

# Worth House Hydroelectric Power Scheme

Flood risk assessment.

## Document Control

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## Renewables First – Company

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### Contents

<b>1</b>	<b>INTRODUCTION .....</b>	<b>2</b>
<b>2</b>	<b>FLOOD RISK .....</b>	<b>2</b>
<b>3</b>	<b>CONCLUSIONS .....</b>	<b>3</b>

## 1 Introduction

This document accompanies the water resources abstraction licence application and hydroelectric power scheme application for the proposed hydroelectric power (HEP) scheme located at Worth House, Lower Washfield, Tiverton, Devon.

An overshot waterwheel system is proposed for installation just downstream of the weir on the site.

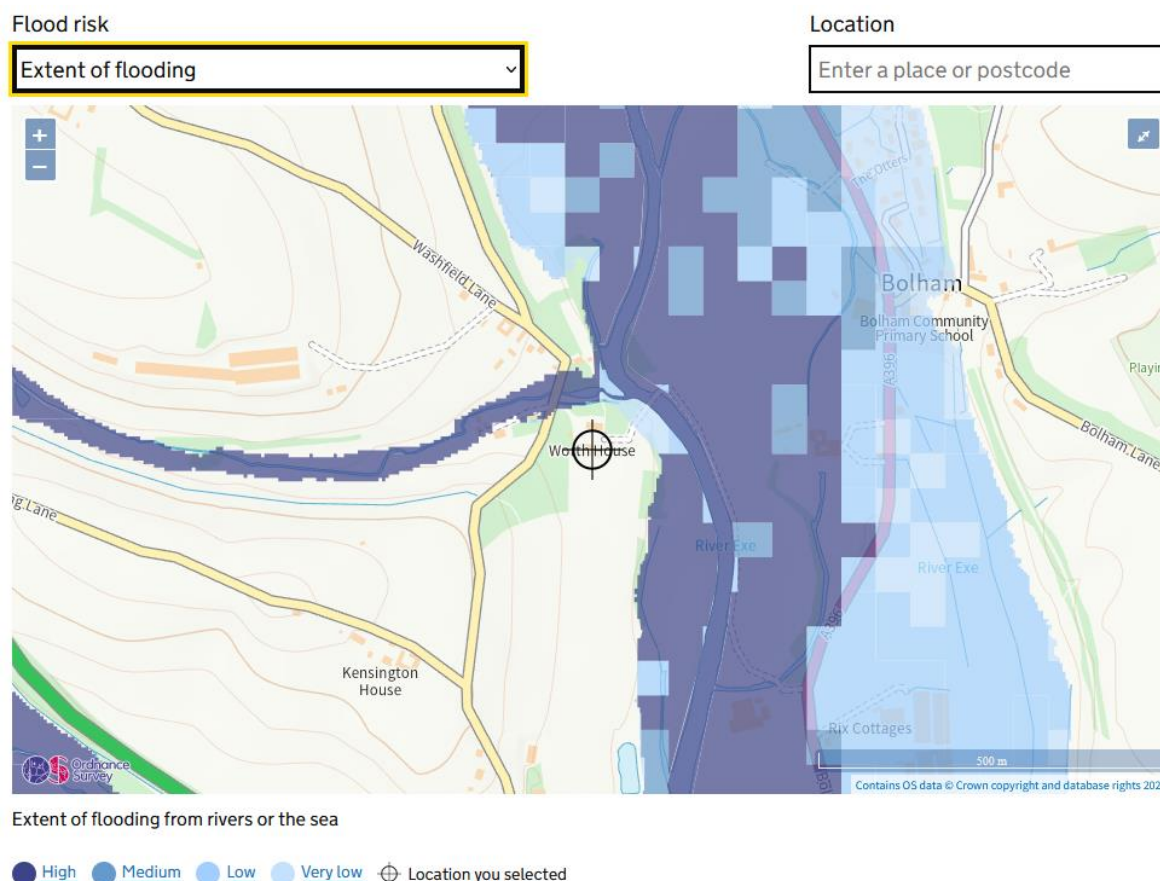
The installation will transfer the water from the upstream pond via the waterwheel to the bed of the stream below. The rotating wheel will drive a gearbox to run a generator and produce power.

The proposed installation has been assessed for possible flood risk and the following assessment made.

This summary is to be read alongside the Product 4 Report

## 2 Flood Risk

The image below shows the extent of flooding from Rivers or the Sea as indicated by the <https://check-long-term-flood-risk.service.gov.uk/> website.



The 1% AEP with 85% climate change allowance flood level for the River Exe adjacent to the site is 69.67 mAOD (refer to the Product 4 Report for the site). All control equipment will be located in an existing building on site above this flood level.

All of the equipment located within the river will be flood resilient with the exception of the generator. It is not practical to locate the generator above the 1% AEP with climate change allowance level.

