



EASTERN CATCHMENT FLOOD RISK ASSESSMENT AND MANAGEMENT STUDY - UoM10 - AVOCA-VARTRY RIVER BASIN STRATEGIC ENVIRONMENTAL ASSESSMENT & NATURA IMPACT ASSESSMENT REVIEW

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Keywords: *Review of Flood Risk Management Plan; Environmental Reports; Strategic Environmental Assessment Statement and; Natura Impact Statement*

Abstract: Fehily Timoney & Company carries out a review of the Environmental Reports, Strategic Environmental Assessment Statement and Natura Impact Statement to assist the Minister to conclude whether the FRMP will adversely affect the integrity of a Natura Site/Sites and if significant effects on the environment are likely to occur.

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1 INTRODUCTION

This document has been prepared by Fehily Timoney & Company on behalf of the Department of Public Expenditure and Reform to review the SEA and AA reports for the Avoca-Vartry River Basin Flood Risk Management Plan (UoM10) as part of the Eastern CFRAM study, such that the Department of Public Expenditure and Reform may be in a position to recommend to the Minister on the adequacy/compliance, or otherwise, of the SEA and AA submitted by the OPW for approval. The approval process will provide for a separate and independent review of the plans undertaken to inform the Minister as to the adequacy/compliance, or otherwise, of the plans.

In considering the Avoca-Vartry River Basin Strategic Environmental Assessment and Appropriate Assessment the following documents were reviewed:

Draft Flood Risk Management Plan
Strategic Environmental Assessment - Environmental Report
Strategic Environmental Assessment - Statement
Natura Impact Statement

In assessing these documents a report was produced to determine if the procedures and statutory obligations set out in the relevant environmental regulations have been fully complied with; if all relevant environmental considerations have been duly and effectively assessed; if the FRMP will adversely affect the integrity of a Natura Site/Sites and if significant effects on the environment are likely to occur.

This document is presented in a number of checklists having regard to the EPA guidelines as derived from the SEA Directive (2001/42/EC), the EU Habitats Directive (92/43/EEC) and the Birds Directive as amended (2009/147/EC).

Table 1: AA Screening

AA Screening				
Minimum Requirements				
	Question	Yes	No	Comment
1.1	Is the statutory basis for AA set out?	Yes		pg 3, paragraph 2
1.2	Is methodology in line with DEHLG (2009); EC (2001 and 2002)?	Yes		pg4, paragraph 1
1.3.1	Is there a desk based assessment?	Yes		Described in section 3.1.3
1.3.2	Is there a field-based assessment?		No	Will be conducted at project-stage - some recommendations given in section 5 for each specific AFA
1.4	Does the project description adequately describe the project?	Yes		Section 3.1 gives a broad description of the overall plan for the CFRAM and the specific UoM. Section 4.3 and subsections describes measures put forward for each AFA.
1.5	Is there a clear figure of the site location and proposed plan?	Yes		Figures in section 4 show preferred option layout for each AFA.
1.6	Has consultation with NPWS / DAU taken place?		No	No actual communication is mentioned. Guidelines have been consulted and adhered to and recommendations of consultations with NPWS and IFI are given for project stage.
1.7	Have all European Sites been considered within 15km of the project?	Yes		Figure 3.4.1
1.8	Are there any European Sites at a greater distance than 15km ecologically connected to the project?		No	Only options which are not considered likely to generate impacts extending beyond 15km of the study area, have been brought forward to Multi-Criteria Analysis
1.9	Are figures included illustrating the project in relation to European Sites?	Yes		Figure 3.4.1
1.10	Is there a clear identification of which European Sites are being considered in the assessment?	Yes		All within the 15km buffer of the study area are to be included - pg 25 paragraph 4

Minimum Requirements				
	Question	Yes	No	Comment
1.11	Is the screening of each European Site out/in adequately described?	Yes		Appendix B provides tables for each SAC/SPA, describing qualifying interest, distance and linkage to AFAs and potential impacts
1.12	Are the conservation objectives for the relevant European Sites set out?	Yes		Appendix C
1.13	Has the following screening matrix been fulfilled in text or table format?			
1.13.1	<i>Is there a brief description of project or plan?</i>	Yes		Section 3.1 gives a broad description of the overall plan for the CFRAM and the specific UoM. The plan for each AFA is described in Section 4.
1.13.2	<i>Is there a brief description of the Natura 2000 (European) Site(s)?</i>	Yes		Appendix B
1.13.3	<i>Is there a description of any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of?</i>	Yes		Broadly discussed in Appendix B - when a potential linkage between site and AFA was identified, the site was referred to NIS stage (Section 5)
	<ul style="list-style-type: none"> • Size and scale; 			
	<ul style="list-style-type: none"> • Land-take; 			
	<ul style="list-style-type: none"> • Distance from Natura 2000 site or key features of the site; 			
	<ul style="list-style-type: none"> • Resource requirements; 			
	<ul style="list-style-type: none"> • Emissions; 			
	<ul style="list-style-type: none"> • Excavation requirements; 			
	<ul style="list-style-type: none"> • Transportation requirements; 			
	<ul style="list-style-type: none"> • Duration of construction, operation etc.; 			
	<ul style="list-style-type: none"> • Other. 			

Minimum Requirements				
	Question	Yes	No	Comment
1.13.4	<i>Is there a description of the any likely changes to the site arising as a result of?</i>	Yes		Broadly discussed in Appendix B - when a potential linkage between site and AFA was identified, the site was referred to NIS stage. In depth detail not given at screening stage
	<ul style="list-style-type: none"> • Reduction of habitat area; 			
	<ul style="list-style-type: none"> • Disturbance of key species; 			
	<ul style="list-style-type: none"> • Habitat or species fragmentation; 			
	<ul style="list-style-type: none"> • Reduction in species density; 			
	<ul style="list-style-type: none"> • Changes in key indicators of conservation value; 			
	Climate change.			
1.13.5	<i>Is there a description of any likely impacts on the Natura 2000 site as a whole in terms of?</i>	Yes		Broadly discussed in Appendix B - when a potential linkage between site and AFA was identified, the site was referred to NIS stage. In depth detail not given at screening stage
	<ul style="list-style-type: none"> • Interference with the key relationships that define the structure of the site; 			
	<ul style="list-style-type: none"> • Interference with key relationships that define the function of the site. 			
1.13.6	<i>Are indicators of significance provided as a result of the identification of effects set out above in terms of:</i>		No	Not applicable as the plan is of a high level and this level of detail was not possible. Stated that further assessments will be required at individual project stage
	<ul style="list-style-type: none"> • loss, 			
	<ul style="list-style-type: none"> • fragmentation, 			
	<ul style="list-style-type: none"> • disruption, 			
	<ul style="list-style-type: none"> • disturbance, 			
	<ul style="list-style-type: none"> • change to key elements of the site (e.g. water quality etc.). 			

Minimum Requirements				
	Question	Yes	No	Comment
1.13.7	<i>Is there a description from the above, those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale of magnitude of impacts is not known?</i>		No	When a potential linkage between site and AFA was identified, the site was referred to NIS stage. In depth detail not given at screening stage
1.14	Have other plans or project in the vicinity been identified?	Yes		Section 3.3
1.15	Have cumulative effects been assessed?		No	Not undertaken at screening stage
1.16	Has a FONSE Matrix been completed for screened out European Sites, including the following:		No	A formal matrix has not been created for each screened out site, but screening out has been well justified, especially in Appendix 3.
1.16.1	<i>Name and location of the Natura 2000 sites</i>			
1.16.2	<i>Description of the project or plan</i>			
1.16.3	<i>Is the Project or Plan directly connected with or necessary to the management of the site (provide details)?</i>			
1.16.4	<i>Are there other projects or plans that together with the project of plan being assessed could affect the site (provide details)?</i>			
1.16.5	<i>Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site</i>			
1.16.6	<i>Explain why these effects are not considered significant</i>			
1.16.7	<i>Who carried out the assessment</i>			
1.16.8	<i>Sources of Data</i>			
1.17	Are the reasons for proceeding to Stage 2 clearly explained	Yes		Section 3.5.1

Table 2: NATURA IMPACT STATEMENT

Natura Impact Statement				
Minimum Requirements				
	Question	Yes	No	Comment
2.1	Does the plan description adequately describe the plan	Yes		Section 4.3 describes proposed plan and measures for each AFA
2.2	Are the conservation objectives detailed	Yes		Appendix C
2.3	Is there an adequate description of how the project will affect key species and key habitats	Yes		The screened in sites for each AFA are assessed separately, describing qualifying interests, potential source of impact, pathway, potential impact, specific avoidance/mitigation measures, and residual impacts. Good level of detail given and potential impacts are described in relation to qualifying interests.
2.4	Are there any uncertainties or gaps in information	Yes		The plans are a high-level assessment. Therefore, further in depth assessment will need to be carried out at project stage.
2.5	Is the effect of the project on the integrity of the European Sites adequately assessed (determined by structure and function and conservation objectives) *check desktop data to ensure all elements have been addressed	Yes		The screened in sites for each AFA are assessed separately, describing qualifying interests, potential source of impact, pathway, potential impact, specific avoidance/mitigation measures, and residual impacts. Good level of detail given and potential impacts are described in relation to qualifying interests.
2.6	Are mitigation measures described to avoid, reduce or remedy effects	Yes		In each impact assessment table in section 5, and in chapter 6
2.7	For each mitigation measure are the following details given:	Yes		The below factors are broadly discussed. However, it is stated that detailed mitigation measures will need to be devised at option design and project stage. Detail included at this stage is sufficient and well formulated.
2.7.1	<i>How the measures will avoid adverse effects on site integrity;</i>			
2.7.2	<i>How the measures will reduce the adverse effects on site integrity;</i>			

Minimum Requirements				
	Question	Yes	No	Comment
2.7.3	<i>Evidence of how the measures will be implemented and by whom;</i>			
2.7.4	<i>Evidence of the degree of confidence in their likely success;</i>			
2.7.5	<i>A timescale, relative to the project, of when they will be implemented;</i>			
2.7.6	<i>Details of monitoring scheme and how mitigation failure will be addressed</i>			
1.6	Has consultation with NPWS / DAU taken place?		No	No actual communication is mentioned. Guidelines have been consulted and adhered to and recommendations of consultations with NPWS and IFI are given for project stage.
	Are there any significant impacts predicted?	Yes		There is one potentially significant residual impact predicted on wetland habitats in the Tinakelly area of the Murrough Wetlands SAC and the Murrough SPA as a result of the FRM measures at Wicklow and Ashford & Rathnew AFAs. This is due to proposed construction works within the SAC boundary. The magnitude of impact cannot be determined conclusively until project level assessment is carried out.

Table 3: SEA SCREENING

SECTION 1 SEA SCREENING					
Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
1.1	In reaching a determination of the requirement for SEA, have the criteria set out in Annex 1 of the SEA Directive and Schedule 2A of S.I. 436 or Schedule 1 of S.I. 435 been taken into account?	Yes		Section 4 of Screening Report details the process of determination for SEA. Determination was made at pre-screening stage and assessed further against criteria.	SEA Directive Annex I (2001), Schedule 2A S.I. 436 (2004), Schedule 1 of S.I. 435 (2004)
1.2	Has a determination been made, in consultation with the DoEHLG, regarding the requirement for an appropriate assessment in accordance with the Habitats Directive?	Yes		Section 3.1.3 of AA states compliance.	Habitats Directive Article 6(3)
1.3	Has the relevant competent authority consulted the prescribed environmental authorities as required and notified them of its determination?	Yes		Section 5.2 of Screening Report states compliance.	SEA Directive Article 3(6)/6(3), S.I. 435 (2004)
1.4	Has the relevant statutory authority made available for public inspection a copy of its determination on the requirement for SEA?	Yes		Made available from the East CFRAM Website.	S.I. 435 (2004)
1.5	Does the screening determination clearly state whether SEA is required or not, who has made the decision and when?	Yes		Section 3.3 of ER, OPW, 2011.	

Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
1.6	If the P/P has been screened out of SEA, does it clearly demonstrate that it does not meet all/most of the criteria of Annex 1 and Schedule 2A of S.I. 436 and Schedule 1 of S.I. 435?	n/a	n/a	P/P has not been screened out of SEA.	n/a
1.7	Has a description been provided in the ER of the screening process and subsequent determination?	Partial		Screening process is not detailed in ER. Present in screening report available on East CFRAM website. Determination is clearly stated in Section 3.3 of ER.	

Table 4: SCOPING

SECTION 2 SCOPING					
Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
2.1	Were the designated environmental authorities consulted when deciding on the scope of the information to be included in the Environmental Report?	Yes		<ul style="list-style-type: none"> • Section 3.4.1 of the ER • Environmental Protection Agency • Department of Environment, Community and Local Government • Department of Agriculture, Food and the Marine • Department of Communications, Energy and Natural Resources • Department of Arts, Heritage and the Gaeltacht 	SEA Directive Article 5(4)

Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
2.2	Does the proposed scope of the report cover all the relevant information in accordance with Annex 1 of the SEA Directive and all of the points in Schedule 2 and Schedule 2B of S.I. 435 and S.I. 436? If not, have reasons for eliminating issues from further consideration been documented?	Yes		All relevant information held within the text of ER. The scoping process is detailed within the Scoping Report (separate document available from East CFRAM website).	
2.3	Has informal preliminary scoping taken place with the designated authorities prior to the commencement of the P/P making process?	Yes		Section 3.4 of the ER details how the Scoping report was produced in order to allow consultees to give feedback on the scope of the SEA.	Guidelines for Regional Authorities & Planning Authorities: Implementation of SEA Directives Section 3.14
2.4	Have scoping meetings/workshops been held with (a) any of the designated environmental authorities, (b) relevant internal departments within the organisation and (c) other relevant statutory and non-statutory organisations?	Yes		Section 6.1 of scoping report details a workshop that took place in January 2012 with a number of statutory and non-statutory consultees from a wide range of organisations.	
2.5	Where appropriate, if the zone of influence extends beyond the plan boundary, has transboundary notification and consultation been undertaken with other Member States & adjoining authorities on the scope of the SEA?		No	Section 3.4.1 of ER states: There are not anticipated to be any transboundary impacts from implementation of the FRMPs for the eastern CFRAM Study and therefore transboundary consultations were not undertaken during scoping.	

Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
2.6	As part of the scoping exercise, have the designated authorities been given an outline of: a) the geographical area involved (including a referenced and scaled map of the area) b) the nature of the plan and its intended lifespan c) the likely scale, nature and location of development within the area during the life of the plan (in broad terms) d) the predicted significant effects of this development	Yes		Section 1.1 of the Scoping Report sets out the questions and topics directed at consultees for the scoping of this SEA.	Guidelines for Regional Authorities & Planning Authorities: Implementation of SEA Directives Section 3.17
2.7	Has a Scoping Report been prepared which clearly highlights key environmental resources, zone of influence of the P/P, alternatives, key existing environmental issues/problems and likely significant environmental effects of the P/P?	Yes		Sections 3, 4 & 5 of the scoping Report highlight these issues.	Guidelines for Regional Authorities & Planning Authorities: Implementation of SEA Directives Section 3.16
2.8	Does the scoping report reflect the size/level of detail in the P/P?	Yes		The scoping report appropriately reflects the size/level of detail in the P/P.	
2.9	Does the scoping report provide the designated authorities with sufficient information to form a view on the likely significant effects of implementation of the P/P?	Yes		As well as the scoping report, a High-Level Impacts of Flood Risk Management Methods report was produced which details potential impacts of implementation.	

Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
2.10	Has a Scoping Issues Paper (for land use plans) been prepared to facilitate consultation? Have the environmental issues raised in the Issues paper been appropriately addressed in the scoping report?		No	n/a	
2.11	Have the public and other interested bodies been identified and consulted at the scoping stage?	Yes		Appendix E of the Scoping Report details the extent of the identified stakeholders. Consultation had occurred at this stage and more was planned to go ahead.	
2.12	Have the teams responsible for the preparation of the P/P and the ER been involved in the scoping exercise?	Yes		These teams were responsible for preparing the scoping exercise.	
2.13	Have the responses to the scoping exercises been included in the Scoping Report?	Yes		Appendix F of the ER details Directives, regulations and frameworks relating to the SEA area and has been updated in receipt of scoping responses.	
2.14	Has the Scoping Report been made public?	Yes		Available on the East CFRAM Website.	
2.15	Where an appropriate assessment is required and will be undertaken in conjunction with the SEA, have any environmental problems, indicators or other issues relevant to the assessment been identified, that need to be considered during the SEA process?	Yes		Issues set out in Section 3.4 of Scoping Report.	Habitats Directive Article 6

Table 5: CONSULTATION

SECTION 3 CONSULTATION					
Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
3.1	Have the Draft P/P and accompanying ER been made available to the designated authorities and the public?	Yes		Details set out in section 4.4.6 of FRMP.	SEA Directive Article 6(1) & 6(3)
3.2	Have the designated environmental authorities and the public been given an early and effective opportunity to express their opinion on the draft P/P and the accompanying ER?	Yes		Consultation dates stated in section 4.4.6 of FRMP provided adequate time for consultation feedback.	SEA Directive Article 6(2) & 6(4)
3.3	Have the ER and the opinions expressed by the designated authorities and the public during consultation been taken into account during the preparation of the P/P?	Yes		Section 6.1 of the FRMP describes the input from the ER and opinions of the designated authorities. Appendix B of SEA statement document details submissions.	Sea Directive Article 8
3.4	Where relevant, has a copy of the Draft P/P and the ER been forwarded to other Member States before its adoption?		no	Not considered relevant.	SEA Directive Article 7
3.5	Where relevant, have the Member States been given a reasonable time frame to respond to the draft P/P and ER?		no	Not considered relevant.	
3.6	Have the opinions expressed by other Member States during transboundary consultation been taken into account?		no	Not considered relevant.	SEA Directive Article 7
3.7	Has a description of the outcome of all consultations (including transboundary) been documented in the ER?	Yes		Environmental submissions and outcomes detailed in Appendix B of SEA Statement.	

Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
3.8	Where a consultation recommendation has not been taken on board, has an explanation been provided of why?	Yes		Appendix B of the SEA Statement details the actions taken in response to consultations recommendations.	
3.9	Have P/Ps and ERs for counties contiguous to the border with Northern Ireland been subject to transboundary consultation with the relevant Northern Ireland Environmental Authorities?		no	Not considered relevant.	
3.10	If the zone of influence of the P/P extends beyond the P/P boundary, have relevant statutory Bodies/Authorities and adjoining Local Authorities been informed and consulted?	Yes		All relevant authorities within and beyond the study boundary have been consulted. Refer to list of consultees and stakeholders Appendix E of ER.	

Table 6: DESCRIPTION

SECTION 4 Plan Description					
Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
4.1	Has an outline of the contents and the main objectives of the P/P been provided in the ER?	Yes		Objectives listed in Table 4.3 of ER. Contents outlined in table 5.1 of ER.	SEA Directive Article 5 Annex 1(a)
4.2	Has information been provided on the relationship of the P/P with other relevant P/Ps?	Yes		Section 7.1 of ER details other relevant P/Ps.	SEA Directive Article 5 Annex 1(a)
4.3	Has a referenced and scaled map illustrating the geographical extend of the P/P area been included in the ER?	Yes		Figure 2.1	
4.4	Have any relevant conflicts and/or synergies between the P/P objectives and the objectives of other P/Ps in the hierarchy (including transboundary) been identified and described?	Yes		Discussed in Appendix F of the ER.	
4.5	Has the zone of influence of the P/P been described appropriately?		No	Section 5.3 of the ER states that the geographical scope of the study will be focused within the FRMP with room for flexibility where required. Outlying FRMPs will receive their own separate SEA study, therefore adjacent FRMPs have been scoped out of this SEA	
4.6	Has the potential for transboundary effects of the plan been identified?	Yes		Section 3.4.1 states that there are not likely to be transboundary impacts.	

Table 7: EXISTING ENVIRONMENT

SECTION 5 EXISTING ENVIRONMENT								
Minimum Requirements								
5.1	(a) Are the relevant aspects of the current state of the environment described? (b) Are any existing environmental problems described (in particular those relating to areas designated pursuant to the Birds and Habitats Directives)? (c) Are the environmental characteristics of areas that are likely to be significantly affected by the P/P identified? (d) Is the likely evolution of the existing environment without the implementation of the P/P described? (e) Have any significant gaps in the baseline data been identified? (f) Have alternative/proxy data sources been identified where existing baseline data is unavailable?							
	Environmental Receptors	A	B	C	D	E	F	Comment
	Biodiversity, flora and fauna	x	x	x	x	o	o	Section 6.2
	Water (surface, ground, estuarine and coastal)	x	x	x	x	o	o	Section 6.5
	Soil	x	x	x	x	o	o	Section 6.4
	Landscape	x	x	x	x	o	o	Section 6.10
	Cultural Heritage	x	x	x	x	o	o	Section 6.9
	Population	x	x	x	x	o	o	Section 6.3
	Human Health	x	x	x	x	o	o	Section 6.3
	Air	o	o	o	o	o	o	Not Considered Relevant (section 6.6)
	Climatic Factors	x	x	x	x	o	o	Section 6.7
	Material Assets	x	x	x	x	o	o	Section 6.8
	Interrelationships	o	o	o	x	o	o	Not referred to in Baseline & Relevant Environmental Issues
Fisheries	x	x	x	x	o	o	Section 6.11	

Minimum Requirements								
Amenity, Community & Socio-Economics		x	x	x	x	o	o	Section 6.12
								Requirement D is described in section 6.13 with regard to all headings.
	Question	Yes	No	Comment	Statutory Basis			
5.2	Has a description been included of any difficulties (such as technical deficiencies or lack of know how) encountered in compiling the required information?	Yes		Section 4.6 of ER. Difficulties mentioned included the extent of the area and different views of the large range of stakeholders. Long timeframe and changing environment, legislation, policies and opinions were also sited.	SEA Directive Article 5 Annex 1			
5.3	Does the relevant current state of the environment (baseline), as described, reflect: a) the availability of data? b) The size and level of detail of the P/P?	Yes		A wide range of data was included in the baseline description which covered the large area adequately.				
5.4	Have trends for key environmental receptors been presented and described using appropriate environmental data?	Yes		Key receptors are referred to where relevant.				

	Question	Yes	No	Comment	Statutory Basis
5.5	What sources of environmental data and/or environmental information systems (e.g. GIS) have been used?			Table 10.2 of ER for full details.	
5.6	Have existing environmental problems relevant to the P/P been identified and put into the context of relevant environmental objectives, standards, thresholds etc.?	Yes		Table 10.2 of ER.	

Table 8: OBJECTIVES, TARGETS AND INDICATORS

SECTION 6 OBJECTIVES, TARGETS AND INDICATORS					
Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
6.1	Have any environmental protection objectives, established at International, European Community or Member State level which are relevant to the P/P been identified?	Yes		Table 10.2 of ER. Support Habitats Directive, Support Water Framework Directive.	SEA Directive Article 5 Annex 1
6.2	Have these objectives and any environmental considerations been taken into account (placed in context/linked into the P/P) during the preparation of the P/P?	Yes		Section 1.4.1 of FRMP.	SEA Directive Article 5 Annex 1
6.3	Are the proposed environmental objectives linked to appropriate targets and indicators?	Yes		Table 8.1 of FRMP.	

	Question	Yes	No	Comment	Statutory Basis
6.4	In relation to environmental targets; (a) have limits or thresholds been established where appropriate? (b) have timescales been set where appropriate?		No	Section 8.4 of FRMP sets out the review cycle for PFRA flood maps and plans. Limits and thresholds are not stated at this stage.	
6.5	Are the environmental indicators capable of the following: <ul style="list-style-type: none"> describing trends in the baseline environment? demonstrating the likely significant environmental impact(s) of the implementation of the P/P? being used in a monitoring programme? providing an early warning of significant unforeseen adverse effects? prioritising key environmental impact(s)? is the number of environmental indicators manageable, in terms of time and resources? 	Yes		Cannot provide early warning of unforeseen adverse effects. Manual prioritisation necessary.	
6.6	Have the environmental objectives been linked to targets and indicators for those environmental receptors identified as being significantly affected?				
	Environmental Receptor	O	T	I	Comment
	Biodiversity, flora and fauna	n	n	Y	Table 10.2 of ER
	Water (surface, ground, estuarine and coastal)	n	n	Y	
	Soil	n	n	Y	
	Landscape	n	n	Y	
	Cultural Heritage	n	n	Y	
	Population	n	n	Y	
	Human Health	n	n	Y	
	Air	n	n	n	Not Considered Relevant
	Climatic Factors	Y	n	n	
	Material Assets	n	n	Y	
	Fisheries	n	n	Y	

	Question	Yes	No	Comment	Statutory Basis
	Amenity, Community & Socio-Economic	n	n	Y	
	Environmental objective (O): In SEA, objectives are broad, overarching principles which should specify a desired direction of change, for example, 'reduce air pollution' or 'improve human health'.				
	Environmental target (T): A target usually underpins an objective often having a time deadline that should be met and should be accompanied by limits or thresholds				
	Environmental indicator (I): Indicators are used to track the achievements of objectives and targets, describe the baseline situation, monitor the impact of the proposed plan or programme on the environment and monitor impacts				
	Proxy indicators: A measure of activity resulting from a P/P which provides information on environmental impact without the need for a direct measure of an environmental receptor				

Table 9: CONSIDERATION OF ALTERNATIVES

SECTION 7 CONSIDERATION OF ALTERNATIVES					
Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
7.1	Have 'reasonable alternatives' been identified and described?	Yes		Section 8 of ER.	SEA Directive Article 5 Annex 1
7.2	Have the reasons for selecting (a) the alternatives and (b) the preferred alternative been provided?	Yes		Section 9 of ER.	SEA Directive Article 5 / Article 9 Annex 1
7.3	Has a description of how the assessment of alternatives was undertaken been provided?	Yes		Section 4.2 of ER.	SEA Directive Article 5 Annex 1
7.4	Are the potential alternatives proposed assessed against the relevant environmental objectives and against each other?	Yes		Appendix C of ER discusses and scores alternatives.	
7.5	Has a clear explanation been given of the likely significant environmental effects of each alternative?	Yes		Section 9.	
7.6	Has clear written justification been given for the choice of the preferred alternative?	Yes		Section 9.	
7.7	Do the alternatives considered reflect the objectives and hierarchy of the P/P?	Yes			

Table 10: SIGNIFICANT EFFECTS ON THE ENVIRONMENT

SECTION 8 LIKELY SIGNIFICANT EFFECTS ON THE ENVIRONMENT					
Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
8.1	Are the likely significant effects on the environment described?	Yes		Each major settlement is considered in terms of impact and significance and discussed in detail in section 9 of the ER in relation to the topics set out in the SEA Directive Article 5 Annex I (f).	SEA Directive Article 5 Annex I (f)
8.2	Are significant effects described in relation to: - current environmental conditions - relevant environmental standards and thresholds	Yes		Section 6 of ER describes current environmental conditions.	
8.3	Are appropriate impact prediction methods used, and, are impacts quantified where relevant?	Yes		Section 9 of ER within the environmental assessment for each settlement.	
8.4	Have the methods used for impact prediction been described?	Yes		Section 4.1 of ER	

Table 11: MITIGATIN MEASURES

SECTION 9 MITIGATION MEASURES					
Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
9.1	Have mitigation measures been proposed for all significant adverse effects on the environment of implementing the P/P?	Yes		Section 10.1.2 (ER). Section 3.5 of SEA Statement	SEA Directive Article 5 Annex 1
9.2	Have the proposed mitigation measures been incorporated into the P/P?	Yes		Section 6.6.3 of FRMP sets out mitigation measures (more detail to be provided at project level stage)	
9.3	Have the proposed mitigation measures been linked, where appropriate, to specific relevant significant environmental effects?	Yes		Table 10.1 (ER). Section 3.5.2 of SEA Statement	
9.4	Has an explanation been provided where mitigation of significant adverse effects is not proposed?	N/A		N/A	
9.5	Are the mitigation measures proposed within the remit of the statutory authority? If not, is there reasonable certainty that they will be implemented?	Yes		Table 10.2 (ER) states the responsible authorities.	
9.6	Do the proposed mitigation measures have potential to fully avoid or mitigate the relevant impact(s)? If not, have additional measures been considered?	Yes		Proposed mitigation measures are sufficient at strategic level (Table 10.1 of ER).	

Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
9.7	Is a description provided of any likely post mitigation residual impacts included?		No	Not mentioned in text	
9.8	If the appropriate assessment shows that the P/P would have a significant impact on the integrity of a Natura 2000 site, has the statutory authority considered further alternatives to try to avoid these impacts?		No	Significant impacts will be assessed further at project level.	

Table 12: MONITORING PROGRAMME

SECTION 10 MONITORING PROGRAMME					
Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
10.1	Has a monitoring programme of significant environmental effects of implementing the P/P been described?	Yes		Section 10.2 (ER)	SEA directive Article 10 Annex 1, S.I. Nos 435 & 436 (2004)
10.2	Does the monitoring programme allow unforeseen adverse effects to be identified, for instance, where assumptions underpinning the ER's impact predictions may not come true in practice?	Yes		Table 10.2 indicators (ER). Mentioned in last paragraph of conclusion	SEA directive Article 10 Annex 1, S.I. Nos 435 & 436 (2004)
10.3	Have thresholds / trigger levels been assigned which will determine the need for appropriate remedial action?	Yes		Table 10.2 indicators (ER)	SEA Directive Article 10 Annex 1, S.I. Nos 435 & 436 (2004)

Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
10.4	Are responsibilities for carrying out the monitoring programme clearly defined?	Yes		Table 10.2 (ER)	Planning Guidelines for SEA section 7.7
10.5	Are responsibilities for responding to any significant negative environmental effects of implementation of the P/P clearly defined?	Yes		Table 10.2 (ER) "Responsible Authorities"	
10.6	Are responsibilities for identifying and responding to unforeseen adverse effects of implementation of the P/P clearly defined?	Yes		Table 10.2 (ER) "Responsible Authorities"	
10.7	Has the frequency of monitoring been specified in the monitoring programme?	Yes		Section 10.2 (ER) mentions cycles of FRMPs. Section 5.1 of SEA Statement	
10.8	Has the frequency of reporting on the results of the monitoring programme been specified?	Yes		Section 5.1 of SEA Statement	
10.9	Does the monitoring programme address significant gaps identified in the baseline data?	Yes		Gaps are not identified; however, the monitoring program aims to identify issues that may not have been considered in the first instance. (Section 8.2 of FRMP)	Planning Guidelines for SEA section 7.4
10.10	Does the monitoring programme utilise existing monitoring arrangements where appropriate?		No	Not specified.	
10.11	Does the monitoring programme include provision for the ongoing review of environmental targets and indicators?	Yes		Indicators can be used in an ongoing manner (Table 10.2 of ER). Section 8.2 of FRMP details the ongoing nature of the monitoring program.	
10.12	Has provision been made to produce regular monitoring reports during the time period of the P/P?		No	More detail to be provided at project level.	

Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
10.13	Does the monitoring programme address transboundary effects, if any?		No	N/A	
10.14	What provisions are there to make the results and interpretation of the monitoring programme available to the designated environmental authorities and the public?		None	Not specified at this stage.	

Table 13: ENVIRONMENTAL REPORT AND NON-TECHNICAL SUMMARY

SECTION 11 ENVIRONMENTAL REPORT AND NON-TECHNICAL SUMMARY					
Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
11.1	Does the ER contain all of the aspects listed in Annex 1 of the SEA Directive and Schedule 2 and 2B of S.I. 435 and 436 of 2004?	Yes		Throughout Text	SEA Directive Article 5 Annex 1
11.2	Does the ER include a non-technical summary?	Yes		Pre-text	SEA Directive Article 5 Annex 1
11.3	Does the non-technical summary clearly summarise the following:				SEA Directive Article 5 Annex 1
	a) Contents & Main Objectives of the draft P/P	Yes			
	b) Current state of the environment and evolution	Yes			
	c) Environmental characteristics of area significantly affected	Yes			

Minimum Requirements					
	Question	Yes	No	Comment	Statutory Basis
	d) Existing environmental problems	Yes			
	e) Environmental protection objectives	Yes			
	f) Significant effects on the environment	Yes			
	g) Mitigation Measures	Yes			
	h) Alternatives	Yes			
	i) Monitoring	Yes			
11.4	Has a description been provided in the ER of the screening process and subsequent determination?	Yes		Process is not detailed in ER (present in separate screening report, an appendix of the scoping report available on East CFRAM Website) Determination is detailed in section 3.3	
11.5	Have the responses to the scoping exercises been included in the ER? Has an explanation been given as to how these responses were considered?	Yes		Feedback from scoping has been inputted to the ER, however details are not provided in ER. Consult scoping report on East CFRAM Website.	
11.6	Is the non-technical summary concise and easy to understand?	Yes			Planning guidelines on SEA section 4.41
11.7	Has a description of the outcome of all consultations (including transboundary) been documented in the ER?	Yes		Section 4 of ER	
11.8	Have relevant references, glossary of terms and scaled maps (with source identified) been included?	Yes			

2 CONCLUSION

Fehily Timoney & Company were appointed to review the environmental assessment and compile a report on each Flood Risk Management Plan. This report determines that the procedures and statutory obligations set out in the relevant environmental regulations, including but not limited to SI Nos. 477 of 2001 and 435 of 2004 and any relevant amending regulations have been fully complied with.

All relevant environmental considerations have been duly and effectively assessed. Section 2.9 of the Natura Impact Statement review indicates that there is potential for significant impacts on Natura sites. Further assessment and appropriate mitigation measures should be undertaken at project level. It is in order for the Minister to decide that the Flood Risk Management Plan will not adversely affect the integrity of Natura Sites and the plans are not likely to have significant effects on the environment.