

Title: Impact Assessment of the Addition of Flood Defence Consents regime to the Environmental Permitting regime IA No: Defra 1394 Lead department or agency: Department for Environment, Food and Rural Affairs Other departments or agencies: Welsh Government, Environment Agency, Natural Resources Wales	Impact Assessment (IA)		
	Date: 17/07/2015		
	Stage: Final		
	Source of intervention: Domestic		
	Type of measure: Secondary legislation		
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Summary: Intervention and Options	RPC Opinion: 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
£18.1m	£14.8m	£-1.35m	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. In addition, each application for a consent must be considered individually. Government intervention is necessary to reduce the administrative burdens on industry while continuing to ensure flood risk management.
 The proposed measure is for England and Wales.

What are the policy objectives and the intended effects?
 The policy objectives are;

- to allow a single application to cover a number of different Environment Agency and Natural Resources Wales consenting schemes,
- to remove complexity from the application process, and
- to ensure that neither flood risk management nor environmental protection is compromised.

The intended effects are to make the scheme risk based so that the regulators are able to concentrate on high risk applications, and to make applications for flood consents easier and quicker for businesses 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;
 Option 0 - 'do nothing'. This models the status quo, whereby the Flood Defence Consenting regime remains in isolation from the Environmental Permitting regime
 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.

Will the policy be reviewed? It will be reviewed within 5 years of the regulations taking 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.		Micro Yes	< 20 Yes	Small Yes	Medium Yes
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)		Traded: N/A		Non-traded: 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: _____ **Rory Stewart** _____ Date: 16/11/2015

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 2015	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: N/A	High: N/A	Best Estimate: £18.1m

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	£0.74m	£0	£0.72m

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

All costs are transitional costs;
 Costs to applicants (includes businesses, landowners, charities and householders); understanding new guidance (£0.29m NPV)
 Costs to regulators; implementation costs (developing standard rules permits, writing guidance and temporary reduction in process efficiency) ((£0.42m NPV).

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	£2.25m	£18.77m

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

There are no transitional benefits.
 On-going benefits;
 Benefits to applicants; simplified guidance, integration of regimes, quicker applications for standard rules permits, activities exempt from need for application (£15.1m NPV)
 Benefits to regulators; integration of regimes, quicker processing of standard rules permits, reduced resources needed for exempt activities (£3.7m NPV)

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;

- no changes to who regulates, what is regulated or environmental outcomes,
- no changes in numbers of applications, or distribution between types of application,
- no change to ratio of applications between England and Wales.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:	In scope of OITO?	Measure qualifies as
Costs:£0.03m	Yes	OUT
Benefits: £1.38m		
Net: 1.35m		

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 2015	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	£0.53m

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

All costs are transitional costs;
 Costs to applicants (includes businesses, landowners, charities and householders); understanding new guidance (£0.29m NPV)
 Costs to regulators; implementation costs (writing guidance) ((£0.23m NPV).

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	£0.19m	£1.55m

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

There are no transitional benefits.
 On-going benefits;
 Benefits to applicants (includes businesses, landowners, charities and householders); simplified guidance (£1.52m NPV)
 Benefits to regulators; reduction in regulatory queries (£0.03m NPV)

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%

Key assumptions;

- no changes to who regulates, what is regulated or environmental outcomes,
- no changes in numbers of applications,

no change to ratio of applications between England and Wales.

BUSINESS ASSESSMENT (Option 2)

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

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Evidence Base

1.0 Introduction

If poorly executed, construction works or maintenance activities on or near watercourses can cause problems such as increasing flood risk, cause or exacerbate flooding, and/or cause environmental damage. 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 activities requiring flood defence consents also need other permissions before they can proceed. Some, such as waste permits, are issued by the Environment Agency or Natural Resources Wales. Others, such as planning permission, are issued by other regulators. This can add to the administrative burdens associated with the activities for which consents are required. Reducing these burdens will contribute to the development of a competitive business environment in the UK 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. The aim is to provide a more transparent and proportionate system for applications, reducing costs to organisations that wish to carry out works in or near watercourses. 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, 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.

This Impact Assessment provides updated information to the one issued to accompany the public consultations held by Defra, Welsh Government and Environment Agency launched on 10 December 2014. Differences between the two assessments are stated in the relevant text.

1.1 Problem under consideration

The requirements for flood defence consents on statutory main rivers¹ are set out in sections 109 and 110 of the Water Resources Act 1991 and in regional byelaws. Regulation is carried out by the Environment Agency and Natural Resource Wales. 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). They issue consents largely on a case by case basis, although some area offices allow standardised permits to be issued for 'low risk' activities.

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.

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.

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 Review² 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 (i.e. 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

¹ 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.

² Department for Business Innovation & Skills (2010) *Penfold Review of Non-Planning Consents: Final Report*.

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
- 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 adopts a risk based approach whereby high risk or unique activities are assessed on an individual basis, while those wishing to undertake low risk activities can use standard rules permits. These are a set of fixed rules for common applications, amenable to a risk assessment in advance by the regulator. In addition, the lowest risk activities are exempt or excluded from the requirement to apply for a permit. Those wishing to use exemptions must register with the regulator. Exclusions require neither permit, nor registration.

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).³

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 two options which aim to deliver such changes (as well as a “do nothing” comparator).

Each policy option relates only to flood defence consents 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.

Option 0 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.

Policy Option 1 is to incorporate Flood Defence Consenting for main rivers within the Environmental Permitting Regime. This is the Government’s preferred option (following consultation) 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 provision for standard rules permits, exemptions and exclusions enables 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.

Policy Option 2 is for non-legislative changes to be made to the Flood Defence Consent regime. 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. Improving guidance would benefit businesses administrative costs, and benefit the regulators by reducing the queries arising regarding watercourse activity permits. Again the delivery of Policy Option 2 would be implemented by the Environment Agency and Natural Resources Wales.

³ The applicant has a right of appeal to an independent arbitrator against decisions by the regulating body

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. 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 data 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 flood defence consent 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 flood defence consent 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.

It is assumed that the working year for both the Environment Agency and applicants is 218 days. The productive working day is assumed to be 7.5 hours.

The costs and benefits in this Impact Assessment are measured over a 10 year period⁴, with the net present values (NPVs) shown for the period (NPVs effectively show the value of a stream of costs and benefits over a period of time in 'today's terms'). In line with the HM Treasury Green Book⁵, 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).

The impacts associated with the preparation of each of the policy options commenced in 2015, prior to implementation in 2016. These costs have therefore already been incurred, but have been included here in order to provide a complete picture of the costs and benefits. The last year covered by the impact assessment is 2024.

⁴ Standard period for Government Impact Assessments.

⁵ http://www.hm-treasury.gov.uk/data_greenbook_index.htm

Following implementation, it is recognised that some of the benefits associated with the policy options will not have an immediate effect. Based on previous experience⁶, the full impact of benefits tend to be realised over a period of time, rather than being delivered instantaneously. As such, the majority of the modelling assumes a transitional period between 2016 and 2018. Benefits are expected to be lower in during implementation of the new policy; i.e. during 2016 (the first year of implementation) it is expected that 50% of the expected benefits will be realised. In 2017, 75% are expected and in 2018 it is expected that 100% of the benefits will be realised. A modified transitional period has been used for the introduction of standard rules permits in Wales. NRW proposes to consider proposals for standard rules later in 2015. At this stage it has been assumed that the same proportion of applications will be eligible for Standard Rules Permits as in England (i.e. 11%), and that the transitional period, and the realisation of benefits will be delayed by 1 year compared to that set out above.

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 0 – Do Nothing Option	Policy Option 1 – Environmental Permitting Option	Policy Option 2 – Non-legislative Option
Preparation and management of regime changes	✗	✓	✓
Introduction of standard rules permits	✗	✓	✗
Ability to make integrated application transactions	✗	✓	✗
Delivery of new guidance	✗	✓	✓
Ability to make single applications for multiple sites	Partial ⁷	✓	Partial
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:

- Applicants⁸;
- 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 13 and Table 17.

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

⁶ EPP1 Post Implementation Review

⁷ 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.

⁸ 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.

using the system can be estimated, and to facilitate estimation of savings applying under the policy options.

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 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 Annum⁹

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
Total	4,829	500

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 is less good for deriving aggregate statistics as 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 in April 2013, administering the Flood Defence Consent regime on main rivers¹⁰ in England and Wales is estimated to have cost the Environment Agency £2.31m (£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. All figures are derived from management statistics.

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);

⁹ These figures are based on Environment Agency data for 2012/13 covering both England and Wales, and excludes 171 rolling programme consents.

¹⁰ 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.

- 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 £34.53¹¹ 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 operating authority;
- Ensures works contribute to environmental objectives. For example, 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; and
- Supports UK compliance with certain EU directives such as the Water Framework Directive.

The benefits of the existing regulatory regime are difficult to quantify. This is 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 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 some 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).

¹¹ See table 22, Annex 1 for further details of assumptions behind wage rates.

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 wider flood risk management plan of a given catchment. The use of standard rules permits may, however, limit such opportunities in the future, as the conditions under which an activity may be undertaken are already set out.

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, the majority of the activities (see below) are expected to take place before the system is implemented in 2016 (i.e. during 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. The Environment Agency has already drawn up a set of standard rules permits for England, however Natural Resources Wales will not consider proposals for standard rules until after the Environment Bill for Wales is published. Part of the Bill will introduce a new integrated approach to managing Natural Resources Wales, including flood risk, and new powers for NRW to exercise accordingly.

The total preparation costs are expected to be £0.25m in the first year, £0.03m in the second; the 10 year net present value (NPV) is £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 for a single year, which would amount to £0.10m in England in 2015 (i.e. 5% of £2.05m). In Wales, it has been assumed that the costs will be spread over two years to reflect the delay in introducing standard rules. Costs in Wales are therefore expected to be £6k for each of 2015 and 2016 (i.e. 5% of £260k).
- The implementation of the new regime would also necessitate the development of standard permits, exemptions and the consultation process with statutory consultees. We have used as a basis the estimate 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)¹²(£75k). We have assumed that three quarters of the costs accrue to the first year to reflect the work in drawing up exemptions and exclusions for both countries, and standard rules permits for England, and one quarter to the second year when Natural Resources Wales will consider their proposals for standard rules permits. Considering the split of the costs for the first year 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. The first year's costs are £56k; 51k in England, 5k in Wales. The costs of the second year (£19k) accrue wholly to Wales.
- 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% non-wage

¹² 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/uksiem_20100675_en.pdf

costs).¹³ These costs have again been apportioned between England and Wales based on each country's percentages of applications; £80k in England, 8k in Wales.

The total costs are therefore £233k in England in 2015, and £20k in Wales in 2015, £25k in Wales in 2016.

These costs are all transitional costs.

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

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

	Actor	2015	2016	2017	2018...	...2024	TOTAL (NPV)
Costs	Applicants	£0	£0	£0	£0	£0	£0
	Environment Agency/ Natural Resources Wales	£253	£25	£0	£0	£0	£278
	Consultees	£0	£0	£0	£0	£0	£0
	Government	£0	£0	£0	£0	£0	£0
	Total	£253	£25	£0	£0	£0	£278

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. 2015), 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 third).

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

	Actor	2015	2016	2017	2018...	...2024	TOTAL (NPV)
Costs	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
	Total	£88	£0	£0	£0	£0	£88

* indicates transitional costs (2015 – 2018)

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.

¹³ 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 assessing 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. Calculations at the time of the initial impact assessment suggested that some 35% of applications could be eligible for Standard Rules Permits. Subsequently these activities were reassessed with a view to moving the lowest risk activities into exemptions or exclusions. (The public consultation reflected more detailed work in identifying appropriate activities, although there was insufficient time to reflect these details in the initial impact assessment). As a result of this review, together with further refinements suggested through the public consultation, the Environment Agency now considers that some 20 % of applications will be eligible for Standard Rules Permits (with a corresponding increase in applications being eligible for exemptions and exclusions). This reduces the benefits of introducing standard rules permits from that suggested in the previous impact assessment, but increases those due to the provision of exemptions and exclusions.

Natural Resources Wales proposes to consider proposals for standard rules following publication, in May 2015, of the Environment Bill for Wales. Part of the Bill will introduce a new integrated approach to managing the natural resources of Wales, including flood risk, and new powers for Natural Resources Wales to exercise accordingly. Natural Resources Wales will consult on any proposals. For the purposes of this IA it has been assumed that the same proportion of applications will be eligible for Standard Rules Permits (i.e. 20%), but that these will not be introduced until 2016. 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	20%	20%

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 group is predicted to be the applicants who are expected to accrue savings from the easier method of undertaking new applications of approximately £461k per annum in England and £48k 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 £153k per annum in England and £16k 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 (£48k), less time required to process each application (£74k) and fewer inspections (£47k).

Annual savings from reduced pre-application discussions are £48k, 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% EA grade 3-equivalent 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 £74k, 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 £47k, 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 be consistent with the number of permits within the respective countries. The 10 year NPV relating to the introduction of Standard Rules Permits is £4.23m in England and £0.38m in Wales.

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

	Actor	2015	2016	2017	2018...	...2024	TOTAL (NPV)
Benefits	Applicants	£0	£231	£370	£497	£509	£3,464
	Environment Agency/ Natural Resources Wales	£0	£76	£122	£165	£169	£1,147
	Consultees	£0	£0	£0	£0	£0	£0
	Government	£0	£0	£0	£0	£0	£0
	Total	£0	£307	£492	£662	£678	£4,611

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 method was developed for this impact assessment to represent the likely distribution of permits among activities. This approach involves a starting assumption that, where there are 2, 3, or 4 permits required for a location, if the permitting tasks were 100% 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 separate permits, respectively. This percentage saving is then adjusted by the following factors:

- a) The actual degree of replication of permitting tasks between regimes. Estimates are made of 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 adjusted for the actual 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% ($3.1\% \times 10\%$) 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% ($3.1\% \times 15\%$) 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. 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 of £145 per day); and
- submission of the application (3.2 days, calculated as described earlier, multiplied by the average applicant wage of £259 per day).

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	2015	2016	2017	2018...	...2024	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
	Total	£0	£12	£18	£24	£24	£163

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) over the 10 year period.

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 an EA 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 EA 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 2014 to 2016 – 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.

These three costs are all transitional costs.

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	2015	2016	2017	2018...	...2024	TOTAL (NPV)
Costs	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
	Total	£147	£105	£105	£105	£0	£440
	Benefits	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
Total		£0	£110	£165	£220	£220	£1,515

Please note that numbers may not add due to rounding.
* indicates transitional costs (2015 – 2018)

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	2015	2016	2017	2018...	...2024	TOTAL (NPV)
Costs	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
	Total	£147	£105	£105	£105	£0	£440
	Benefits	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
Total		£0	£110	£165	£220	£220	£1,515

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 £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.

4.7 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, for example the erection of temporary scaffolding, the laying of cables beneath the river bed or on pylons above.

Applicants that wish to carry out an exempt activity are not expected to need to go through an application process, although they will 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 excluded activities, no notification is required.

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 guidance will state that “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.

The initial impact assessment used an initial analysis of the current population of applications to calculate the potential level of exemptions and exclusions. At that stage the Environment Agency considered that 20% of applications would no longer need to go through the full application process, i.e. 12% would be eligible for an exemption and 8% eligible for an exclusion. More activities were identified as being suitable to become exemptions or exclusions following the initial impact assessment. This more detailed list was reflected in the consultation document, but there was insufficient time to revise the impact assessment to reflect this new information before the consultation was launched. As a result of this work, and amendments made as a result of comments made during the public consultation, the Environment Agency estimates that 30% of applications would no longer need to go through the full application process; 25% as exemptions, 5% as exclusions. Four exemptions relating to desilting activities to be introduced in England will not be introduced in Wales (and will therefore require bespoke permits). The proportions of applications eligible for exemptions and exclusions in Wales will therefore be 24.75% and 5% respectively.

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 £178k), providing pre-application advice (92.5% of applications, for 4 hours, i.e. 115k) and conducting inspections (3 hours for 75% of applications, i.e. £70k) for the regulators (sources: as above).¹⁴ 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 3.49 days per application at a wage rate of £259 per day which equates to £904, which sums to an overall saving of £1.20m. For exclusions, the savings are 100%, equating to £259k. These annual savings total £363k for regulators, and £1.46m for applicants.

Table 10 summarises total benefits by actor. The overall 10 year NPV relating to exemptions and exclusions is approximately £12.4m.

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

¹⁴ 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.

	Actor	2015	2016	2017	2018...	...2024	TOTAL (NPV)
Benefits	Applicants	£0	£723	£1,084	£1,446	£1,446	£9,962
	Environment Agency/ Natural Resources Wales	£0	£180	£270	£360	£360	£2,482
	Consultees	£0	£0	£0	£0	£0	£0
	Government	£0	£0	£0	£0	£0	£0
	Total	£0	£903	£1,354	£1,806	£1,806	£12,444
	Please note that numbers may not add due to rounding.						

The split between the Welsh and English impacts has been calculated based on the estimated number of licence holders within each country and the proportions of eligible applications for exemptions and exclusions. Consequently, the overall benefits in England are estimated to be £11.4m, while for Wales they are forecast to be £1.0m.

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 EA grade 5 staff members.

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

	Actor	2015	2016	2017	2018...	...2024	TOTAL (NPV)
Benefits	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
	Total	£0	£3	£4	£5	£5	£37

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	2015	2016	2017	2018...	...2024	TOTAL (NPV)
Benefits	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
	Total	£0	£3	£4	£5	£5	£37

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 £18.1m in NPV terms is anticipated. 82% (£14.8m) 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, 65% of

this (£9.6m) 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 3% (£258k). Consultees are expected to end up with a net cost of £6k, whilst no costs or benefits are expected for Government.¹⁵

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

	Actor	2015	2016	2017	2018	...2024	TOTAL (NPV)
Costs	Applicants*	£0	£105	£105	£105	£0	£294
	Environment Agency/ Natural Resources Wales*	£394	£25	£0	£0	£0	£418
	Consultees*	£6	£0	£0	£0	£0	£6
	Total	£400	£130	£105	£105	£0	£718
	Applicants	£0	£1,074	£1,635	£2,183	£2,195	£15,083
Benefits	Environment Agency/ Natural Resources Wales	£0	£261	£399	£533	£537	£3,687
	Consultees	£0	£0	£0	£0	£0	£0
	Total	£0	£1,334	£2,033	£2,716	£2,732	£18,770
	Applicants	£0	£969	£1,530	£2,078	£2,195	£14,789
Net Benefits	Environment Agency/ Natural Resources Wales	-£394	£235	£399	£533	£537	£3,268
	Consultees	-£6	£0	£0	£0	£0	-£6
	Total	-£400	£1,204	£1,929	£2,612	£2,732	£18,051

Please note that numbers may not add due to rounding.

* indicates transitional costs (2015 – 2018)

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 use of 'Standard Rules Permits' (£4.6m) as described in Section 4.4.1 and the introduction of additional exemptions and exclusions (£12.4m) as described in Section 4.8.1. The only activity area expected to result in a net cost is the preparatory work laying the ground for the policy itself (-£278k) (see Section 4.3.1).

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

¹⁵ Please note that 'sunk costs' (i.e. those costs already occurred prior to 2015) are not included in this assessment and thus no costs or benefits are forecast for Government.

	Activity	2015	2016	2017	2018	...2024	TOTAL (NPV)
Costs	Preparation*	£253	£25	£0	£0	£0	£278
	Simplified Guidance*	£147	£105	£105	£105	£0	£440
	Total	£400	£130	£105	£105	£0	£718
Benefits	Standard Permits	£0	£307	£492	£364	373	£2,536
	Integration of Regimes	£0	£12	£18	£24	£24	£163
	Simplified Guidance	£0	£110	£165	£220	£220	£1,515
	Exemptions and Exclusions	£0	£903	£1,354	£1,806	£1,806	£12,444
	Other Savings	£0	£3	£4	£5	£5	£37
	Total	£0	£1,334	£2,033	£2,716	£2,732	£18,770
	Total Net Benefits	-£400	£1,204	£1,929	£2,612	£2,732	£18,051

Please note that numbers may not add due to rounding.

* indicates transitional costs (2015 – 2018)

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 £16.6m.

For Wales, the savings are forecast to be proportionately less. Table 16 shows that the 10 year NPV is forecast to be £1.5m.

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

	Activity	2015	2016	2017	2018	...2024	TOTAL (NPV)
Costs	Preparation*	£233	£0	£0	£0	£0	£233
	Simplified Guidance*	£133	£95	£95	£95	£0	£399
	Total	£366	£95	£95	£95	£0	£632
Benefits	Standard Permits	£0	£307	£461	£614	£614	£4,232
	Integration of Regimes	£0	£11	£16	£21	£21	£148
	Simplified Guidance	£0	£100	£149	£199	£199	£1,373
	Exemptions and Exclusions	£0	£827	£1,241	£1,655	£1,655	£11,403
	Other Savings	£0	£2	£4	£5	£5	£33
	Total	£0	£1,247	£1,871	£2,494	£2,494	£17,190
	Total: Net Benefit	-£366	£1,152	£1,176	£2,399	£2,494	£16,557

Please note that numbers may not add due to rounding.

* indicates transitional costs (2015 – 2018)

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

	Activity	2015	2016	2017	2018	...2024	TOTAL (NPV)
Costs	Preparation*	£20	£25	£0	£0	£0	£44
	Simplified Guidance*	£14	£10	£10	£10	£0	£41
	Total	£34	£35	£10	£10	£0	£86
Benefits	Standard Permits	£0	£0	£32	£48	£64	£378
	Integration of Regimes	£0	£1	£2	£2	£2	£15
	Simplified Guidance	£0	£10	£15	£21	£21	£142
	Exemptions and Exclusions	£0	£76	£113	£151	£151	£1,041
	Other Savings	£0	£0.3	£0.4	£1	£1	£3
	Total	£0	£87	£163	£222	£238	£1,580
	Total: Net Benefit	-£34	£52	£153	£212	£238	£1,494

Please note that numbers may not add due to rounding.

* indicates transitional costs (2015 – 2018)

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 net benefits (after costs) in NPV terms. All of the positive 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	2015	2016	2017	2018	...2024	TOTAL (NPV)
Costs	Applicants*	£0	£105	£105	£105	£0	£294
	Environment Agency/ Natural Resources Wales*	£229	£0	£0	£0	£0	£229
	Consultees*	£6	£0	£0	£0	£0	£6
	Total	£235	£105	£105	£105	£0	£529
	Applicants	£0	£110	£165	£220	£220	£1,515
Benefits	Environment Agency/ Natural Resources Wales	£0	£3	£4	£5	£5	£37
	Consultees	£0	£0	£0	£0	£0	£0
	Total	£0	£113	£169	£225	£225	£1,552
	Applicants	£0	£5	£60	£115	£220	£1,221
Net Benefits	Environment Agency/ Natural Resources Wales	-£229	£3	£4	£5	£5	-£192
	Consultees	-£6	£0	£0	£0	£0	-£6
	Total	-£235	£8	£64	£120	£225	£1,024
	Applicants	£0	£5	£60	£115	£220	£1,221

Please note that numbers may not add due to rounding.
* indicates transitional costs (2015 – 2018)

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	2015	2016	2017	2018	...2024	TOTAL (NPV)
Costs	Preparation*	£88	£0	£0	£0	£0	£88
	Simplified Guidance*	£147	£105	£105	£105	£0	£440
	Total	£235	£105	£105	£105	£0	£529
Benefits	Simplified Guidance	£0	£110	£165	£220	£220	£1,515
	Other Savings	£0	£3	£4	£5	£5	£37
	Total	£0	£113	£169	£225	£225	£1,552
Total Net	-£235	£8	£64	£120	£225	£1,024	

Please note that numbers may not add due to rounding.
* indicates transitional costs (2015 – 2018)

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	2015	2016	2017	2018	...2024	TOTAL (NPV)
Costs	Preparation*	£80	£0	£0	£0	£0	£80
	Simplified Guidance*	£133	£95	£95	£95	£0	£399
	Total	£213	£95	£95	£95	£0	£479
Benefits	Simplified Guidance	£0	£100	£149	£199	£199	£1,373
	Other Savings	£0	£2	£4	£5	£5	£33
	Total	£0	£102	£153	£204	£204	£1,407
	Total Net	-£213	£7	£58	£109	£204	£928

Please note that numbers may not add due to rounding.

* indicates transitional costs (2015 – 2018)

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

	Activity	2015	2016	2017	2018	...2024	TOTAL (NPV)
Costs	Preparation*	£8	£0	£0	£0	£0	£8
	Simplified Guidance*	£14	£10	£10	£10	£0	£41
	Total	£22	£10	£10	£10	£0	£50
Benefits	Simplified Guidance	£0	£10	£15	£21	£21	£142
	Other Savings	£0	£0.3	£0.4	£1	£1	£3
	Total	£0	£11	£16	£21	£21	£146
	Total Net	-£22	£1	£6	£11	£21	£96

Please note that numbers may not add due to rounding.

* indicates transitional costs (2015 – 2018)

5.0 “One in, Three out”

These proposals are in scope of “OITO” as they regulate activities undertaken by businesses. The preferred option, option 1, is an “OUT” under OITO as it is deregulatory and the direct incremental economic benefit to business exceeds the direct incremental economic cost to business. The equivalent annual cost to business is calculated using the Department for Business, Innovation & Skills ‘[Impact assessment calculator](#)’ (Ref: BIS/15/295). The equivalent annual cost to business totals £0.03m in 2009 prices, and the equivalent annual benefit to business totals £1.38m in 2009 prices. This equates to an equivalent annual net cost to business of -£1.35m in 2009 prices discounted to 2010.

6.0 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 Programme¹⁶, 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.

7.0 Conclusions

This 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 which aims to achieve as many of the intended benefits as possible without the need for legislation.

The assessments undertaken illustrates that while Policy Option 1 has a greater initial preparation cost, this is counteracted by considerable benefits for the applicant, as well as presenting savings for the Environment Agency and Natural Resources Wales; Option 1 reduces the time spent by applicants in applying for permits through standard rules permits and simplified guidance, and by enabling a single applications when permits are needed from a number of different schemes within the Environmental Permitting framework. In addition, Option 1 considerably reduces the activities for which a permit is required (by introducing exemptions and exclusions). Businesses make, on average, 65% of applications for flood defence consents, and are therefore expected to receive 65% of the applicant benefits set out in this impact assessment. Option 1 enables the regulators to take a risk based approach to applications, ensuring that flood risk management and environmental protection are not compromised.

While Option 2 also allows for improved guidance, which is expected to ease the application process, this is the only benefit for applicants.

In view of the benefits presented by Policy Option 1 it is Defra’s view that this option presents considerably more benefits to applicants and regulators, and is therefore the preferred option.

¹⁶ <http://www.legislation.gov.uk/uksi/2007/3538/memorandum/contents>

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 its relative 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.

A sensitivity analysis has also been carried on the assumption within the Impact Assessment that Natural Resources Wales will introduce standard rules in 2017, one year later than in England, replacing it with an assumption that no standard rules are introduced in Wales, i.e. reducing their availability by 9%.

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 standard rules permits 9% less than expected (regulator & applicants)	% Difference	Availability of exemptions 10% less than expected (regulator & applicants)	% Difference
Activity							
Preparation	-£278	-£278	0.0%	-£253	-9.0%	-£278	0.0%
Standard Permits	£4,611	£4,288	-7.0%	£4,232	-8.2%	£4,611	0.0%
Integration of Regimes	£163	£163	0.0%	£163	0.0%	£163	0.0%
Simplified Guidance	£1,075	£1,075	0.0%	£1,075	0.0%	£1,075	0.0%
Other Savings	£37	£37	0.0%	£37	0.0%	£37	0.0%
Exemptions and Exclusions	£12,444	£12,444	0.0%	£12,444	0.0%	£11,200	-10.0%
Total Net	£18,052	£17,729	-1.6%	£17,698	-2.0%	£16,807	-6.9%
Actor							
Applicants	£14,789	£14,550	-1.6%	£14,505	-1.9%	£13,793	-6.7%
<i>of which business¹⁷</i>	£9,613	£9,457	-1.6%	£9,428	-1.9%	£8,965	-6.7%
Regulator	£3,268	£3,518	-2.5%	£3,199	-2.1%	£3,020	-7.6%
Consultees	-£6	-£6	0.0%	-£6	0.0%	-£6	0.0%
Government	£0	£0	n/a	£0	n/a	£0	n/a
Total Net	£18,052	£17,729	-1.6%	£17,698	-2.0%	£16,807	-6.9%

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 the time saving for 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 7.0%.
- The original assumption of an expected delay of one year in introducing standard rules permits in Wales compared to England, reduces the impact of the 9% less standard rules permits availability to 8.2%. There is also a 9% reduction in preparation costs, as Natural Resources Wales will no longer need to prepare standard rules permits and staff will more quickly reach full efficiency in operating the new scheme.
- 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 all cases, from an actor perspective, the sensitivity adjustment results in a smaller impact on the overall benefit obtained. This ranges from 1.6% (for applicants, in the event of a 10% lower than expected saving arising from Standard Rules permits) to 7.6% (for regulators, in the event that the number of applications suitable for exemptions or exclusions is 10% lower than expected).

¹⁷ Businesses are taken to be 65% of all applicants, based on the information set out in Annex 2.

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 regulator (Environment Agency and Natural Resources Wales) 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.

Table 22: Wage Rates

Actor	Grade/Position	Average Cost Per Annum	Average Cost Per Day
Regulator	Grade 1	£15,816	£93.13
Regulator	Grade 2	£18,685	£109.71
Regulator	Grade 3	£22,973	£134.89
Regulator	Grade 4	£28,219	£165.69
Regulator	Grade 5	£35,748	£209.89
Regulator	Grade 6	£45,989	£270.02
Regulator	Grade 7	£57,523	£337.75
Regulator	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

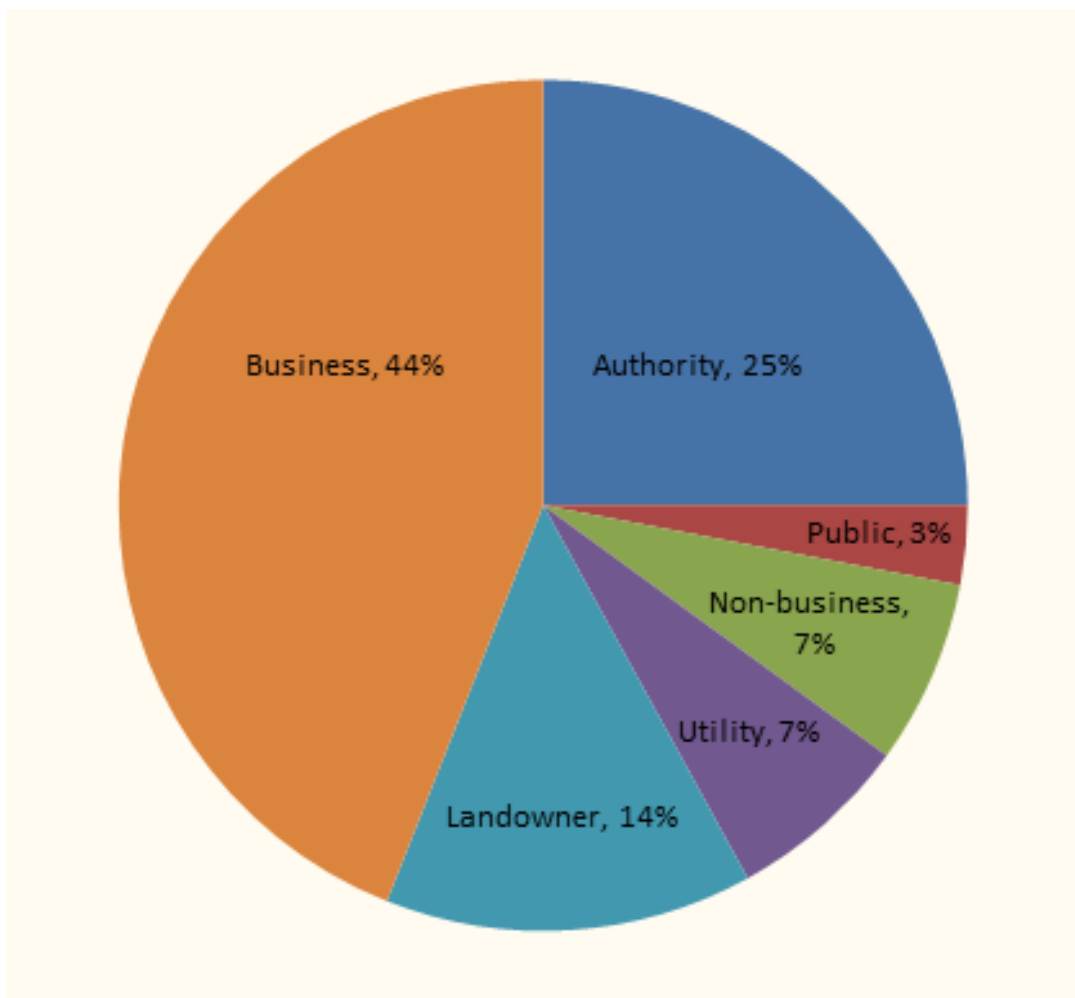
Source: Environment Agency/Natural Resources Wales – Information taken from published Environment Agency 2013 average wage rates: <http://data.gov.uk/dataset/staff-organograms-and-pay-environment-agency/resource/8eb1b4ff-4cd5-4b81-9776-1f1cb835ff1c>;

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: <http://www.ons.gov.uk/ons/rel/ashe/annual-survey-of-hours-and-earnings/2013-provisional-results/index.html>.

It is expected that wage rates keep up with inflation and these rates are thus in 2014 prices.

Annex 2: Flood defence consents issued in April 2014 to March 2015 by applicant type

Flood defence consents issued in 2014/15, 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 Greenhouse Gas Impact Assessment

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

A3.4 Wider Environmental Issues

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

A3.5 Health and Well-Being

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

A3.6 Human Rights

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

A3.7 Justice System

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

A3.8 Rural Proofing

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

A3.9 Sustainable Development

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