectives have been set by SEPA and agreed with flood risk management authorities following consultation. They were identified through an assessment of the underlying evidence of the causes and impacts of flooding. Target areas have been set to focus actions; they do not necessarily correspond to areas at risk in SEPA's flood map. The objectives below have been set for Kinloch Rannoch Potentially Vulnerable Area.

| Target area                                  | Objective   | ID   | Indicators within PVA  |
|--|---|------|--|
| Applies across<br>Tay Local Plan<br>District | Avoid an overall increase in flood risk   | 8001 | <ul><li>30 residential<br/>properties</li><li>£94,000 Annual<br/>Average Damages</li></ul> |
| Applies across<br>Tay Local Plan<br>District | Reduce overall flood risk   | 8041 | <ul><li>30 residential<br/>properties</li><li>£94,000 Annual<br/>Average Damages</li></ul> |
| Applies across<br>Tay Local Plan<br>District | Organisations such as Scottish Water, energy companies and Historic Environment Scotland actively maintain and manage their own assets, including the risk of flooding. These actions are not detailed further in the Flood Risk Management Strategies. |      |  |

## Actions to manage flooding in Potentially Vulnerable Area 08/02

Actions describe where and how flood risk will be managed. These actions have been set by SEPA and agreed with flood risk management authorities following consultation. Selection of actions to deliver the agreed objectives was based on a detailed assessment and comparison of economic, social and environmental criteria. The actions shaded and then described below have been selected as the most appropriate for Kinloch Rannoch Potentially Vulnerable Area.

| Selected actions                       |                                       |                           |                                     |                                  |                          |
|--|---------------------------------------|---------------------------|-------------------------------------|----------------------------------|--------------------------|
| Flood<br>protection<br>scheme/works    | Natural flood<br>management<br>works  | New flood<br>warning      | Community<br>flood action<br>groups | Property level protection scheme | Site protection plans    |
| Flood<br>protection<br>study           | Natural flood<br>management<br>study  | Maintain flood<br>warning | Awareness raising                   | Surface water plan/study         | Emergency plans/response |
| Maintain flood<br>protection<br>scheme | Strategic<br>mapping and<br>modelling | Flood<br>forecasting      | Self help                           | Maintenance                      | Planning policies        |

| Action (ID):    | FLOOD FORECASTING  | (80410009)  |   |
|-----------------|--|---|---|
| Objective (ID): | Reduce overall flood risk  | (8041)  |   |
| Delivery lead:  | SEPA   |   |   |
| Status:         | Existing   | Indicative delivery:  | Ongoing   |
| Description:    | The Scottish Flood Forect SEPA and the Met Office statements which are issuservice also provides infowarnings, giving people a flooding on their home or SEPA's website. | that produces daily ued to Category 1 aurmation which allow better chance of re | national flood guidance and 2 Responders. The s SEPA to issue flood aducing the impact of |

| Action (ID):    | <b>SELF HELP</b> (80410011)   |                      |         |  |
|-----------------|---|----------------------|---------|--|
| Objective (ID): | Reduce overall flood risk (8041)  |                      |         |  |
| Delivery lead:  | <del></del>   |                      |         |  |
| Status:         | Existing  | Indicative delivery: | Ongoing |  |
| Description:    | Everyone is responsible for protecting themselves and their property from flooding. Property and business owners can take simple steps to reduce damage and disruption to their homes and businesses should flooding happen. This includes preparing a flood plan and flood kit, installing property level protection, signing up to Floodline and Resilient Communities initiatives, and ensuring that properties and businesses are insured against flood damage. |                      |         |  |

| Action (ID):    | AWARENESS RAISING   | (80410013)           |         |  |
|-----------------|---|----------------------|---------|--|
| Objective (ID): | Reduce overall flood risk   | (8041)               |         |  |
| Delivery lead:  | Responsible authorities   |                      |         |  |
| Status:         | Existing  | Indicative delivery: | Ongoing |  |
| Description:    | SEPA and the responsible authorities have a duty to raise public awareness of flood risk. Improved awareness of flood risk and actions that prepare individuals, homes and businesses for flooding can reduce the overall impact.  From 2016 SEPA will engage with the community through local participation in national initiatives, including partnership working with Neighbourhood Watch Scotland.  Local authorities will be undertaking additional awareness raising activities. Further details will be set out in the Local FRM Plan. |                      |         |  |

| Action (ID):    | MAINTENANCE (80410007)  |  |  |  |
|-----------------|---|--|--|--|
| Objective (ID): | Reduce overall flood risk (8041)  |  |  |  |
| Delivery lead:  | Perth and Kinross Council, asset / land managers  |  |  |  |
| Status:         | Existing  | Indicative delivery:   | Ongoing  |  |
| Description:    | Local authorities have a conclearance and repair work reduce flood risk. They prove works and make these as undertake inspection and owners and riparian lands and management of their reduce flood risk. | ks where such works<br>roduce schedules of<br>railable for public ins<br>repair on the public<br>owners are responsi | s would substantially clearance and repair spection. Scottish Water sewer network. Asset ble for the maintenance |  |

| Action (ID):    | EMERGENCY PLANS/RESPONSE (80410014)   |  |   |  |
|-----------------|---|--|---|--|
| Objective (ID): | Reduce overall flood risk (8041)  |  |   |  |
| Delivery lead:  | Category 1 and 2 Responders   |  |   |  |
| Status:         | Existing  | Indicative delivery:   | Ongoing   |  |
| Description:    | Providing an emergency many organisations, inclusively services and SEPA. Effectively emergencies are sponse relies on emergency response by the tregional and local resilient supported by the work of | iding local authoritied<br>ctive management of<br>lency plans that are<br>by Category 1 and 2<br>these organisations<br>lice partnerships. Thi | s, the emergency f an emergency prepared under the Civil Responders. The is co-ordinated through is response may be |  |

| Action (ID):    | PLANNING POLICIES (  | 80010001)   |  |  |
|-----------------|--|---|--|--|
| Objective (ID): | Avoid an overall increase  | in flood risk (8001)  |  |  |
|                 | Reduce overall flood risk  | (8041)  |  |  |
| Delivery lead:  | Planning authority   |   |  |  |
| Status:         | Existing   | Indicative delivery:  | Ongoing  |  |
| Description:    | Scottish Planning Policy a set out Scottish Ministers system and for the develorisk management, the pol sustainable flood risk man our cities and towns, encoural areas, and to address coasts and islands. Unde with medium to high likelifurther information on the Annex 2. | ' priorities for the oppoper and use of la licy supports a catch nagement and aims ourage sustainable less the long-term vuller this approach, new hood of flooding should be approach. | peration of the planning and. In terms of flood ament-scale approach to to build the resilience of land management in our nerability of parts of our of development in areas build be avoided. For |  |