ONeill, Pat

From: OBrien, Danny

Sent: 20 October 2009 08:23

To: ONeill, Pat

Subject: FW: MLVC Bioatlantis - proposed seaweed harvesting in Bantry Bay

Danny O'Brien Foreshore Unit C.Z.M.D. 053/9163400 Ext 3349

----Original Message----

From: Jimmy King [mailto:jimmy.king@cfb.ie]

Sent: 19 October 2009 16:20

To: OBrien, Danny

Cc: terry.mcmahon@marine.ie; mcpartland@swrfb.ie; francis.obeirn@marine.ie **Subject:** MLVC Bioatlantis - proposed seaweed harvesting in Bantry Bay

Danny,

Comment on above as requested

Jimmy King

Dr. James J. King, Fisheries Biologist,

Central Fisheries Board, Swords Business Campus, Balheary Road, Swords, Co. Dublin, Republic of Ireland.

T: 353018842618 F: 353018360060 E:jimmy.king@cfb.ie www.cfb.ie

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MARINE LICENCE VETTING COMMITTEE:

Re: DAFF file ref MS 51/8/1363 foreshore application for the proposed harvest of specific seaweed at Bantry Bay, Co. Cork.

Request for observations from Mr. Danny O' Brien (DAFF) 26.7.2009

In broad terms, this can be seen as a very positive proposal in regard to controlled use and harvesting of a natural resource. However, to ensure success for all parties it is imperative that the project be demonstrated to be self-sustaining – that the harvesting process be capable of managing a renewable resource

I agree with broad parameter outlines of Dr. O' Beirne re monitoring programme – requirement to monitor pre- and post-harvest impact on both the kelp beds themselves and on the biological elements associated with them. In particular, I would be anxious that the fish linkage be fully investigated via field investigations prior to any harvesting. CFB is currently involved in monitoring fish communities in estuarine waters under Water Framework Directive and some of the suite of sampling methods used – fyke netting and use of light trawling gear – have potential to be very effective in sampling kelp beds. In recent spring sampling in one west coast estuary, CFB's fyke netting effort within a small kelp bed generated a substantially higher biomass and diversity of fish species compared to open-bed habitats.

I note that BioAtlantis is committed to complete a baseline study as a condition of the licence. I share the view of the Southwestern Regional Fisheries Board re requirement for a fish baseline survey. The overall baseline must be able to address concerns of relevant biodiversity stakeholders and, from a fisheries perspective, should include fish surveys that provide comparative data on fish composition and abundance in (a) open/uncolonised areas of seabed V kelp beds and (b) seasonal variation in relation to (a) above – this might take the form of spring (April – May) V autumn (Sep – Oct) surveys. I would be happy to contribute to further discussion in development of agreed fish baselines.

The kelp forests are likely to provide a substantial 3-dimensional network for fish to use. The NPWS document "The role of kelp in the marine environment" provides an important background for discussion in the fish issue here and makes a series of recommendations (p. 83) in regard to survey requirements, including need for fundamental baselines on fish species associated with Irish kelp forests. It also provides an extensive listing of fish species directly associated with kelp in Irish and European waters – indicating a clear biodiversity role for kelp forests. The forests provide sites for reproduction and nursery functions for fish. Some fish species may create nests in the forest of stalks while others have sticky eggs that can adhere to the surface of holdfasts or fronds. The dense matrix may provide cover for young fish and a feeding or grazing area for immature and adult fish. As such, the forests may serve to focus certain fish species and thus provide good quality angling for the charter-boat fishing market for wrasse species, among others.

Additional items:

First mention of *Ascophyllum* at Item 6. of application. Is this seaweed to be targeted as well?

No statistical basis given to data on kelp production/density/standing crop. More information should be supplied in regard to the extent of the sampling programme for kelp, from which the data of 2 – 5 kg/m2 derives – how many sampling locations; how many replicates per site; what is range or standard deviation of the mean value provided etc.

One of the conditions of licencing should be the requirement for an agreed baseline sampling programme (to be agreed with relevant environmental stakeholders, and with MLVC) to be developed and submitted to MLVC prior to commencement of any harvesting. This baseline must include a suite of pre-harvesting data sets and agreement on subsequent monitoring over the 5-year recovery phase of selected beds of kelp.

James J. King Central Fisheries Board 19.10.2009

CC Terry Mc Mahon MLVC; Michael Mc Partland SWRFB