

# Sustainable Water Network (SWAN)

## Response to Public Consultation on Environmental Analysis of Scenarios Related to Implementation of Recommendations in Food Harvest 2020



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# TABLE OF CONTENTS

<b>1. Introduction to SWAN .....</b>	<b>1</b>
<b>2. Context: Water Framework Directive; agriculture &amp; sustainable water management.....</b>	<b>1</b>
2.1 Challenges of meeting Water Framework Directive obligations.....	1
2.2 Agriculture as a significant water management issue .....	1
2.3 River Basin Management Plans: Measures to address agricultural pressures .....	2
<b>3. Overarching Comments on Food Harvest 2020.....</b>	<b>2</b>
3.1 Strategic Environmental Assessment .....	2
3.2 Limitations of public consultation .....	2
3.3 Impacts of Food Harvest 2020 growth targets on the water environment.....	3
3.3.1 Assessment & management of agriculturally derived nutrients in the context of FH2020.....	3
3.3.2 Milk production targets .....	4
3.3.3 Other sectoral targets.....	4
3.3.4 Aquaculture .....	4
<b>4. Conclusion.....</b>	<b>5</b>
<b>Appendices .....</b>	<b>6</b>
I. SWAN Partner Groups .....	6
II. SWAN Board of Directors .....	6

# 1. Introduction to SWAN

The Sustainable Water Network (SWAN) is an umbrella network of 25 of Ireland's leading environmental NGOs, national and regional, working together to protect and enhance Ireland's aquatic resources through coordinated participation in the implementation of the Water Framework Directive (WFD) and other water-related legislation. SWAN member groups are listed in Appendix I. SWAN has been actively engaged in Water Framework Directive (WFD) and other water policy implementation at both national and River Basin District (RBD) level since 2004, responding to water-related public consultations and representing the environmental sector on WFD River Basin District (RBD) Advisory Councils, the South Eastern RBD Management Group and National Rural Water Services Committee. SWAN network members and staff have engaged in a positive way with members of the farming representative bodies on all of these fora and built trust and an understanding of the challenges facing the farming community.

SWAN's aim is to participate in the national debate on the management of the aquatic environment at the highest level, with the support of evidence-based information, analysis, recommendations and international best practise examples.

## 2. Context: Water Framework Directive; agriculture & sustainable water management

### 2.1. Challenges of meeting Water Framework Directive obligations

According to the most recent EPA State of the Environment Report<sup>1</sup>, *'meeting the requirements of the Water Framework Directive (WFD) and protecting our water resources ... are pressing challenges for Ireland.'* The Water Framework Directive (WFD) establishes in law a comprehensive set of environmental objectives for Irish and EU aquatic resources which requires them to be managed in a sustainable manner<sup>2</sup>. It requires all surface and groundwaters to achieve 'good' status by 2015<sup>3</sup> (with limited application of exemptions) and in addition prohibits any deterioration in the current status of our waters. The most recent EPA water quality report<sup>4</sup> finds just 52% of river water bodies achieving WFD standards, with 41% of lakes failing those standards, illustrating the scale of activity that will be required in order to meet the objectives of the Directive.

### 2.2 Agriculture as a significant water management issue

Agriculture accounts for almost two-thirds of the land area of the State and according to the recent EPA State of the Environment Report, agriculture was the suspected cause of pollution at 47% of polluted river sites surveyed in 2007-2009<sup>1</sup>. The WFD River Basin Management Plans (RBM Plans) published in 2010<sup>5</sup>, identify agriculture as a significant pressure on the status of surface water and groundwaters and estimate *"that agriculture sources account for 31% of pollution incidents"*.

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<sup>1</sup> EPA (2012) *'Ireland's Environment 2012 - An Assessment'*, EPA, Wexford

<sup>2</sup> It applies to surface waters, i.e. lakes, rivers, transitional waters (estuaries) and coastal waters (up to one nautical mile from land) and to ground waters

<sup>3</sup> Defined as biological conditions deviating only 'slightly' from those found under undisturbed conditions

<sup>4</sup> McGarrigle, M., Lucey, J. & O' Cinnéide, M. (2010) *'Water Quality in Ireland 2007-2009'*. EPA, Wexford

<sup>5</sup> Carlow County Council (2010) *'Water Matters – Our Plan'*, *South Eastern River Basin Management Plan 2009 -2015* Carlow County Council, Carlow

While it is clear that onsite waste water treatment system and municipal wastewater, amongst others are also significant sources of nutrients, it is estimated by the EPA that over 70 per cent of phosphorus reaching inland waters emanates from agricultural sources<sup>6</sup>. The 2010 EPA Water Quality report attributes agriculturally-derived moderate river pollution to “diffuse losses including farmyard losses, siltation due to bank erosion and cattle access to streams, phosphorus loss from riparian areas and nitrate losses from tillage land.”<sup>7</sup>

### 2.3 River Basin Management Plans: Measures to address agricultural pressures

The River Basin Management (RBM) Plans identify the Good Agricultural Practise for the Protection of Water Regulations (the ‘Nitrates Regulations’ or ‘GAPP Regulations’) as the primary legislative tool by which to achieve agricultural compliance with the WFD. However they also state that “*Evidence suggests that they will not be sufficient to fully deliver the requirements of the Water Framework Directive in some areas of the country*” and that “*the need for supplementary measures will arise*” including for ‘high status sites’. If the current legislative and policy framework is insufficient to protect high status sites, under the current production regime<sup>8</sup>, it follows that enhanced targets of FH2020 present increased pressures with associated increased impacts on certain aquatic sites.

## 3. Overarching Comments on Food Harvest 2020

### 3.1. Strategic Environmental Assessment

It is SWAN’s position that Food Harvest 2020 is a national strategic policy, coordinated by the Department of Agriculture, Food and the Marine (DAFM)<sup>9</sup> and that therefore a Strategic Environmental Assessment (SEA) of the strategy is required under Articles 2 and 3 of Directive 2001/42/EC. In fact the authors of Food Harvest 2020 themselves recommended that their proposals should be subject to a Strategic Environmental Assessment: “*DAFF should lead a strategic environmental assessment on the impact of the recommendations of this report...*” Whilst this retrospective environmental assessment is welcome, it does not replace the required SEA and SWAN has concerns about its limited terms of reference (see 3.2 below). Due to the lack of an SEA, Food Harvest 2020 may be in breach of Directive 2001/41/EC, despite the current assessment.

### 3.2. Limitations of Public Consultation

SWAN welcomes the opportunity to present some preliminary comments, despite the late stage in the process. However, SWAN seeks clarification from the Department as to the exact nature of this public consultation. It is important that stakeholders know whether this is a consultation on the Food Harvest 2020 strategic document. In the context of SEA, early public participation in the assessment process, in addition to the final decision-making process is required. It is our position that FH2020 does not provide all the necessary information to facilitate meaningful public consultation, especially within the limited timeframe (notwithstanding the extension), at this late stage in the process, given that FH2020 is effectively a finalised document.

SWAN also has concerns with regard to the terms of reference of the ‘*Environmental Analysis of Scenarios Related to Implementation of Recommendations in Food Harvest 2020*’ on which this consultation is based. As a scientific analysis SWAN believes that this must be an objective assessment of the environmental impacts of the significant growth targets set out in FH2020. However the wording of the consultation document suggests that this assessment is being set within

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<sup>6</sup> EPA (2006) ‘*Environment in Focus 2006 - Environmental Indicators for Ireland*’, EPA Wexford

<sup>7</sup> McGarrigle, M., Lucey, J. & O’ Cinnéide, M. (2010) ‘*Water Quality in Ireland 2007-2009*’. EPA, Wexford

<sup>8</sup> Irvine K. & Ní Chuanigh, E. (2011) ‘*Management Strategies for the Protection of High Status Water Bodies. A Literature Review*’. EPA, Wexford, 2011

<sup>9</sup> In a written response to a parliamentary question on December 1st 2010, the then Minister of Agriculture Fisheries & Food, Mr Brendan Smith TD, said “*The Government’s strategic policy document, Food Harvest 2020, outlines the vision for the expansion of the agri-food and fishing sector...*” and that “*...my primary focus has been directed at ensuring a coherent and integrated approach to its implementation.*”

narrow parameters: “The analysis will consider a number of alternative approaches and formulate an optimum approach to achieving the growth targets, presenting a number of scenarios for meeting the volume and value targets...” This wording, although not altogether clear, suggests that the objective of the assessment is limited to examining different scenarios for minimising environmental impacts of the growth targets set in FH2020 but is not aimed at assessing whether these targets are fundamentally environmentally sustainable. In other words, the targets are set, but the scenarios for meeting them are open for consideration, in the context of their respective environmental impacts. If this is indeed the case, then it is unacceptable to SWAN.

SWAN requests that:

- a. A further round of public consultation is carried out on the Draft Analysis Report once it is delivered to the Department ‘by end July 2012’, which provides more time and information for meaningful stakeholder engagement;
- b. The Department provides an opportunity for stakeholders to meet and present our responses to the consultants and/or relevant officials for consideration in the development of the Final Analysis Report ‘by end October 2012’;
- c. Clarification be provided with regard to the terms of reference for the ‘*Environmental Analysis of Scenarios Related to Implementation of Recommendations in Food Harvest 2020*’;
- d. Clarification is provided with regard to the actions that will be taken in response to the ‘*Environmental Analysis*’ i.e. is there an option to amend the Food Harvest 2020 growth targets on foot of this analysis?

### 3.3 Impacts of Food Harvest 2020 growth targets on the water environment

SWAN welcomes and supports the assertion in the ‘Protecting Water Resources’ section of FH2020 that “*Ireland’s waterways are one of our major natural resources [and that] Plentiful availability of water offers a significant competitive advantage to agriculture, but is a resource that must be carefully managed. Improving water quality status is a national priority for Ireland...*” However, without a comprehensive environmental analysis, it is impossible to assess in an evidence-based way, whether the targets of the strategy are consistent with this aspiration. In the absence of an SEA, there are certain conclusions with regard to the potential environmental impacts of FH2020 targets which one can draw from the literature; these are set out below in relation to water.

#### 3.3.1 Assessment & management of agriculturally derived nutrients in the context of FH2020

There is a comprehensive body of literature<sup>10,11</sup> evidencing the significant impact of agricultural activity on the aquatic environment in Ireland, especially in relation to nutrient loading. Given the uncertainty around the effectiveness of the GAPP Regulations and the National Action Programme to address these agricultural pressures (and thus in meeting WFD targets), the findings of the Agricultural Catchments Programme (ACP) are extremely important. The RBM Plans set out the purpose of the Agricultural Catchments Programme (ACP): “... to provide a scientific evaluation of the effectiveness of the National Action Programme measures and where necessary to underpin the basis for any modifications of the measures that might be required to achieve Water Framework Directive water quality objectives”. This is echoed by the FH2020 document which states that the ACP studies “will indicate the effectiveness of those agricultural measures in reducing pollution of water by nitrates and phosphates from agricultural sources”.

Given the importance of these studies is assessing the efficacy of the National Action Programme in controlling agriculture-derived nutrients under the current production regime, it is premature and scientifically questionable to promote increased agricultural output before substantive findings from the ACP are available and to claim that this can be done in an environmentally sustainable manner.

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<sup>10</sup> Irvine K. & Ni Chuanigh, E. (2011) ‘*Management Strategies for the Protection of High Status Water Bodies. A Literature Review*’. EPA, Wexford

<sup>11</sup> Bourke, D., Jeffrey, D., Dowding, P., Kurz, I. and Tunney, H., (2008). ‘*Eutrophication from agricultural sources -the impact of the grazing animals on phosphorus, nitrogen, potassium and suspended solids loss from grazed pastures - phosphorus dynamics in grazed grassland*’. ERTDI Report Series No. 77, EPA and Teagasc Wexford, Ireland.

In this context, it is of further concern to SWAN that in a statement last year<sup>12</sup> the Minister for Agriculture, Food and the Marine, Mr. Simon Coveney TD, was pre-emptively anticipating that the scientific findings of the ACP would support the targets of FH2020: *“the new scientific knowledge being generated by the Agricultural Catchments Programme will be critical to the sustainable expansion of Irish milk and meat production from grass and therefore will be critical to achieving the ambitious growth targets of Food Harvest 2020”*. It is SWAN’s position that this aspiration must not circumscribe the terms of reference of the current assessment.

### 3.3.2 Milk Production Targets

The specific sectoral target of 50% increase in milk production poses a particular threat to the aquatic environment in the context of the pressures and lack of results from the ACP outlined in 3.3.1 above. According to EPA research<sup>13</sup>, this target *“..accentuates potential impact on all waters, but especially those at high status if animal waste is allowed to be exported across catchments”*. The recent EPA State of the Environment report<sup>14</sup> states that *“The milk production targets will present a significant challenge to meeting WFD objectives.”* The 2012 ‘Environment Review 2012’ from the Economic & Social Research Institute (ESRI)<sup>15</sup> also reflects this: *“Nutrient enrichment of surface and ground waters is prevalent in many locations and agriculture is one of the contributory sources. With increased volumes of excreted nutrients associated with growth in the sector, Food Harvest 2020 has the potential to exacerbate the problem.”*

SWAN acknowledges that the 50% increase in output does not necessarily equate exactly to the same 50% increase in the national herd. However, we do not believe that this target is consistent with meeting environmental objectives for the water environment under the WFD. It is regrettable that in the section of the FH2020 document on the dairy sector the only water-related ‘Green’ initiative identified is rainwater harvesting. This is despite the fact that the most significant issue in relation to the water environment is management of nutrients.

### 3.3.3 Other sectoral targets

It is difficult for SWAN to provide a view of impacts to the water environment of other sectoral targets since the strategy does not provide clear volume targets for beef, sheep, pig or forestry sectors. All of these sectors represent a significant pressure on the water environment and SWAN looks forward to studying the more detailed information in the Draft Analysis Report and providing more detailed comments, as requested under 3.2 above.

### 3.3.4 Aquaculture

Aquaculture was identified in the RBM Plans as a significant water management issue, especially in areas of high density operation. It is unacceptable that aquaculture has been omitted from the current environmental analysis *“in order to avoid duplication”* since *“..the increased production envisaged for seafood and aquaculture under FH 2020 has already been appropriately assessed”*. It is SWAN’s understanding, based on information given by the Department to SWAN member organisation Friends of the Irish Environment, that the assessment being referred to here is BIM’s 2008 ‘Irish National Seafood Plan: Environment Report’. Whilst FH2020 growth targets of 78% reflect targets in that document, objectives set out in ‘Our Ocean Wealth’ far exceed these and furthermore propose expansion of aquaculture operations into new sites. For this reason, it is not true to say that including aquaculture in the current assessment would be duplication, since circumstances and government targets for the sector have substantially changed since 2008.

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<sup>12</sup> 14<sup>th</sup> September 2011

<sup>13</sup> Irvine K. & Ni Chuanigh, E. (2011) ‘Management Strategies for the Protection of High Status Water Bodies. A Literature Review’. EPA, Wexford

<sup>14</sup> EPA (2012) ‘Ireland’s Environment 2012 - An Assessment’, EPA, Wexford,

<sup>15</sup> Curtis, J. (2012) ‘Environment Review 2012’ Economic & Social Research Institute (ESRI), Dublin, 2012

## 5. Conclusion

Meeting the requirements of the Water Framework Directive is an important challenge that will deliver benefits in terms of enhancing our rivers, lakes, wetlands and coasts for farming, tourism, business and the enjoyment of local communities. According to the EPA State of the Environment report launched last week, it is important that “*we protect this strategic resource for future generations.*” and also “*..vital that future agricultural practices be developed and implemented to be fully sustainable, and not prevent Ireland from meeting its EU obligations in relation to water*”. A full strategic environmental assessment of Food Harvest 2020 is necessary to assess the degree to which FH2020, a significant strategic national plan, meets these criteria and is environmentally sustainable. In the interim, the terms of reference of the current analysis must be sufficiently broad to assess the impacts of the FH2020 growth targets and the government must be open to reviewing and amending the targets if they are shown to be environmentally unsustainable. A further public consultation on the Draft Analysis Report once it is delivered to the Department should be conducted, which provides more time and information for meaningful stakeholder participation in the development of the Final Analysis Report.

## Appendix I

### SWAN Member Organisations & Board Members

SWAN National Groups		SWAN Regional & Local Groups	
1.	An Taisce	16.	Carra Mask Corrib Water Protection Group
2.	Bat Conservation Ireland		
3.	Birdwatch Ireland	17.	Cavan Leitrim Environmental Awareness Network
4.	Coastwatch Europe Network		
5.	Coomhola Salmon Trust Ltd.	18.	Cork Environmental Forum
6.	Eco-UNESCO	19.	Longford Environmental Alliance
7.	Friends of the Earth	20.	Macroom District Environmental Group
8.	Friends of the Irish Environment		
9.	Irish Doctor's Environmental Association	21.	Save Our Lough Derg
10.	Irish Peatland Conservation Council	22.	Save Our Lough Ree
11.	Irish Seal Sanctuary	23.	Save The Swilly
12.	Irish Water and Fish Preservation Society	24.	Shannon Whale & Dolphin Foundation
13.	Irish Whale and Dolphin Group		
14.	Irish Wildlife Trust	25.	Slaney River Trust
15.	Voice Of Irish Concern for the Environment (VOICE)		

SWAN Board of Directors:	
Mark Boyden, Chair	Coomhola Salmon Trust
Eamonn Moore, Vice Chair	An Taisce
David Lee, Director	Cork Environmental Forum
David Healy, Director	Friends of the Irish Environment
Joachim Schaefer, Director	Cavan Leitrim Environmental Awareness Network
Karin Dubsky, Director	Coastwatch Europe
Elaine Nevin, Director	ecoUNESCO