**To:** Kent Flood Risk Management Committee – 6<sup>th</sup> March 2017

From: Michael Harrison, Chairman of Kent Flood Risk Management

Committee

**Subject:** Rewilding and Natural Flood Management

Classification: Unrestricted

**Summary:** To receive a presentation addressing Rewilding and Natural Flood Management from Professor Alastair Driver FCIEEM, Director – England and Wales, Rewilding Britain.

## 1. Background

1.1 Rewilding Britain is an environmental charity launched in 2015, with the mission of achieving the restoration of ecosystems in Britain, on land and at sea.

- 1.2 In September 2016 Rewilding Britain published a report entitled <u>How Rewilding Reduces Flood Risk</u>. Their report argues that managing flood risk naturally, by restoring natural processes, can offer better value for money and is more sustainable than traditional approaches to flood defence. The report provides a body of evidence demonstrating that alongside being cost effective, rewilding can improve water quality and create vibrant natural landscapes which stimulate tourism and ecological awareness, while also soaking up greater quantities of CO<sub>2</sub>.
- 1.3 Examples of rewilding projects featured within the report include:
  - Moorland restoration at the Holnicote Estate in West Somerset, including
    the recreation of flood meadows and making woody dams to mimic beaver
    activity. During winter 2013's unprecedented rainfall, there was no flooding in
    villages that regularly suffered in the past. There was also a 10% reduction in
    flood peak in late December 2013 on an already saturated catchment
    containing over 90 properties at risk.
  - Uplands Projects. At the headwaters of the River Derwent, on the highest plateau in the Peak District National Park, peat bogs were re-planted with moorland grasses, heathers and other plants. Average peak flows reduced by 30% and average run-off slowed by around 20 minutes.
  - Beavers and other wildlife. A beaver reintroduction trial in Devon has seen beavers dramatically alter the landscape, stimulating the revival of wet woodland home to a diverse range of wildlife. They have significantly increased water storage while slowing the flow of water downstream valuable services both at times of drought and after storms. During storm events, there was on average 30% lower peak volume of water leaving the site, compared with entering, reducing flood risk downstream.
  - Sussex Flow Initiative: replicating nature by placing 'leaky dams' composed of tree branches and trunks upriver along the River Ouse. In addition, floodplain woodlands have been created with the planting of 23,000 trees and more than 2 miles of hedgerow. This increases the landscape's natural ability to absorb

excess water and reduce flood. Floodplain meadows have become one of Sussex's most threatened habitats, but left alone can support diverse and dynamic ecosystems and store carbon. Such measures are also substantially cheaper than traditional flood defence schemes.

## 2. Recommendations

- 2.1 That Members:
  - Note the contents of the presentation by Professor Alastair Driver; and
  - Contribute any additional matters arising from debate by the Committee.

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Background documents: <u>How Rewilding Reduces Flood Risk</u>, Rewilding Britain (2016).