

Ann Kehoe

Subject: FW: S0012-02 Dumping at Sea Permit Application from Port of Waterford Company
Attachments: IFI response to PoW mtnc dredging Dumping-at-Sea 1.2014.doc

From: Jimmy King [<mailto:Jimmy.King@fisheriesireland.ie>]

Sent: 22 January 2014 10:35

To: Tara Higgins

Cc: Karen Creed; Frank ODonoghue

Subject: Re: S0012-02 Dumping at Sea Permit Application from Port of Waterford Company

Tara,

Further to notification from EPA please find attached comment form Inland Fisheries Ireland in regard to the above DAS application.

Jimmy King

Dr. James King

Senior Research Officer

Iascach Intire Éireann
Inland Fisheries Ireland

Tel +353 (0)1 8842600

Mob +353 (0) 87 6468608

Fax +353 (0)1 8360060

Email jimmy.king@fisheriesireland.ie

Web www.fisheriesireland.ie

Swords Business Campus, Swords, County Dublin, IRELAND.

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EPA Dumping at sea Advisory Committee:

Re: S0012-02 Dumping at Sea Permit Application from Port of Waterford Company

Request for observations from Dr. Karen Creed and Dr. Tara Gallagher dated 22.10.2013

IFI understanding of current PoW application:

- The principal concern of Inland Fisheries Ireland (IFI) in regard to the dredging operations proposed in the Port of Waterford maintenance dredging application related to suspended solids (SS) and resuspension of SS into the water column with potential adverse impacts on fish life stages, migratory fish passage, and fisheries habitat.
- IFI understands that Port of Waterford has made application for maintenance dredging (DECLG Foreshore licence) and for dumping at sea (EPA DAS licence) to cover an eight-year period up to 2021. The comments from IFI cover both licence applications and are forwarded to DECLG and to EPA.
- IFI notes that maintenance dredging is proposed at a series of discrete sites, clearly identified in maps provided, that are related to shipping passage, berthing and turning circles both at the principal port area of Belview as well as at Passage East, Cheekpoint and in Waterford city quays. IFI understands that dredging will be confined to these indicated areas.
- IFI understands that dredging will be conducted by trailer suction dredge technique and that this process creates a slurry on the channel bed in the immediate area of the dredge head. The suction draws the slurry through a pipe network into the hull of the vessel undertaking the dredging. IFI understands that this process confines disturbance and suspended solids release to the immediate area of the dredging.
- Anecdotal reports pointed to naturally-high levels of Suspended Solids (SS) in the Waterford Harbour – Barrow-Suir estuarine areas. If such were the case, with high SS potentially occurring at any time of year then the argument for a 'closed period' on dredging would be diminished. The purpose of the closed period, covering March – June inclusive, was to facilitate passage up- and downstream of fish life stages – in particular, the downstream migration of salmon smolts and the upstream migration of adult Twaite shad. In its current application, Port of Waterford (PoW) provides data to emerge from a recent monitoring study it commissioned. The study investigated SS, using automated turbidity metering as a surrogate for SS, over extended periods of weeks, covering neap and spring tide events and covering periods when dredging was underway as well as no-dredge periods. In all cases, the turbidity meter was positioned in a zone adjacent to dredging activity. The

monitoring supported anecdotal reports and previous less-extensive SS data in regard to high SS events occurring at any / all times of the year both during dredging and at times of zero dredging.

IFI's stewardship role in regard to fish species of relevance in PoW area of operation:

The main fisheries concerns are:

- (1) that elevated suspended solids levels may increase mortality and cause adverse effects, including abrasion of gills, reduction in feeding rates and increased susceptibility to disease
- (2) silt deposition on areas where spawning or deposition of egg has occurred could impact on egg and larval survival
- (3) high suspended solid levels could obstruct fish passage/migration.

While the Habitats Directive is administered, in its generality, by National Parks and Wildlife Service (NPWS), the Minister for Communications, Energy and Natural Resources (DECLG) is charged with the conservation status and monitoring of the fish species listed in Annex II of the Directive. This annex includes Atlantic salmon, species of lamprey and species of shad. The role of the Minister is fulfilled by IFI who carries out survey works on the fish species. In the context of the present application(s) from Port of Waterford, species of interest that are listed in the Habitats Directive include Atlantic salmon, sea- and river lamprey and Allis and Twaite shad. In addition, the smelt is a species with nationally-important spawning populations in the Waterford Harbour – Barrow – Nore – Suir estuarine waters. This species migrates upriver to the head of the tide in March to spawn. Young-of-year and adult fish live in the lower estuary.

The shads are large members of the herring family. The shads have been known in Waterford Harbour for some time and are known to spawn at the upper tidal limits of the Barrow, Nore and Suir Special Areas of Conservation (SACs) under Habitats Directive. They are known to migrate upriver, from the lower Harbour area and/or the open sea, in late April - May and spawn during late May and early June. The spent fish migrate downriver after this. The fertilised eggs may float in the water column or may sink to the channel bed and hatch out there. The young, post-larval fish can be sampled in the water column of the estuaries within weeks of spawning. Adult fish may be found as by-catch in the lower harbour at various times of year. The shad populations are not considered to be large and are listed as 'Vulnerable' (Twaite shad) and 'Data deficient' (Allis shad) in the recent Irish Red Data Book for fish.

IFI response to PoW applications for Foreshore and DAS licences:

IFI welcomes the investigative monitoring and documentation compiled by PoW in regard to SS and the Port's shipping and dredging operations. The evidence provided would support the proposal to remove the current 'closed period' constraint on dredging operations. However, IFI would be concerned at a full-scale lifting of constraints with no associated monitoring or assessment over an eight-year period – the requested duration of the current maintenance dredging application.

IFI would be prepared to agree to a removal of the 'closed period' on dredging if a series of measures were agreed. These would include:

- Dredging be confined completely to those clearly circumscribed areas delineated on maps and documents supplied with the application
- Trailer suction dredging be used as the dredging mechanism, to provide maximum curtailment of elevated SS levels to the water column
- Suction dredging – boat loading to be done in a manner that allowed slurred sediment to settle out in the hull so that water overflow consisted of liquid with a low suspended solids level. The practise of constantly filling the hull and allowing overspill of heavily SS-laden waters should not be permitted
- Plough dredging should not be permitted in the period March – June inclusive due to the potential for dispersal of SS plumes and problems of controlling this process
- A monitoring programme on SS levels at various tidal and port-activity conditions, including during dredging operations, should be compiled and presented to EPA and DECLG for an interim review, after Year 3 of the proposed 8-year licencing period. This monitoring programme should broadly follow the format of that supplied with the current application. Relevant stakeholders e.g. NPWS, IFI, commercial fishermen to be involved in the planning of this programme
- PoW to engage with IFI in regard to protection and monitoring of relevant fish species.

James J. King (IFI R&D) and Frank O'Donoghue (IFI Clonmel)

Inland Fisheries Ireland

22.1.2014