

<b>Title:</b> Impact Assessment of the Addition of Flood Defence Consents regime to the Environmental Permitting regime  <b>IA No:</b> Defra 1394  <b>Lead department or agency:</b> Department for Environment, Food and Rural Affairs  <b>Other departments or agencies:</b> Welsh Government, Environment Agency, Natural Resources Wales	<b>Impact Assessment (IA)</b>		
	<b>Date:</b> 02/10/2014		
	<b>Stage:</b> Consultation		
	<b>Source of intervention:</b> Domestic		
	<b>Type of measure:</b> Secondary legislation		
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<b>Summary: Intervention and Options</b>	<b>RPC Opinion:</b> Awaiting Scrutiny
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Cost of Preferred (or more likely) Option			
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, Two-Out? Measure qualifies as
£17.6m	£14.3m	£-0.83m	Yes   OUT

**What is the problem under consideration? Why is government intervention necessary?**  
 Certain activities on or near rivers and streams can affect flood risk. To avoid this, current legislation requires prior consent be sought from regulators (called flood defence consents). These consenting requirements can add to the administrative burdens of public and business' projects; there is some duplication with other (planning and non-planning) permit regimes. The numbers and extent of these regimes can be complex for both industry and regulators, and may act as a barrier to new business developments and start ups. Government intervention is necessary to reduce the administrative burdens on industry while continuing to ensure flood risk management.

Impact assessment relates to [England and Wales](#).

**What are the policy objectives and the intended effects?**  
 The policy objective is to make applications for flood consents easier, by removing duplication with other Environment Agency and Natural Resources Wales consenting schemes, and by removing complexity from the application process, in order to remove barriers and costs to business whilst ensuring that neither flood risk management nor environmental protection is compromised.

**What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)**  
 This Impact Assessment considers three options, each of which will to continue to protect the environment and human health;  
 Option 1; - incorporate flood defence consents into the Environmental Permitting regime. This option is the Government's preferred option as it is expected to cut unnecessary red tape, reduce the current administrative costs, and increase clarity.  
 Option 2 – make improvements to admin burdens through non-legislative means  
 Option 3 - 'do nothing'. This models the status quo, whereby the Flood Defence Consenting regime remains in isolation from the Environmental Permitting regime.

<b>Will the policy be reviewed?</b> It will be reviewed 5 years after the regulations take effect.					
Does implementation go beyond minimum EU requirements?				N/A	
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.		<b>Micro</b> Yes	<b>&lt; 20</b> Yes	<b>Small</b> Yes	<b>Medium</b> Yes
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)				<b>Traded:</b> N/A	<b>Non-traded:</b> N/A

***I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.***

Signed by the responsible Minister: \_\_\_\_\_ Date: \_\_\_\_\_

# Summary: Analysis & Evidence

# Policy Option 1

Description: Addition of Flood Defence Consents regime to the Environmental Permitting Programme

## FULL ECONOMIC ASSESSMENT

Price Base Year 2014	PV Base Year 2014	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: N/A	High: N/A	Best Estimate: £17.6m

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	N/A	N/A	N/A
High	N/A	N/A	N/A
Best Estimate	£0.74m	£0	£0.72m

### Description and scale of key monetised costs by 'main affected groups'

Implementation costs to the Environment Agency and Natural Resources Wales associated with process change, developing standard rules permits, writing guidance and a temporary reduction in process efficiency, together with costs to business of familiarising themselves with the new rules. See evidence base for further details.

### Other key non-monetised costs by 'main affected groups'

None identified

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	N/A	N/A	N/A
High	N/A	N/A	N/A
Best Estimate	£5.98m	£2.66m	£18.31m

### Description and scale of key monetised benefits by 'main affected groups'

The benefits arise mostly through reduced administrative costs. The majority (£14.6m NPV) of benefit is derived by applicants (including businesses, landowners, charities and householders amongst others), while the remainder (£3.7m NPV) accrues to the regulators. Further information is provided in the evidence base below.

### Other key non-monetised benefits by 'main affected groups'

Increased clarity and certainty for all affected groups. Simplified system for transposing environmental directives.

Key assumptions/sensitivities/risks	Discount rate (%)	3.5%
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Key assumptions are that there are no changes to who regulates, what is regulated or environmental outcomes. The only difference between England and Wales is that the overall number of applications is larger in the former; qualitatively, the nature of the applications and the resulting outcomes are effectively the same in both countries. Key risks are around timing and stakeholder engagement, that are monitored closely by the EPP Team

## BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:	In scope of OITO?	Measure qualifies as
Costs: £0.03m	Yes	OUT
Benefits: £1.33m		
Net: 1.31m		

# Summary: Analysis & Evidence

# Policy Option 2

Description: Non-legislative changes to be made to the Flood Defence Consents regime

## FULL ECONOMIC ASSESSMENT

Price Base Year 2014	PV Base Year 2014	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: N/A	High: N/A	Best Estimate: £1.1m

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	N/A	N/A	N/A
High	N/A	N/A	N/A
Best Estimate	£0.55m	£0.00m	£0.53m

### Description and scale of key monetised costs by 'main affected groups'

Implementation costs to the Environment Agency and Natural Resources Wales associated with process change. See evidence base for further details.

### Other key non-monetised costs by 'main affected groups'

None identified

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	N/A	N/A	N/A
High	N/A	N/A	N/A
Best Estimate	£0.51m	£0.22m	£1.55m

### Description and scale of key monetised benefits by 'main affected groups'

The benefits arise mostly through reduced administrative costs. The majority (£1.52m NPV) of benefit is derived by applicants (including businesses, landowners, charities and householders amongst others), while the remainder (£0.03m) accrues to the regulators. Further information is provided in the evidence base below.

### Other key non-monetised benefits by 'main affected groups'

Increased clarity and certainty for all affected groups. Somewhat simplified system for transposing environmental directives.

Key assumptions/sensitivities/risks	Discount rate (%)	3.5%
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Key assumptions are that there are no changes to who regulates, what is regulated or environmental outcomes. The only difference between England and Wales is that the overall number of applications is larger in the former; qualitatively, the nature of the applications and the resulting. Key risks are around timing and stakeholder engagement, that are monitored closely by the EPP Team.

## BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: £0.03m	Benefits: £0.14m	Net: £0.11m	Yes	OUT

# Evidence Base

## 1.0 Introduction

Construction works or maintenance activities can increase flood risk, cause or exacerbate flooding, and/or cause environmental damage if poorly executed. Such activities include, for example, building or repairing bridges, works to prevent erosion of river banks, dredging. The public, businesses and developers are therefore required to apply for permission (known as flood defence consents) to undertake certain types of activities on or near rivers and streams to avoid these problems being created. About 5% of flood defence consents need other permits issued by the Environment Agency or Natural Resources Wales (such as, waste permits), or may need permission from other regulators, such as planning permission. This can add to the administrative burdens associated with the activities for which consents are required. The Government has undertaken to reduce these burdens in order to meet its objective of ensuring the UK develops a competitive business environment that underpins business success, attracts investment and ultimately promotes economic growth.

This Impact Assessment considers options to reduce the administrative burdens associated with applying for flood defence consents with the aim of providing a more transparent and proportionate system for applications, reducing costs to organisations that wish to carry out works affecting main rivers. It explores the costs and benefits of integrating these consents into the Environmental Permitting framework, a system which allows applicants to make a single application for a number of different permits or for a number of activities at different sites, reduces the time needed to apply for permits, and enables regulators to focus resources on higher risk activities. It also explores how many of these improvements could be achieved by a non-legislative route. Both options look to reduce regulatory burdens while ensuring that flood risk management and environmental protection are not compromised.

### 1.1 Problem under consideration

Regulation is carried out by the Environment Agency and Natural Resource Wales on statutory main rivers.<sup>1</sup> Regulation includes;

- consideration of consent (or permit or authorisation) for those wishing to carry out works, usually some form of construction, structural alteration or physical maintenance works; and
- powers to rectify the impacts of works resulting from either failure to comply with a consent, or failure to obtain a consent, including restoration to previous condition, cost recovery, and prosecution (enforcement). (The applicant has a right of appeal to an independent arbitrator against decisions by the regulating body).

Regulation on other watercourses is carried out by Internal Drainage Boards (IDBs) and lead local flood authorities but is not covered by this Impact Assessment.

Current regulatory powers are based on legislation dating from 1980 and 1991, the latter being largely derived from the Land Drainage Act 1976. Legislation is therefore based on the priorities of at least thirty years ago, and does not fully reflect modern requirements on regulators for greater proportionality and transparency. The Pitt review<sup>2</sup> recommended clear accountability of roles for local flood risk management. The Flood and Water Management Act 2010 aimed to clarify some of these roles, but was limited by operating largely within the confines of the existing permitting legislation. In addition to the need for clearer accountability there is a need to further include the principles of better regulation into the flood defence regulation process.

Regulation generally comprises either the issue of a permit and suitable inspection and action to ensure that it is complied with, or action being taken where works have gone ahead but no permit has been sought. Environment Agency and Natural Resource Wales staff follow a simple national procedure in conjunction with locally-derived approaches to deliver a tailored service, which generally includes some form of risk-based approach (i.e. there is some prioritisation of regulatory effort towards the highest risk situations). Existing systems issue consents largely on a case by case basis, although some area offices allow standardised permits to be issued for 'low risk' activities.

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<sup>1</sup> A main river is defined as a watercourse marked as such on a main river map. Main rivers are usually larger streams and rivers, but also include some smaller watercourses.

<sup>2</sup> UK Government (2008) *Learning lessons from the 2007 floods*.

## 1.2 Rationale for intervention

While at present the regime is relatively low cost to the applicant and reasonably simple, there are issues that affect its overall user-friendliness:

- There is overlap with other permitting regimes, some or all of which can apply in addition to the flood defence consents system. These include planning consent (local planning authority), protected sites and species legislation (Natural England, Natural Resources Wales), or other Environment Agency and Natural Resources Wales permits covering abstraction, impoundment, discharge to a river and navigation.
- The interaction with these permits adds complexity, and could lead to difficulties in delivering the Penfold Review<sup>3</sup> recommendation that all the ‘if’ decisions (i.e. “if” a development should proceed in principle) are made together, and the ‘how’ decisions later.
- Flood defence regulation itself is applied under several legislative provisions on main rivers, including the Water Resources Act 1991, regional byelaws and the Highways Act 1980. These various regimes have differing charges, application times, appeal mechanisms and other provisions leading to a complex position for someone trying to take forward a proposal and determine the requirements of the legislation that applies.
- Much of the process is enshrined in primary legislation (e.g. the Acts mentioned above), which makes it difficult to readily amend the regime to suit changing circumstances.

Measures to make the system more risk-based and proportionate will help to cut red tape, and should increase clarity and certainty for stakeholders regarding the contribution of the system to the protection of the environment.

## 2.0 Permitting Regimes

### 2.1 Flood Defence Consent Regime

Construction works or maintenance can impact on broad flood risk management aims in a locality, and can exacerbate the risk of flooding and/or environmental damage if poorly executed. Works themselves are often for a purpose other than flood management, such as a bridge or utility route crossing a river or prevention of erosion. The current powers allow for the authorisation of the design and construction of these works, and enforcement action to rectify unapproved works can avoid these problems being created. The granting of a consent is based on its impact on the flood risk, land drainage, water level management, and other management aims, including the duty to further conservation (see, for example, Sections 6 – 8 Environment Act 2005). It does not represent an approval of the design of the structure, responsibility for which remains with the applicant.

The range of potential applicants for consent covers the entire cross section of society who may have interest in a river or a flood defence. This includes, but is not limited to:

- Residential riparian owners, such as homeowners;
- Non-residential riparian owners, such as businesses, large landowners (estates or farms), charities, and non-business organisations, such as voluntary trusts, churches, sports clubs;
- Property developers;
- Local authorities exercising their various roles, such as highway authority, education authority, and providing public facilities;
- Utility and infrastructure providers, such as water companies, electricity generators and distributors, Network Rail, Highways Agency, Transport Wales, cable TV companies, British Telecom, etc.;
- The Crown via the Ministry of Defence and similar departments;
- Port authorities, navigation authorities, harbour authorities; and

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<sup>3</sup> Department for Business Innovation & Skills (2010) *Penfold Review of Non-Planning Consents: Final Report*.

- Those affected by byelaws covering development in flood plains that is not covered by planning permission; some waste or agricultural activities

## 2.2 Environmental Permitting Regime

The Environmental Permitting system introduced under the Environmental Permitting (England and Wales) Regulations 2010 comprises a common set of definitions, processes and controls for the permitting of specified activities to prevent pollution. The creation of this system was intended to rationalise various permitting regimes into a common framework that is easier to understand and use. For example, it allows businesses that would otherwise require several permits for activities falling under the regulations on a single site to have just one permit and enables regulators to focus resources on higher risk activities.

In general, the Environmental Permitting regime does not change the substantive requirements of permits, but is intended to reduce the administration necessary to deliver those requirements. The benefits are, therefore, generally expressed in terms of savings in administrative costs.

The Environmental Permitting regime places risk at the heart of its licensing structure. The two main types of permits available are listed as follows:

- **Standard rules permits** – these are a set of fixed rules for common applications, amenable to a risk assessment in advance by the regulator
- **Bespoke permits** – these are written specifically for activities which are unique and of higher risk.

In addition, for some activities which do not require permits, there may be a requirement for an exemption:

- **Exemptions** – for activities that don't need a permit. Many of these need to be registered with the regulator. Those that do not need to be registered are referred to as "exclusions". We have assumed that the current distribution of activities seeking consent will continue, and therefore consider that 40% of exemptions will be exclusions.

## 2.3 Regulatory Bodies

The regulation of the Flood Defence Consent regime is carried out by a number of authorities. The Environment Agency and Natural Resources Wales are responsible for consenting activities on statutory main rivers in England and Wales respectively, whilst ordinary watercourse regulation in internal drainage districts is undertaken by Internal Drainage Boards (IDBs) and Lead Local Flood Authorities (upper tier local authorities) outside IDB districts. The planned change affects only consenting activities on statutory main rivers.

The role of the regulator is twofold:

- consideration of consent (or permit or authorisation) for those wishing to carry out works, usually some form of construction, structural alteration or physical maintenance works; and
- powers to rectify the impacts of works resulting from either failure to comply with a consent, or failure to obtain a consent, including restoration to previous condition, cost recovery, and prosecution (enforcement).<sup>4</sup>

## 3.0 Policy Options

The key driver for change is the need to modernise regulation, with particular emphasis on administrative burdens to applicants and increasing transparency and accountability. This Impact Assessment therefore considers three options which aim to deliver such changes.

Each policy option relates only to FDCs affecting main rivers. The possibility of making changes to the permitting system affecting other watercourses has been discounted, since under the current legislation only a limited range of exclusively high-risk activities currently necessitate a permit. This restricts potential for standard rules to be implemented, as most applications warrant individual consideration.

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<sup>4</sup> The applicant has a right of appeal to an independent arbitrator against decisions by the regulating body

The first option considered within this impact assessment **to incorporate Flood Defence Consenting for main rivers within the Environmental Permitting Regime** (Policy Option 1). This is the Government's preferred option as it is expected to lead to a larger reduction in red tape than alternatives whilst continuing to protect the environment and human health, and to increasing clarity and certainty for all stakeholders on how the system protects the environment.

Environmental permitting comprises a common set of definitions, processes and controls for the permitting of specified activities. In doing so, it seeks to rationalise various permitting regimes into a common framework that is intended to be easier to understand and use. For example, it allows businesses that would otherwise require several permits for activities falling under the regulations on a single site to complete a single application, and to be issued with a single permit. The simpler and more transparent system helps regulators to focus resources on higher risk activities. In general, Environmental Permitting does not change the substantive requirements of permits, but it is expected to reduce the administration necessary to deliver those requirements. The delivery of this policy option would be implemented by the Environment Agency and Natural Resources Wales.

The second option considered in this assessment for **non-legislative changes to be made to the Flood Defence Consent regime** (Policy Option 2). This would achieve some of the benefits which are likely to be associated with Policy Option 1, but without any associated legislative change. It is likely that improvements can be made to the existing system (i.e. clearer guidance) which will not require any changes to the legislation. Again the delivery of Policy Option 2 would be implemented by the Environment Agency and Natural Resources Wales.

The third and final option is the '**do nothing**' option (model baseline). This, as its name suggests, models the status quo, whereby the Flood Defence Consent regime remains distinct from the Environmental Permitting regime.

## 4.0 Costs and Benefits

The following sections outline the costs and benefits associated with each of the policy options.

In the analysis, costs and benefits for Policy Option 1 and 2 are compared with the 'do nothing' option. For the purposes of this relative analysis the costs and benefits of the 'do nothing' option are considered to be zero. However, Section 4.2 sets out the basis for estimating the costs of the do nothing option, in an absolute sense over time. Where possible, the risks and key assumptions relating to the analysis are presented.

In recognition of the distinct responsibilities of the Environment Agency and Natural Resources Wales, the costs and benefits have been split between England and Wales where these can be calculated. These are outlined within each section of the assessment.

### 4.1 Methodology

The costs and benefits described in this impact assessment have been modelled using an Excel spreadsheet to capture, organise and analyse key data regarding the flood defence consents system. Data has been gathered from two key sources:

- the Environment Agency has provided details regarding the number and characteristics of consents under the current system, and regarding the effort and costs involved in processing them (this information covers both England and Wales)
- a small-scale survey was carried out in Spring 2014 to seek information from recent FDC applicants regarding their experience of the current system, and their expectations regarding the potential impact of the changes envisaged in the policy options. Structured telephone interviews were carried out with nineteen organisations, yielding useful results in all cases. The findings were averaged and the results used as the basis for estimates of the amount of time and level of staff they employ within the marine planning process.

The majority of the impacts have been assessed using the Standard Cost Model (SCM). The SCM method is a way of breaking down the costs of regulation into manageable components that can be measured. The model breaks down the costs of complying with regulations into:

- 1) '*substantive compliance costs*', which are the costs incurred in achieving the intended results of the policy (for example, the costs of fitting a filter to comply with environmental requirements), and

- 2) ‘*administrative burden costs*’, which are the administrative activities that businesses are required to conduct in order to comply with the information obligations of central government regulation (for example, the costs of documenting and reporting that the filter has been fitted).

Administrative burdens are calculated using the formula:

$N \times W \times T$ , where:

$N$  is the number of businesses affected;

$W$  is the cost per hour taken to meet the obligation; and

$T$  is the number of hours taken per year.

The costs and benefits in this Impact Assessment are measured over a 10 year period<sup>5</sup>, with the net present values (NPVs) shown for the period (NPVs effectively show the value of a stream of costs or benefits over a period of time in ‘today’s terms’). In line with the HM Treasury Green Book<sup>6</sup>, a 3.5% discount rate has been used to calculate the NPVs.

The costs and benefits presented in this impact assessment are in real terms (2014 prices).

It is assumed that the impacts associated with the preparation of each of the policy options commence in 2014, prior to the implementation in 2015. The last year covered by the impact assessment is therefore 2023.

Following implementation, it is recognised that the long term costs and benefits associated with the policy options will not have an immediate effect. Based on previous experience<sup>7</sup>, the full impact of costs and benefits tend to be realised over a period of time, rather than being delivered instantaneously. As such, throughout all of the modelling, a transitional period between 2015 and 2017 is assumed. Costs and benefits are expected to be 25-50% lower in 2015 – 16 during implementation of the new policy. I.e. during 2015 (the first year of implementation) it is expected that 50% of the expected costs and benefits will be realised. In 2016, 75% are expected and in 2017 it is expected that 100% of the costs and benefits will be realised.

There are a number of groups of activities relating to the introduction of each policy option which will result in the accrual of costs and benefits.

Table 1, shown below, summarises the main impacts associated with the Policy Options described in Section 3.0.

Table 1: High Level Summary of Impacts by Policy Option

Impact	Policy Option 1 – Environmental Permitting Option	Policy Option 2 – Non-legislative Option	Policy Option 3 – Do Nothing Option
Preparation and management of regime changes	✓	✓	✗
Requirement to amalgamate public registers	Partial <sup>8</sup>	✗	✗
Introduction of standard rules permits	✓	✗	✗
Ability to make integrated application transactions	✓	✗	✗
Delivery of new guidance	✓	✓	✗
Ability to make single applications for multiple sites	✓	Partial <sup>9</sup>	✗
Reduced administrative costs	✓	✓	✗

The costs and benefits associated with each of these areas and for each policy option are provided in more detail in the following sections. Where possible, costs and benefits have been separately calculated for different actors in the economy, these include:

<sup>5</sup> Standard period for Government Impact Assessments.

<sup>6</sup> [http://www.hm-treasury.gov.uk/data\\_greenbook\\_index.htm](http://www.hm-treasury.gov.uk/data_greenbook_index.htm)

<sup>7</sup> EPP1 Post Implementation Review

<sup>8</sup> Applications for permits from more than one scheme will be added to the register, but those for just flood defence consents will not be. Considerations regarding public registers are therefore not deemed to be relevant to this impact assessment.

<sup>9</sup> Currently regulators are able to form an opinion as to what constitutes an application, so it is possible for multiple sites on occasion to fall under a single permit.



- Applicants<sup>10</sup>;
- the Environment Agency;
- Natural Resources Wales;
- Government; and
- Consultees.

Each impact of the proposed policy options is presented so as to make clear its contribution to the overall costs and benefits shown in the summary tables, Table 14 and Table .

## 4.2 Model Baseline

The costs and benefits for each of the policy options assessed in this impact assessment are measured against a common baseline. The baseline is in effect a prediction of future events under a “do nothing” scenario. It projects the numbers of permits (applications, inspections etc.) and the profile of these over time. The baseline is also quantified, so that the annual costs to both the regulator and applicants in using the system can be estimated.

For the purposes of this impact assessment, the baseline was considered to be static (i.e. the same number of new licence applications each year for the ten years of the impact assessment) to reflect the fact that there has been no observed trend in changes to application numbers over recent years.

Table 2, summarises the number of new applications currently received by the Environment Agency and Natural Resources Wales per annum. Whilst in practice there is a degree of variability in the number of applications received, it is assumed that an average of 4,829 applications per annum will be continue to be received by the Environment Agency and 500 by Natural Resources Wales over the ten year period covered by this Impact Assessment.

**Table 2: Estimated Quantity of New Applications per Annum**

Description	Quantity Per Annum – England	Quantity Per Annum – Wales
Main rivers: New applications for a single activity	4,283	463
Main rivers: New applications for multiple structures on one consent	546	37
<b>Total</b>	<b>4,829<sup>11</sup></b>	<b>500</b>

In the course of determining applications, regulators also conduct site inspections to determine the acceptability of the applications. Conversations with the Environment Agency indicate that approximately three quarters of all applications require a site inspection (whether that be prior, during or after consent). As part of this project, interviews with applicants indicated that around 45% of applications involve a site inspection. Whilst this survey represents the strongest available evidence on which to base an assessment of the behaviour and practices of applicants, it drew on a limited sample, from a heterogeneous pool. In this regard, the Environment Agency has a better overview of the global picture, and therefore in this instance the Agency’s estimate has been used to model the costs.

### 4.2.1 Costs of the Flood Defence Consent Regime

Prior to the establishment of Natural Resources Wales, administering the Flood Defence Consent regime on main rivers<sup>12</sup> in England and Wales is estimated to have cost the Environment Agency £2.31m

<sup>10</sup> The term ‘applicants’ refers to all applicants for Flood Defence Consents, which include businesses, members of the public, public bodies, rural landowners, charities, clubs and other institutions. In April-June 2012, 17% of applications came from utilities; 15% from landowners and agricultural businesses; and 25% from other businesses (See Annex 2). The unusually broad range of applicants means that there is no representative ‘industry body’ and there are many more one off applicants than for other environmental permits.

<sup>11</sup> This figure is based on Environment Agency data for 2012/13 covering both England and Wales, and excludes 171 rolling programme consents.

<sup>12</sup> Although at that time the EA was also responsible for administering the regime on ordinary watercourses (outside of Internal Drainage Board areas) the costs for this aspect have been excluded.

(£2.05m in England and £0.26m in Wales) in 2010. In addition to these frontline costs, there are also additional 'back office' costs which the Environment Agency and Natural Resources Wales currently incur. These are estimated at £0.1m.

Again, these costs represent the regulation of main rivers and ordinary water courses.

Costs to applicants comprise administrative burdens and some potential other direct costs. Administrative burdens will include activities such as reading and understanding guidance on the scheme, compiling relevant information and completing the application, and attending inspections if required. Where technical assessments are required in order to demonstrate that their proposals will not impact on flood risk or the environment, applicants generally need to pay for their production. There may also be additional costs if applicants need to engage consultants to advise on or assist with the application.

In the absence of definitive information on applicant's costs, it is estimated that each applicant currently spends approximately £973 per application (staff time x hourly rate). These costs are based on industry interviews and comprise the staff time spent:

- obtaining pre-application advice from the regulator (1.8 hours);
- completing the application form (18.5 hours);
- assembling supporting documentation;
- dealing with queries or clarifications (3.5 hours);
- and preparing for and supervising site visits (for an average of 75% of applications (source: EA estimate), requiring 5.7 hours each).

An average hourly rate of £34.53<sup>13</sup> is assumed, including 28% on-costs, equalling a day rate of £259. Explicitly, these costs only represent an estimate of the administrative costs associated with applications; excluding the financial costs associated with application fees. Application fees are not within the scope of this assessment, but it should be noted that reductions in the costs to the regulator are likely to help reduce application fees and make them smaller than they would be otherwise.

Therefore, using the numbers of applications from Table 2, and the costs per application above, it is estimated that applicants in England spend £4.7m per annum on the Flood Defence Consenting regime, while those in Wales spend £487k.

#### **4.2.2 Benefits of the Flood Defence Consent Regime**

The primary benefit of the Flood Defence Consenting regime is the avoidance of direct flooding as a result of poorly designed structures. Examples include culverts that are too small and lead to the flooding of surrounding property, erosion protection works that prevent the restriction of the capacity of watercourses leading to flooding, and inadequate design of flood control structures (new or altered) leading to failure and flooding that affects applicants or other parties;

The regime also:

- Enables prevention of blocked access to a structure that would otherwise lead to an increased cost of operation by the drainage authority; and
- Ensures works contribute to environmental objectives, such as prevention of ecological damage caused by the use of unsuitable materials such as concrete bank protection where more natural banks with habitat provision might be retained, or the destruction of habitat through unnecessary over-dredging by a landowner
- Supports UK compliance with certain EU directives such as the Water Framework Directive.

The benefits of the existing regulatory regime are difficult to quantify, due principally to the variation in scale of works proposed, from minor to highly significant, and variation in the quality of submissions and the degree of involvement needed from the operating authority to ensure a suitable outcome. There is also considerable variation in benefit depending on what structure is consented (ranging from simple outfall to major defence repair or alterations, or highway bridge for example), and how much intervention is needed from the operating authority to ensure the eventual design is suitable.

However, the Environment Agency estimate that in an average case the damage avoided (e.g. flooding of buildings, roads and vehicles) is approximately £5,000 per consent issued, based on a single avoided

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<sup>13</sup> See table 22, Annex 1 for further details of assumptions behind wage rates.

event. This has been based on the value of a car written off, small scale domestic damage, or replacement of erosion protection or outfall structure following failure, as examples of typical damage). This implies a total benefit of the main river flood defence consents of approximately £27m per annum (5,329 consents @ £5,000), of which £2.5m relates to Wales. These estimates may be conservative to the extent that events may occur more than once in the absence of control (i.e. a single event does not lead to the landowner correcting the situation, perhaps because of externalities or lack of information regarding solutions).

In addition, there are various non-monetised benefits as “spin-offs” from the generally locally-based operation of the existing regime. These include negotiated improvements to works to provide positive benefit, rather than just offsetting negative impacts of the proposal; benefits to other interests such as the natural environment through habitat creation, public recreation through provision of walkways, access or improvements to river based navigation interests; prevention and reduction of pollution through construction and in the final design of works; and delivery of some Water Framework Directive improvements by suitable design and use of materials (e.g. naturalised river bank erosion protection). These benefits arise in individual cases rather than across the board. Occasionally, consented works can contribute to a flood alleviation scheme promoted by the Environment Agency or Natural Resources Wales, as a developer can carry out works that fit into the bigger picture. Any more centralised system of consenting and the use of standard rules permits may, however, limit these opportunities in the future.

### 4.3 Preparation Costs and Benefits

#### 4.3.1 Policy Option 1 – Environmental Permitting Option

There are a number of preparation activities which are expected to be undertaken in order to prepare for the Flood Defence Consents regime transferring in to the Environmental Permitting regime. Accordingly, all of the activities are expected to take place before the system is implemented in late 2015 (i.e. during 2014 / first half 2015). The key activities modelled in this impact assessment comprise:

- the management of the changes to the Flood Defence Consents regime;
- the development of standard permits, exemptions and consultations.

In addition, there is also expected to be a reduction in process efficiency experienced during this period.

The Environment Agency and Natural Resources Wales will be the bodies required to take action to implement the changes in order to align the watercourse permitting system with the Environmental Permitting regime. It is anticipated that a common set of standard permits for England and Wales will be developed by the regulators, although it remains open to each administration to produce its own. It is not expected that divergence between the two administrations would impact significantly upon the costs and benefits of the policy option.

The total preparation costs are expected to total £0.28m. As this is all accrued in the first year in the impact assessment, the 10 year net present value (NPV) is also £0.28m.

- For the regulators, the largest cost is expected to be a reduction in process efficiency during the transition period, as staff engaged in processing applications will take time to reach full efficiency in operating the new system – for example, needing to make more frequent reference to written guidance, and to undertake additional checks to ensure that permits are completed accurately. This is estimated by the Environment Agency to be 5% of application processing costs (i.e. 5% of £2.33m) for a single year, which would amount to £0.12m.
- The implementation of the new regime would also necessitate the development of standard permits, exemptions and the consultation process with statutory consultees, expected to cost £75k (the same cost estimate as used for the development of standard rules and permits for the Water Discharge and Impoundment regime in the impact assessment for phase 2 of the Environmental Permitting Programme (EPP2 IA)<sup>14</sup>).

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<sup>14</sup> Department for Environment Food and Rural Affairs, and Department of Energy and Climate Change (2010) *Explanatory Memorandum to the Environmental Permitting (England and Wales) Regulations 2010 No. 675*, 2010, [http://www.legislation.gov.uk/uksi/2010/675/pdfs/ukxiem\\_20100675\\_en.pdf](http://www.legislation.gov.uk/uksi/2010/675/pdfs/ukxiem_20100675_en.pdf)

- Managing the process change is expected to cost around £88k or the equivalent of 1.5 FTE grade 6 staff members (source: EA estimate) at a day rate of £270 (including 28% on-costs).<sup>15</sup>

A summary of the costs by actor is shown in Table 3.

**Table 3: Policy Option 1 - Summary of Preparation Costs (£k)**

	Actor	2014	2015	2016	2017...	...2023	TOTAL (NPV)
<b>Costs</b>	Applicants	£0	£0	£0	£0	£0	£0
	Environment Agency/ Natural Resources Wales	£280	£0	£0	£0	£0	£280
	Consultees	£0	£0	£0	£0	£0	£0
	Government	£0	£0	£0	£0	£0	£0
	<b>Total</b>	<b>£280</b>	<b>£0</b>	<b>£0</b>	<b>£0</b>	<b>£0</b>	<b>£280</b>

Considering the split of these costs between England and Wales, it is assumed that the same processes would be required for both countries. Rather than duplicating effort, it would be reasonable for the costs to be shared between the two regulators. In the absence of any formula as to how that might be achieved, the simplest way of splitting these costs is to use the respective percentages of applications in England and Wales. Based on this approach, the costs to the Environment Agency would be £250k and £30k for Natural Resource Wales.

#### 4.3.2 Policy Option 2 – Non-legislative Option

For Policy Option 2, it is expected that only a small number of activities would be required in order to prepare for non-legislative changes to the Flood Defence Consents regime. Unlike Policy Option 1, undertaking Policy Option 2 would not require the development of standard permits, exemptions and consultations.

The key impact associated with the non-legislative option is the requirement for resources to manage the implementation of the changes – these would largely comprise of project management resources. Since processes remain largely unchanged, it is assumed that no transitional process inefficiency is introduced. The impact is most likely to fall on the Environment Agency and Natural Resource Wales in the year prior to changes being made (i.e. 2014), and is equivalent to approximately £88k or 1.5 FTE grade 6 member of staff at a day rate of £270 (including 28% on-costs).

Table 4 summarises the costs for each of the main actors. As can be observed in the table, the costs associated with Policy Option 2 are small in comparison to Policy Option 1 (less than a quarter).

**Table 4: Policy Option 2 - Summary of Preparation Costs (£k)**

	Actor	2014	2015	2016	2017...	...2023	TOTAL (NPV)
<b>Costs</b>	Applicants	£0	£0	£0	£0	£0	£0
	Environment Agency/ Natural Resources Wales	£88	£0	£0	£0	£0	£88
	Consultees	£0	£0	£0	£0	£0	£0
	Government	£0	£0	£0	£0	£0	£0
	<b>Total</b>	<b>£88</b>	<b>£0</b>	<b>£0</b>	<b>£0</b>	<b>£0</b>	<b>£88</b>

Considering the split of these costs between England and Wales it is assumed that, like Policy Option 1, the same processes would be required for both the Environment Agency and Natural Resources Wales. Based on that assumption the costs in England will be £80k, and £8k to Wales.

<sup>15</sup> See Annex 1 for further information on wage rates.

## 4.4 Standard Rules Permits Costs and Benefits

### 4.4.1 Policy Option 1 – Environmental Permitting Option

One of the key benefits associated with the Environmental Permitting regime is the ability for the regulator to provide Standard Rules Permits. The regulator designs a Standard Rules Permit for an activity by assesses the risk and drawing up and publishing a set of conditions. If the applicant is able to meet those conditions, then a simplified application process can be followed, reducing regulators' and applicants' costs.

However, unlike bespoke permits, once granted, Standard Rules Permits cannot be varied and are therefore not suitable for higher risk and more complex activities. It is currently assumed that no inspections will be carried out for those applicants opting for Standard Rules Permits. These features also reduce the cost of application and ongoing costs for applicants, as well as for the regulators.

The availability and uptake of Standard Rules Permits will vary depending on the type of activity proposed. Discussions with the Environment Agency have indicated that perhaps 35% all applications on main rivers may be eligible for Standard Rules Permits. It is assumed proportions will be the same for Wales, as there is no particular difference in the nature of applications to account for any substantial difference in figures. Table 5 summarises the assumptions used in this assessment.

**Table 5: Estimate of the Percentage of Applications Eligible for Standard Rules Permits**

Description	Environment Agency	Natural Resources Wales
% of applications eligible for Standard Rules Permits	35%	35%

Whilst there is a cost associated with converting current permits to Standard Rules Permits at the buying point, the savings far outweigh them. Savings are expected to be released in the following activity areas:

- No inspections (regulators and applicants);
- Saving on licence administration costs (regulators only);
- Reduction in costs incurred in the process of obtaining new permits (regulators and applicants); and
- Reduction in the costs of consultation for new permit applications (regulators and consultees)

Examining who the costs and benefits are expected to fall upon, the largest beneficiary is predicted to be the applicants, which once implemented is expected to accrue savings from the easier method of undertaking new applications of approximately £807k per annum in England and £84k in Wales. This is calculated as being a 40% saving on the average cost of an application (3.19 days, based on the industry interviews undertaken in spring 2014) multiplied by an average day rate of £259, (see table 22, Annex 1); plus 100% savings on costs associated with site visits (75% of 0.76 days, again, based on the industry interviews). These assumptions are consistent with the baseline. The estimate of a 40% saving for standard rules permit applications is consistent with the savings estimate for standard rules permits previously used in the EPP2 impact assessment.

Savings for the Environment Agency and Natural Resources Wales would arise from cheaper processing of the Standard Rules Permits. These would amount to £259k per annum in England and £27k in Wales. These result from an average saving of 62.5% on both the provision of pre-application advice and the application determination process (source: National Flood Defence Consent Register (NFDCR)) and 100% saving on time taken for inspections. The total savings across England and Wales are thus made up of those resulting from reduced pre-application discussions (£ 84k), less time required to process each application (£130k) and fewer inspections (£70k).

Annual savings from reduced pre-application discussions are £84k, calculated by multiplying the following:

- The percentage of applications requiring pre-application advice (92.5%; source: EA estimate);
- The average time taken for pre-application advice (4 hours; source: NFDCR data); and

- The wage rate of the licence administration team (£145 per day, calculated from an assumed time split of 80% grade 3 staff, 10% grade 4 and 10% grade 5, as used in the EPP2 impact assessment).
- Expected 62.5% savings (as above)

Annual savings related to application determination are £130.0k, calculated by multiplying:

- The time taken for application determination (5.75 hours; source: EA staff activity survey 2011)
- The wage rate of the licence administration team (£145 per day; source: as above)
- Expected 62.5% savings (as above)

Annual savings related to fewer inspections are £69.8k, calculated by multiplying:

- The time taken for site visits (3 hours; source: EA estimate)
- The wage rate of the licence administrations team (£145 per day; source: as above)
- Expected 100% savings (as above)

Table 6 summarises these assessments. The division of the costs and benefits between England and Wales is expected to fall in line with the number of permits within the respective countries. The 10 year NPV relating to the introduction of Standard Rules Permits is £7.33m in England and £0.76m in Wales.

**Table 6: Policy Option 1 - Summary of Standard Rules Permits Benefits (£k)**

	Actor	2014	2015	2016	2017...	...2023	TOTAL (NPV)
<b>Benefits</b>	Applicants	£0	£446	£668	£891	£891	<b>£6,140</b>
	Environment Agency/ Natural Resources Wales	£0	£1412	£213	£283	£283	<b>£1,953</b>
	Consultees	£0	£0	£0	£0	£0	<b>£0</b>
	Government	£0	£0	£0	£0	£0	<b>£0</b>
	<b>Total</b>	<b>£0</b>	<b>£587</b>	<b>£881</b>	<b>£1,174</b>	<b>£1,174</b>	<b>£8,093</b>

Please note that numbers may not add due to rounding.

#### 4.4.2 Policy Option 2 – Non-legislative Option

The replacement of the current system with a compulsory system of Standard Rules Permits is understood to require legislation, therefore would not be available within Policy Option 2. Therefore no costs or benefits are foreseen for this activity within Policy Option 2.

### 4.5 Integration of Regimes Costs and Benefits

#### 4.5.1 Policy Option 1 – Environmental Permitting Option

A proportion of Flood Defence Consent applicants also hold permits that are currently within the Environmental Permitting regime, such as those relating to water discharge activities, or in schemes the Government has committed to bringing into the Environmental Permitting regime such as water abstraction and impoundment activities.

Should the Flood Defence Consents regime be integrated into the Environmental Permitting regime, the cost of processing an application ‘transaction’ is expected to be reduced where the applicant has a number of other permits. This saving would only apply where there is a common regulator, and therefore would only arise where all related permits are determined by one of the Environment Agency or Natural Resources Wales.

In order to estimate the benefits of the integration of regimes a set of assumptions was developed for this impact assessment to represent the likely distribution of permits among activities. The methodology follows that, where there are 2, 3, and 4 permits required for a location, if the permitting requirements were precisely replicated across the regimes and these could be merged then there would be incremental savings of 50 per cent, 67 per cent or 75 per cent on the typical cost of administering permits, respectively. This percentage saving is then further moderated by two additional factors:

- a) The common ground between regimes for each task. These assumptions describe the degree to which the administering of environmental permits is common in terms of the information required and therefore time taken; and
- b) The probability that an applicant would require tasks, such as application ‘transactions’ or inspections, to be processed at the same time for any site.

Box 1 illustrates the methodology used in this impact assessment with a worked example.

**Box 1: Integration of Permitting Regimes Cost Savings – Worked Example**

Taking just one example of some of the savings that are achievable by bringing together permitting regimes, it is estimated that 5% of the total 5,329 Flood Defence Consents are for sites that also hold one other Environment Agency/Natural Resources Wales permit; 0.7% are thought to be subject to two other permits and 0.2% three other permits (source: EA estimates).

The model assumes that where a permit is held on a site with one other permit, then under a common permitting approach (and assuming the requirements were identical for both permits) the administrative burdens could be cut in half. In this case, effectively 50% of the associated costs for each regime would be avoided. Similarly, where a site holds three permits, the implication is a 67% overlap (the same tasks repeated under each regime). Since some sites have two permits and others have three or four etc., the weighted average savings for any overlapping permits with identical requirements, based on the estimated overlaps in the previous paragraph, is calculated to be 52.9%, while the total percentage of Flood Defence Consents deemed to overlap with other permits is 5.9% (the sum of the estimated overlaps from the previous paragraph). Multiplying these two factors, the total savings that could be expected under a common permitting approach, assuming identical requirements, is 3.1% across all Flood Defence Consents.

To calculate the actual savings due to overlapping permits, the 3.1% then has to be moderated by the degree of common ground between the different permitting regimes. In terms of time spent transferring permits by the Environment Agency or Natural Resources Wales, the actual common ground between regimes is estimated to be 10% of the full transfer process (source: EPP2 impact assessment). For the applicants, the actual common ground in application related tasks is estimated to be 15% (source: EPP2 impact assessment).

Overall, these factors suggest that savings of 0.31% from the total baseline permit transfer costs are possible under a common permitting approach for the Environment Agency or Natural Resources Wales, while a saving of 0.47% could be achieved by applicants.

The savings due to these overlaps have then been multiplied by the relevant baseline costs. The majority of savings from new applications for watercourse activity permits where there is an overlap with another application for an Environmental Permit are expected to occur for applicants, but there are also benefits for the Environment Agency or Natural Resource Wales, as described above.

Table 7 summarises the total benefits by actor. Once a ‘steady state’ has been reached, the total savings are estimated to be £24k per annum during the operation of the policy, derived by multiplying:

- the percentage savings described in the box above by
- the respective cost of:
  - application determination and pre-application advice (1.3 days, calculated as described earlier, multiplied by the licence administration wage rate); and
  - submission of the application (3.2 days, calculated as described earlier, multiplied by the average applicant wage).

The 10 year NPV relating to the integration of regimes is £163k.

**Table 7: Policy Option 1 - Summary of Integration of Regimes Benefits (£k)**

	Actor	2014	2015	2016	2017...	...2023	TOTAL (NPV)
Benefits	Applicants	£0	£10	£15	£21	£21	£142
	Environment Agency/ Natural Resources Wales	£0	£2	£2	£3	£3	£21
	Consultees	£0	£0	£0	£0	£0	£0
	Government	£0	£0	£0	£0	£0	£0
	<b>Total</b>	<b>£0</b>	<b>£12</b>	<b>£18</b>	<b>£24</b>	<b>£24</b>	<b>£163</b>
Please note that numbers may not add due to rounding.							

Considering the breakdown of the benefits between England and Wales, like the other aspects of the policy it would be expected that the breakdown would be consistent with the proportion of applications within the respective countries. Consequently it is expected that in England the benefits will be £148k (£129k to applicants and £19k to the Environment Agency). In Wales the benefits are expected to be more modest, totalling £15k (£13k to applicants and £2k to Natural Resources Wales)

#### 4.5.2 Policy Option 2 – Non-legislative Option

As the Flood Defence Consent regime will remain distinct from the Environmental Permitting regime, the non-legislative option would not realise any of the costs or benefits associated with the integration of regimes. Joint applications will not be able to be made for new activities, and thus no impacts upon the baseline are expected.

### 4.6 Simplified Guidance Costs and Benefits

#### 4.6.1 Policy Option 1 – Environmental Permitting Option

Bringing guidance for the Flood Defence Consent regime into line with the Environmental Permitting guidance is expected to realise benefits to applicants as the guidance will be more easily understood. It will thus not be necessary to spend as much time reading and digesting it and the number of queries arising regarding watercourse activity permits will reduce.

In order to release the benefits for applicants, the Environment Agency and Natural Resources Wales would need to invest in re-writing the guidance and training staff to understand it. This is expected to cost £141k and be incurred prior to the Flood Defence Consent regime transferring in to the Environmental Permitting regime. This is based on an estimate that one FTE senior member of staff will be responsible for re-writing the guidance (£59k, calculated based on a grade 6 wage rate of £270 per day, including 28% on-costs; source: EA estimate) and that 136 staff members will spend approximately 4 days of time reading and being trained on the new guidance (£82k, calculated based on an average of grade 3 and grade 4 wages - £135 and £166 per day, respectively, including on-costs; source: EA estimate).

It is also expected that consultees would assist in the process of re-writing the guidance and therefore also incur a cost, estimated at £6k (assumed to be 10% of the effort of the Environment Agency and Natural Resources Wales; source: EPP2 Impact Assessment).

In addition, some applicants who are familiar with the current regime, will also need to invest time in reading and understanding the new guidance and are therefore expected to incur a cost of £105k per annum from 2013 to 2015 – the first three years of the guidance being made available. This relates to an estimated cost of 1.9 hours (or 0.25 of a day, at a wage rate of £259 per day, as described in the baseline; source: industry interviews) for 30% of applicants. 30% is an expert estimate of the number of applicants each year who have previously applied and would therefore need to read new guidance at an additional cost. It is estimated that 100% of these previous applicants would read the new guidance (source: industry interviews). For applicants who have not used the scheme before, it is assumed that no additional cost will be received as there would be a requirement for these applicants to read some guidance anyway.



Benefits are expected to accrue through a reduction in time spent applying for consents compared with the baseline scenario. The model includes an estimated 5% saving in time for new licence applications as a result of the new guidance introducing process simplifications, in line with the assumptions of the EPP2 Impact Assessment. These annual benefits would therefore be £219.9k (calculated based on 23.9hours taken to apply for a consent, and £259 average daily wage (see section 4.2.1).

Table 8 summarises total costs and benefits by actor. The overall 10 year discounted benefit relating to simplified guidance is approximately £1.5m, whilst the costs associated with developing simplified guidance are around £440k.

**Table 8: Policy Option 1 - Summary of the Simplified Guidance Costs and Benefits (£k)**

	Actor	2014	2015	2016	2017...	...2023	TOTAL (NPV)
<b>Costs</b>	Applicants	£0	£105	£105	£105	£0	<b>£294</b>
	Environment Agency/ Natural Resources Wales	£141	£0	£0	£0	£0	<b>£141</b>
	Consultees	£6	£0	£0	£0	£0	<b>£6</b>
	Government	£0	£0	£0	£0	£0	<b>£0</b>
	<b>Total</b>	<b>£147</b>	<b>£105</b>	<b>£105</b>	<b>£105</b>	<b>£0</b>	<b>£440</b>
	<b>Benefits</b>	Applicants	£0	£110	£165	£220	£220
Environment Agency/ Natural Resources Wales		£0	£0	£0	£0	£0	<b>£0</b>
Consultees		£0	£0	£0	£0	£0	<b>£0</b>
Government		£0	£0	£0	£0	£0	<b>£0</b>
<b>Total</b>		<b>£0</b>	<b>£110</b>	<b>£165</b>	<b>£220</b>	<b>£220</b>	<b>£1,515</b>

Please note that numbers may not add due to rounding.

A split between the Welsh and English impacts has been calculated based on the estimated number of licence holders within each country. The overall costs in England are estimated to be £399k, whilst the benefits are estimated to be £1.4m. For Wales the estimated costs are estimated to be £41k, whilst the benefits are forecast to be £142k.

#### 4.6.2 Policy Option 2 – Non-legislative Option

One of the key changes associated with the non-legislative option is the drafting of new guidance. Although the Flood Defence Consents and Environmental Permitting regimes will be distinct, guidance could be crafted so to ensure that the terminologies and processes contained in the two regimes can be aligned and understood more easily than at present.

Consequently, it is expected that the costs and benefits associated with this policy would be identical to Policy Option 1.

**Table 9: Policy Option 2 - Summary of the Simplified Guidance Costs and Benefits (£k)**

	Actor	2014	2015	2016	2017...	...2023	TOTAL (NPV)
<b>Costs</b>	Applicants	£0	£105	£105	£105	£0	£294
	Environment Agency/ Natural Resources Wales	£141	£0	£0	£0	£0	£141
	Consultees	£6	£0	£0	£0	£0	£6
	Government	£0	£0	£0	£0	£0	£0
	<b>Total</b>	<b>£147</b>	<b>£105</b>	<b>£105</b>	<b>£105</b>	<b>£0</b>	<b>£440</b>
	<b>Benefits</b>	Applicants	£0	£110	£165	£220	£220
Environment Agency/ Natural Resources Wales		£0	£0	£0	£0	£0	£0
Consultees		£0	£0	£0	£0	£0	£0
Government		£0	£0	£0	£0	£0	£0
<b>Total</b>		<b>£0</b>	<b>£110</b>	<b>£165</b>	<b>£220</b>	<b>£220</b>	<b>£1,515</b>

Please note that numbers may not add due to rounding.

As with Policy Option 1, a split between the Welsh and English impacts has been calculated, based on the estimated number of licence holders within each country. Consequently, the overall costs in England are estimated to be £429k, whilst the benefits are estimated to be £1.4m. For Wales the estimated costs are estimated to be £44k, whilst the benefits are forecast to be £142k.

## 4.7 Single Applications for Multiple Sites

### 4.7.1 Policy Option 1 – Environmental Permitting Option

The Environmental Permitting regime allows the option for a single application to be made for common activities on a number of sites. As the Flood Defence Consents regime already allows for such applications to take place, it is assumed that there would be no significant change in the incidence or process for such applications due to incorporation of Flood Defence Consents in the Environmental Permitting regime, and therefore no additional costs or benefits in comparison with the baseline associated with such activities.

### 4.7.2 Policy Option 2 – Non-legislative Option

As described in Section 4.7.1, the Flood Defence Consents regime already allows for single applications to be made for common activities on a number of sites. No change is envisaged under the non-legislative option, and therefore no change in the costs or benefits associated with such activities are expected.

## 4.8 Exemptions and Exclusions

### 4.8.1 Policy Option 1 – Environmental Permitting Option

The Environmental Permitting regime allows for certain watercourse activities to be exempted from the need to obtain a permit. The key example currently drafted into the proposed Regulations is the erection of temporary scaffolding, subject to certain conditions. In addition, it is expected that some activities involving the laying of cables beneath the river bed or on pylons above may be eligible for exemptions. It

is possible that the list of exempt activities in England may differ from that in Wales, although this is yet to be determined.

Applicants that wish to carry out an exempt activity are not expected to need to go through an application process, although in many cases they may need to notify the regulator, and may need to take some specific action (e.g. to mark the site where their activity has taken place). For some activities (“exclusions”), no notification is required. The exact scope of the activities to be classified as exempt or excluded remains under discussion at the time of writing.

Exempt and excluded activities will not be subject to automatic compliance inspections. Controls are being relaxed over such activities because they have little impact on the risk of flooding in an area, and inspections in the past have demonstrated that such activities are commonly undertaken in accordance with conditions set by the regulator.

Pre-application advice, which ensures the applicant considers how an activity could be undertaken to ensure flood risk is not increased and helps an applicant to provide a complete application package, will no longer be required. The regulations and accompanying guidance will make clear exactly how the activities may be undertaken (e.g. the equipment is erected on each working day that it is required, and shall be removed at the end of each working day and stored outside the river or its banks), and no application will be necessary.

Based on analysis of the current population of applications, the Environment Agency estimates that, as a consequence of the availability of exemptions, 20% of applications would no longer need to go through the full application process. Of these, 60% would be exemptions and 40% exclusions, representing respectively 12% and 8% of all applications.

Each is assumed to result in a saving of 100% of the costs of determining an application (5.75 hours at a wage rate of £145 per day which equates to £119k), providing pre-application advice (92.5% of applications, for 4 hours, i.e. 77k) and conducting inspections (3 hours for 75% of applications, i.e. £47k) for the regulators (sources: as above).<sup>16</sup> For the applicant, it is assumed that the exemption notification process takes an average of 2 hours (estimate based on interviews with industry); whilst activities that are subject to exclusions will not take any time. For exemptions, this therefore represents a saving of 93% of the average cost of making an application and supervising site visits under the current system based on the cost reported in the baseline of 3.76 days per application at a wage rate of £259 per day which equates to £973, which equates to an overall saving of £578k. For exclusions, the savings are 100%, equating to £415k. These annual savings total £242k for regulators, and £993k for applicants.

Whilst compliance inspections and pre-application advice will not be required for exempt and excluded activities, there are no costs associated with this, as the activities are such that the risk of flooding will not be increased.

Table 10 summarises total benefits by actor. The overall 10 year NPV relating to exemptions and exclusions is approximately £8.5m.

**Table 10: Policy Option 1 - Summary of the Exemptions and Exclusions Benefits (£k)**

	Actor	2014	2015	2016	2017...	...2023	TOTAL (NPV)
<b>Benefits</b>	Applicants	£0	£496	£745	£993	£993	<b>£6,841</b>
	Environment Agency/ Natural Resources Wales	£0	£121	£181	£242	£242	<b>£1,667</b>
	Consultees	£0	£0	£0	£0	£0	<b>£0</b>
	Government	£0	£0	£0	£0	£0	<b>£0</b>
	<b>Total</b>	<b>£0</b>	<b>£617</b>	<b>£926</b>	<b>£1,235</b>	<b>£1,235</b>	<b>£8,508</b>

Please note that numbers may not add due to rounding.

<sup>16</sup> In practice, registering exemptions may require a process, which would take a few minutes for applicants and necessitate the regulator developing a system for logging them, which would be likely to be based on the existing waste exemptions system.

Based on the assumption that the lists of exemptions in England and Wales will be the same, a split between the Welsh and English impacts has been calculated based on the estimated number of licence holders within each country. Consequently, the overall benefits in England are estimated to be £7.7m, while for Wales they are forecast to be £798k.

#### 4.8.2 Policy Option 2 – Non-legislative Option

The introduction of exemptions would require changes to current legislation, therefore would not be available within Policy Option 2. As the Flood Defence Consent regime will remain distinct from the Environmental Permitting regime, the non-legislative option would not allow any additional opportunities for applicants or regulators to benefit from increased use of exemptions. It would not therefore realise any of the costs or benefits associated with exemptions.

### 4.9 Other Costs and Benefits

#### 4.9.1 Policy Option 1 – Environmental Permitting Option

In addition to the costs and benefits outlined in the previous sections, there are a small number of other benefits related to the Environmental Permitting option which do not readily fall under a single description. These are presented in this section.

As a result of implementing Policy Option 1, it is expected that the average number of regulatory questions received by the Environment Agency and Natural Resources Wales, relating to the relevant regulations, will be reduced by 5%. This assumption reflects the previous experience with other regimes being incorporated within the Environmental Permitting system, together with the impact of clearer guidance.

Additionally, the current legislation requires that applications for Flood Defence Consents must be determined within 2 months, or be deemed by default to have been consented. As a result, if the Environment Agency or Natural Resources Wales does not, for example, receive all the papers necessary to consider an application they will refuse consent in order to ensure flood risk management is not compromised. The applicant must then submit a new application together with a new fee. Under the Environmental Permitting regime, it will be allowable – and a lot easier – for the regulator to “stop the clock” on any incomplete application, advise the applicant of what further information is necessary, and restart the same application as appropriate. By providing more management information and centralised control, the regime should thus help reduce default refusals, and save the applicant money. These benefits have not been quantified, as fee savings are transfers but also there is a lack of clear data regarding the current incidence of such default refusals, which may be significant.

Table 11 summarises the other benefits for each actor. The 10 year NPV is estimated to be £37k, which relates to savings to regulators from reduced enquiries, calculated as 5% of the policy team’s costs, estimated at the equivalent of 3 FTE grade 5 staff members.

**Table 11: Policy Option 1 - Summary of Other Benefits (£k)**

	Actor	2014	2015	2016	2017...	...2023	TOTAL (NPV)
<b>Benefits</b>	Applicants	£0	£0	£0	£0	£0	£0
	Environment Agency/ Natural Resources Wales	£0	£3	£4	£5	£5	£37
	Consultees	£0	£0	£0	£0	£0	£0
	Government	£0	£0	£0	£0	£0	£0
	<b>Total</b>	<b>£0</b>	<b>£3</b>	<b>£4</b>	<b>£5</b>	<b>£5</b>	<b>£37</b>

Considering the impacts on England and Wales, again the savings are split using the number of applications in Wales and England. Based on that apportionment, the savings in Wales are forecast to be £4k, and the savings in England are forecast to be £33k.

#### 4.9.2 Policy Option 2 – Non-legislative Option

Like Policy Option 1, Policy Option 2 (the non-legislative option) is expected to incur impacts over and above those outlined in the previous sections. These cannot be satisfactorily categorised are instead included here.

As a result of clearer guidance being provided (see Section 4.3.2), it is expected that the average number of regulatory questions received by the regulator relating to the relevant regulations will be reduced by 5%. As shown in Table 12, this would result in £37k of benefits for the regulator being realised each year.

**Table 12: Policy Option 2 - Summary of other Benefits (£k)**

	Actor	2014	2015	2016	2017...	...2023	TOTAL (NPV)
<b>Benefits</b>	Applicants	£0	£0	£0	£0	£0	£0
	Environment Agency/ Natural Resources Wales	£0	£3	£4	£5	£5	£37
	Consultees	£0	£0	£0	£0	£0	£0
	Government	£0	£0	£0	£0	£0	£0
	<b>Total</b>	<b>£0</b>	<b>£3</b>	<b>£4</b>	<b>£5</b>	<b>£5</b>	<b>£37</b>

Considering the separate impacts for Wales and England, it is forecast that £4k will be received by the former and £33k will be received by the latter.

### 4.10 Summary of Costs and Benefits

#### 4.10.1 Policy Option 1 – Environmental Permitting Option

Table 13 sets out where the costs and benefits are expected to be allocated. As a result of implementing Policy Option 1, over the 10 year period, a net benefit of £17.6m in NPV terms is anticipated. 82% (£14.3m) of net benefits are expected to be received by applicants, the largest beneficiary of the policy. Assuming that the sample of applicants from April-June 2012 is representative, and that there is no significant difference in the costs incurred by applicants of different types, 57% of this (£8.2m) would be received by businesses (based on the split in applicant type set out in Annex 2). The Environment Agency is expected to receive 17% (£3.0m) of the total benefits and Natural Resources Wales 2% (£305k). Consultees are expected to end with a net cost of £6k, whilst no costs or benefits are expected for Government.<sup>17</sup>

**Table 13: Policy Option 1 - Summary of Net Costs and Benefits by Actor (£k)**

<sup>17</sup> Please note that 'sunk costs' (i.e. those costs already occurred prior to 2014) are not included in this assessment and thus no costs or benefits are forecast for Government.

	Actor	2014	2015	2016	2017	...2023	TOTAL (NPV)
<b>Costs</b>	Industry	£0	£105	£105	£105	£0	£294
	Environment Agency	£420	£0	£0	£0	£0	£420
	Consultees	£6	£0	£0	£0	£0	£6
	<b>Total</b>	<b>£426</b>	<b>£105</b>	<b>£105</b>	<b>£105</b>	<b>£0</b>	<b>£720</b>
<b>Benefits</b>	Industry	£0	£1,062	£1,593	£2,124	£2,124	£14,638
	Environment Agency	£0	£267	£400	£534	£534	£3,678
	Consultees	£0	£0	£0	£0	£0	£0
	<b>Total</b>	<b>£0</b>	<b>£1,329</b>	<b>£1,993</b>	<b>£2,658</b>	<b>£2,658</b>	<b>£18,316</b>
<b>Net Benefits</b>	Industry	£0	£957	£1,488	£2,019	£2,124	£14,344
	Environment Agency	-£420	£267	£400	£534	£534	£3,258
	Consultees	-£6	£0	£0	£0	£0	-£6
	<b>Total</b>	<b>-£426</b>	<b>£1,224</b>	<b>£1,889</b>	<b>£2,553</b>	<b>£2,658</b>	<b>£17,596</b>

Please note that numbers may not add due to rounding.

A summary of the net costs and benefits by activity area is shown in Table 14. The largest share of savings is expected to result from the introduction of additional exemptions and exclusions (£8.5m) as described in Section 4.8.1 and the use of 'Standard Rules Permits' (£8.0m) as described in Section 4.4.1. The only activity area expected to result in a net cost is the preparatory work laying the ground for the policy itself (-£280k) (see Section 4.3.1).

**Table 14: Policy Option 1 - Summary of Net Costs and Benefits by Activity Area (£k)**

	Activity	2014	2015	2016	2017	...2023	TOTAL (NPV)
<b>Costs</b>	Preparation	£280	£0	£0	£0	£0	£280
	Simplified Guidance	£147	£105	£105	£105	£0	£440
	<b>Total</b>	<b>£426</b>	<b>£105</b>	<b>£105</b>	<b>£105</b>	<b>£0</b>	<b>£720</b>
<b>Benefits</b>	Standard Permits	£0	£587	£881	£1,174	1,174	£8,093
	Integration of Regimes	£0	£12	£18	£24	£24	£163
	Simplified Guidance	£0	£110	£165	£220	£220	£1,515
	Exemptions and Exclusions	£0	£617	£926	£1,235	£1,235	£8,508
	Other Savings	£0	£3	£4	£5	£5	£37
	<b>Total</b>	<b>£0</b>	<b>£1,329</b>	<b>£1,993</b>	<b>£2,658</b>	<b>£2,658</b>	<b>£18,316</b>
<b>Total Net Benefits</b>	<b>-£426</b>	<b>£1,224</b>	<b>£1,889</b>	<b>£2,553</b>	<b>£2,658</b>	<b>£17,596</b>	

Please note that numbers may not add due to rounding.

Considering the distribution of impacts between England and Wales, it is expected that the majority of benefits are expected to fall within England. This is due to the majority of the applications relating to activities carried out in England. The total NPV for England is demonstrated in Table 15. It is forecast that the 10 year NPV will be £15.9m.

For Wales, the savings are forecast to be proportionately less. Table 16 shows that the 10 year NPV is forecast to be £1.7m.

**Table 15: Policy Option 1 - Summary of Net Costs and Benefits by Activity Area – England (£k)**

	Activity	2014	2015	2016	2017	...2023	TOTAL (NPV)
<b>Costs</b>	Preparation	£253	£0	£0	£0	£0	£253
	Simplified Guidance	£133	£95	£95	£95	£0	£399
	<b>Total</b>	<b>£386</b>	<b>£95</b>	<b>£95</b>	<b>£95</b>	<b>£0</b>	<b>£653</b>
<b>Benefits</b>	Standard Permits	£0	£532	£798	£1,064	£1,064	£7,334
	Integration of Regimes	£0	£11	£16	£21	£21	£148
	Simplified Guidance	£0	£100	£149	£199	£199	£1,373
	Exemptions and Exclusions	£0	£559	£839	£1,119	£1,119	£7,709
	Other Savings	£0	£2	£4	£5	£5	£33
	<b>Total</b>	<b>£0</b>	<b>£1,204</b>	<b>£1,806</b>	<b>£2,408</b>	<b>£2,408</b>	<b>£16,597</b>
<b>Total: Net Benefit</b>	<b>-£386</b>	<b>£1,109</b>	<b>£1,171</b>	<b>£2,313</b>	<b>2,408</b>	<b>£15,945</b>	

Please note that numbers may not add due to rounding.

**Table 16: Policy Option 1 - Summary of Net Costs and Benefits by Activity Area – Wales (£k)**

	Activity	2014	2015	2016	2017	...2023	TOTAL (NPV)
<b>Costs</b>	Preparation	£26	£0	£0	£0	£0	£26
	Simplified Guidance	£14	£10	£10	£10	£0	£41
	<b>Total</b>	<b>£40</b>	<b>£10</b>	<b>£10</b>	<b>£10</b>	<b>£0</b>	<b>£68</b>
<b>Benefits</b>	Standard Permits	£0	£55	£83	£110	£110	£759
	Integration of Regimes	£0	£1	£2	£2	£2	£15
	Simplified Guidance	£0	£10	£15	£21	£21	£142
	Exemptions and Exclusions	£0	£58	£87	£116	£116	£798
	Other Savings	£0	£0.3	£0.4	£1	£1	£3
	<b>Total</b>	<b>£0</b>	<b>£125</b>	<b>£187</b>	<b>£249</b>	<b>£249</b>	<b>£1,719</b>
<b>Total: Net Benefit</b>	<b>-£40</b>	<b>£115</b>	<b>£177</b>	<b>£240</b>	<b>£240</b>	<b>£1,651</b>	

Please note that numbers may not add due to rounding.

#### 4.10.2 Policy Option 2 – Non-legislative Option

Table 17 sets out where the costs and benefits for Option 2 are expected to be allocated. Over a 10 year period, Policy Option 2 is expected to result in approximately £1m of benefits in NPV terms. All of the net benefits are expected to flow to applicants (£1.2m in total). The Environment Agency (-£174k) and Natural Resources Wales (-£18k), and consultees (£6k) are expected to experience a small net cost as a result of the implementation of the policy. No costs or benefits are expected for Government.

**Table 17: Policy Option 2 - Summary of Net Costs and Benefits by Actor (£k)**

	Actor	2014	2015	2016	2017	...2023	TOTAL (NPV)
<b>Costs</b>	Industry	£0	£105	£105	£105	£0	£294
	Environment Agency	£229	£0	£0	£0	£0	£229
	Consultees	£6	£0	£0	£0	£0	£6
	<b>Total</b>	<b>£235</b>	<b>£105</b>	<b>£105</b>	<b>£105</b>	<b>£0</b>	<b>£529</b>
<b>Benefits</b>	Industry	£0	£110	£165	£220	£220	£1,515
	Environment Agency	£0	£3	£4	£5	£5	£37
	Consultees	£0	£0	£0	£0	£0	£0
	<b>Total</b>	<b>£0</b>	<b>£113</b>	<b>£169</b>	<b>£225</b>	<b>£225</b>	<b>£1,552</b>
<b>Net Benefits</b>	Industry	£0	£5	£60	£115	£220	£1,221
	Environment Agency	-£229	£3	£4	£5	£5	-£192
	Consultees	-£6	£0	£0	£0	£0	-£6
	<b>Total</b>	<b>-£235</b>	<b>£8</b>	<b>£64</b>	<b>£120</b>	<b>£225</b>	<b>£1,024</b>

Please note that numbers may not add due to rounding.

Table 18, shown below, summarises the costs and benefits associated with the Policy Option for each of the activity areas. The largest share of the benefits is expected to result from simplified guidance.

**Table 18: Policy Option 2 - Summary of Net Costs and Benefits by Activity Area (£k)**

	Activity	2014	2015	2016	2017	...2023	TOTAL (NPV)
<b>Costs</b>	Preparation	£88	£0	£0	£0	£0	£88
	Simplified Guidance	£147	£105	£105	£105	£0	£440
	<b>Total</b>	<b>£235</b>	<b>£105</b>	<b>£105</b>	<b>£105</b>	<b>£0</b>	<b>£529</b>
<b>Benefits</b>	Simplified Guidance	£0	£110	£165	£220	£220	£1,515
	Other Savings	£0	£3	£4	£5	£5	£37
	<b>Total</b>	<b>£0</b>	<b>£113</b>	<b>£169</b>	<b>£225</b>	<b>£225</b>	<b>£1,552</b>
	<b>Total Net</b>	<b>-£235</b>	<b>£8</b>	<b>£64</b>	<b>£120</b>	<b>£225</b>	<b>£1,024</b>

Please note that numbers may not add due to rounding.

Considering the impacts for England and Wales, like Policy Option 1, the main proportion of benefits are expected to flow to England. The 10 year NPV is forecast to be £928k for England and £96k for Wales. These are modest savings when compared to Policy Option 1.

**Table 19: Policy Option 2 - Summary of Net Costs and Benefits by Activity Area – England (£k)**

	Activity	2014	2015	2016	2017	...2023	TOTAL (NPV)
<b>Costs</b>	Preparation	£80	£0	£0	£0	£0	£80
	Simplified Guidance	£133	£95	£95	£95	£0	£399
	<b>Total</b>	<b>£213</b>	<b>£95</b>	<b>£95</b>	<b>£95</b>	<b>£0</b>	<b>£479</b>
<b>Benefit</b>	Simplified Guidance	£0	£100	£149	£199	£199	£1,373
	Other Savings	£0	£2	£4	£5	£5	£33



<b>Total</b>	<b>£0</b>	<b>£102</b>	<b>£153</b>	<b>£204</b>	<b>£204</b>	<b>£1,407</b>
<b>Total Net</b>	<b>-£213</b>	<b>£7</b>	<b>£58</b>	<b>£109</b>	<b>£204</b>	<b>£928</b>

Please note that numbers may not add due to rounding.

**Table 20: Policy Option 2 - Summary of Net Costs and Benefits by Activity Area – Wales (£k)**

	Activity	2014	2015	2016	2017	...2023	TOTAL (NPV)
<b>Costs</b>	Preparation	£8	£0	£0	£0	£0	£8
	Simplified Guidance	£14	£10	£10	£10	£0	£41
	<b>Total</b>	<b>£22</b>	<b>£10</b>	<b>£10</b>	<b>£10</b>	<b>£0</b>	<b>£50</b>
<b>Benefits</b>	Simplified Guidance	£0	£10	£15	£21	£21	£142
	Other Savings	£0	£0.3	£0.4	£1	£1	£3
	<b>Total</b>	<b>£0</b>	<b>£11</b>	<b>£16</b>	<b>£21</b>	<b>£21</b>	<b>£146</b>
	<b>Total Net</b>	<b>-£22</b>	<b>£1</b>	<b>£6</b>	<b>£11</b>	<b>£21</b>	<b>£96</b>

Please note that numbers may not add due to rounding.

## 5.0 “One in, One out”

These proposals are in scope of “OITO” as they relate to domestic legislation. The preferred option, option 1, is an “OUT” under OITO representing a small saving to business.

## 6.0 Conclusions

The impact assessment shows a considerable benefit to applicants and regulators alike as a result of the integration of watercourse activities within the Environmental Permitting regime. This compares favourably not just with the “do nothing” option, but also with a non-legislative approach targeting achieving as many of the intended benefits without the need for legislation.

The assessments undertaken illustrates that while Policy Option 1 has a greater initial preparation cost, this is counteracted by a considerable benefits for the applicant, as well as presenting savings for the Environment Agency and Natural Resources Wales.

Policy Option 1 also presents an opportunity to provide Standard Rule Permits which will further reduce the administrative burden on applicants, whilst also reducing inspection obligations for the regulatory bodies. The Standard Rule Permit provision is not possible under Options 2 and 3 but under this assessment has demonstrated considerable benefits. Similarly Option 1 is the only proposal which enables integration of Environmental Permitting, further benefiting applicants and the regulatory bodies.

Both Option 1 and 2 allow for improving guidance which is expected to ease the application process. While the benefits are estimated to be considerable, they are expected to be the same under both Options and therefore do not provide a clear distinction between the two options.

In view of the benefits presented by Policy Option 1 it is Defra’s view that this option would presents more considerable benefits to applicants and regulators. It is our intention to recommend that this option is progressed further.

# Annex 1: Model Assumptions

## A1.1 General Assumptions

In addition to the impacts identified within the evidence base, there a number of assumptions made throughout the modelling which have not resulted in any costs or benefits arising from them. These assumptions are outlined as follows:

- Appeals. It is assumed that the new policy would not result in changes to the current costs or benefits arising from appeals.
- Periodic reviews of licensing. It is assumed that there will be no change to time limits for completion of works under a Flood Defence Consent, and that there will continue to be no necessity for follow-up activity by any actor. .
- Wales manages fewer consents than England due to size. It is assumed that beyond this, the processes, nature of applicants (members of the public, business etc.), the type and complexity of the activities for which applications are submitted, are homogeneous.
- There will be no change in the character or complexity of the activities for which applications are submitted.
- The proportion of activities qualifying for standard rules, exemptions or exclusions remains constant over time – although in practice, more such permits may be introduced by the regulators and therefore the take-up by applicants may change over time.

## A1.2 Sensitivity Analysis

The model which calculates the costs and benefits is formulated of over 100 individual assumptions. As part of the quality assurance process, each of these assumptions has been tested with relevant stakeholders to ensure that an accurate estimate as possible can be reached.

A limited sensitivity analysis has been carried out on the assumptions that carry the greatest weight within the model. These concern the extent of savings arising from Standard Rules permits and from Exemptions and Exclusions. The following sensitivities have been analysed:

- A 10% reduction on the expected processing time saving for regulators and applicants arising from the use of Standard Rules permits
- A 10% reduction in the incidence of applications for which an exemption or exclusion is available, and a 10% reduction in the savings arising.

The results of this analysis are shown in Table 21.

**Table 21: Sensitivity Analysis (£k)**

	Central Scenario	Time Saving on Standard Rules Permits 10% less than Expected (Regulator & Applicants)	% Difference	Availability of Exemptions 10% less than Expected (Regulator & Applicants)	% Difference
<b>Activity</b>					
Preparation	-£280	-£280	0.0%	-£280	0.0%
Standard Permits	£8,093	£7,522	-7.1%	£8,093	0.0%
Integration of Regimes	£163	£163	0.0%	£163	0.0%
Simplified Guidance	£1,075	£1,075	0.0%	£1,075	0.0%
Other Savings	£33	£33	0.0%	£33	0.0%
Exemptions and Exclusions	£8,508	£8,508	0.0%	£7657	-10.0%
<b>Total Net</b>	<b>£17,592</b>	<b>£17,020</b>	<b>-3.2%</b>	<b>£16,741</b>	<b>-4.8%</b>
<b>Actor</b>					
Applicants	£14,344	£13,920	-3.0%	£13,660	-4.8%
<i>of which business<sup>1</sup></i>	£8,176	£7,934	-3.0%	£7,786	-4.8%
Regulator	£3,253	£3,106	-4.5%	£3,087	-5.1%
Consultees	-£6	-£6	0.0%	-£6	0.0%
Government	£0	£0	n/a	£0	n/a
<b>Total Net</b>	<b>£17,592</b>	<b>£17,020</b>	<b>-3.2%</b>	<b>£16,741</b>	<b>-4.8%</b>

The sensitivity analysis shows that a 10% reduction in the key variables results in a significant reduction in the benefits arising to regulators and applicants, and for the activities affected. In the case of exemptions and exclusions, the reduction in the incidence of suitable applications translates directly into a 10% reduction in the benefit achieved from changing this activity. In the case of Standard Rules permits, the processing saving is augmented by the expected savings on inspections, unchanged by the sensitivity check, and so the reduction in savings for this activity is only 7.1%. In both cases, from an actor perspective, the sensitivity adjustment results in a distinctly smaller impact on the overall benefit obtained. This ranges from 3% (for applicants, in the event of a 10% lower than expected saving arising from Standard Rules permits) to 5.1% (for regulators, in the event that the number of applications suitable for exemptions or exclusions is 10% lower than expected).

It is clear that, because of the significant extent to which the benefits of the preferred policy exceed the associated costs, it would be necessary for a very substantial reduction in the expected level of benefit to arise before the policy would fail to result in a net benefit to the key actors.

### A1.3 Wage Rates

For the purposes of the impact assessment, it is assumed that the working year for both the Environment Agency and applicants is 218 days. This takes into account 104 weekend days, 8 bank holidays and an average of 35 days sick and holiday leave. The productive working day is assumed to be 7.5 hours. On costs of 28% are added to salaries, to cover employer's national insurance contribution, pension contributions and other costs of employing personnel.

The wages of consultees were assumed to be in line with Grade 3 to 5 Environment Agency wages.

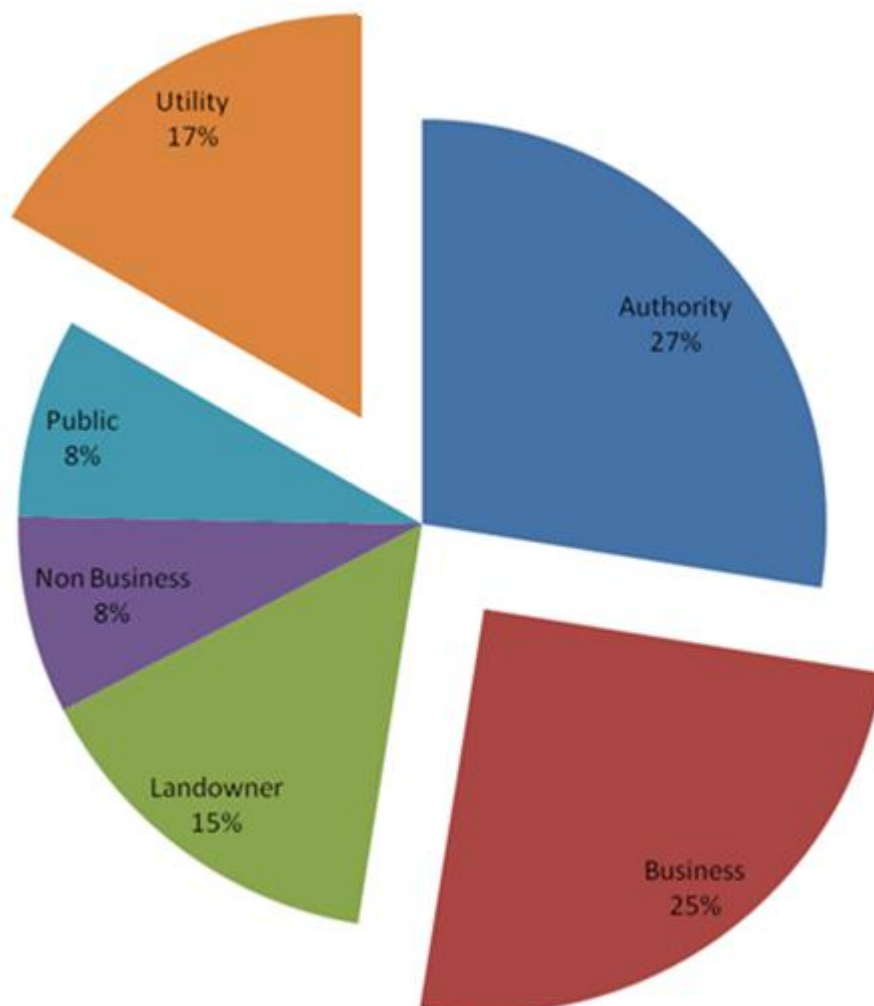
<sup>1</sup> Businesses are taken to be 57% of all applicants, based on the information set out in Annex 2.

**Table 22: Wage Rates**

Actor	Grade/Position	Average Cost Per Annum	Average Cost Per Day
Environment Agency/ Natural Resources Wales	Grade 1	£15,816	£93.13
Environment Agency/ Natural Resources Wales	Grade 2	£18,685	£109.71
Environment Agency/ Natural Resources Wales	Grade 3	£22,973	£134.89
Environment Agency/ Natural Resources Wales	Grade 4	£28,219	£165.69
Environment Agency/ Natural Resources Wales	Grade 5	£35,748	£209.89
Environment Agency/ Natural Resources Wales	Grade 6	£45,989	£270.02
Environment Agency/ Natural Resources Wales	Grade 7	£57,523	£337.75
Environment Agency/ Natural Resources Wales	Average Wage - licence administration	N/A	£145.47
Applicants	Senior Managers	£47,708	£280.12
Applicants	Technicians/Officers	£33,141	£194.59
Applicants	Administrative and clerical staff	£23,356	£137.14
Applicants	Average wage for staff undertaking new applications, variations and subsistence	£44,105.48	£258.97
Consultees	Grade 3	£22,468	£131.92
Consultees	Grade 5	£34,961	£205.28
Consultees	Grade 6	£44,977	£264.08
<p>Source: Environment Agency/Natural Resources Wales – Information taken from published Environment Agency 2013 average wage rates: <a href="http://data.gov.uk/dataset/staff-organograms-and-pay-environment-agency/resource/8eb1b4ff-4cd5-4b81-9776-1f1cb835ff1c">http://data.gov.uk/dataset/staff-organograms-and-pay-environment-agency/resource/8eb1b4ff-4cd5-4b81-9776-1f1cb835ff1c</a>;</p> <p>Applicants - Annual Survey of Hours and Earnings (ASHE)2013 results - senior managers rate based on an average of full-time managers and directors in construction, mining/energy, agriculture, waste and environmental services, technicians/officers rate based on an average of full-time veterinarians, building and civil engineering technicians and estate agents and administrative and clerical staff based on an average of full-time administrative and secretarial occupations: <a href="http://www.ons.gov.uk/ons/rel/ashe/annual-survey-of-hours-and-earnings/2013-provisional-results/index.html">http://www.ons.gov.uk/ons/rel/ashe/annual-survey-of-hours-and-earnings/2013-provisional-results/index.html</a>.</p> <p>It is expected that wage rates keep up with inflation and these rates are thus in 2014 prices.</p>			

## Annex 2: Flood defence consents issued in April – June 2012 by applicant type

Flood defence consents issued in the second quarter of 2012, in England and Wales, have been taken as an indication of the split between applicant types. The categories “business”, “landowner”, and “utilities” in the chart below have been used to assess the proportion of applicants that are businesses for the purposes of this Impact Assessment.



Authority	Local authorities, IDBs, Highways Agency and other government departments
Utility	Phone, electricity, gas, water and cable tv companies
Public	Residential property owners
Non-business	Groups of people not operating as a business or authority (e.g. charities, sports clubs etc.)
Landowner	Agricultural land owners, estates, agricultural businesses
Business	All other businesses

## **Annex 3: Specific Impacts**

### **A3.1 Statutory equality duties**

After initial screening as to the potential impact of this policy/regulation on race, disability and gender equality it has been decided that there will be no impact upon minority groups in terms of numbers affected, the seriousness of the likely impact, or both. Consent is based purely on the nature of the activity proposed, not on the characteristics of the applicant.

### **A3.2 Competition Assessment**

Considering the four questions posed in the competition assessment laid out by the Office of Fair Trading, the preferred Policy Option is not expected to either directly or indirectly limit the number or range of suppliers. The Policy is not expected to limit the ability of the suppliers to compete or to reduce suppliers' incentives to compete vigorously.

### **A3.3 Small and Micro Business Assessment**

The proposal is not anticipated to negatively affect small or micro businesses, their customers or competitors. Indeed any proposal which reduces administrative burden should help small firms as they will spend a lower proportion of their time on administrative tasks. The Environmental Permitting system enables a risk-based approach to regulation. The activities regulated under this proposal are capable of exacerbating flood risk no matter whether carried out by large or small businesses. It is not therefore possible to simply exclude all small or micro firms from regulation. Environmental Permitting is focussed upon reducing administrative burdens, and its risk-based approach allows the Environment Agency and Natural Resources Wales to minimise burdens to all regulated businesses, but its benefits will be greatest for small and micro businesses who have less resources available to afford additional time spent on administration.

As part of the impact assessment conducted for the Second phase of the Environmental Permitting Programme<sup>19</sup>, a quality assurance (QA) assessment took place. The QA process involved interviews with applicants to ascertain the costs associated with the permitting regimes. Of those applicants interviewed to quality assure the data, 19 were small firms.

The QA suggested that the main cause of variance in the time taken for permitting requirements was the nature of the permit itself. In many cases the larger companies tend to be the ones with the more complex, and more involved, permits. However, it may not be surprising that the QA revealed that for certain types of permit, smaller companies take slightly increased amounts of time compared with their larger company counterparts on administration. This would suggest the value of the savings of a more streamlined permitting system may be greater for smaller firms.

### **A3.4 Greenhouse Gas Impact Assessment**

It is expected the changes will have a negligible effect on the emission of greenhouse gases.

### **A3.5 Wider Environmental Issues**

We have considered the guidance and have assessed that there is no impact.

### **A3.6 Health and Well-Being**

We have considered the guidance and have assessed that there is no impact.

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<sup>19</sup> <http://www.legislation.gov.uk/uksi/2007/3538/memorandum/contents>

### **A3.7 Human Rights**

It is not expected that the policy will create any human rights issues.

### **A3.8 Justice System**

We have considered the guidance and have assessed that there is no impact.

### **A3.9 Rural Proofing**

We have considered the guidance and have assessed that there is no impact.

### **A3.10 Sustainable Development**

We have considered the guidance and have assessed that there is no impact.