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kiwis against seabed mining

Maui Dolphin Update

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“IN SHORT, THERE ARE ONLY 111 MAUI’S DOLPHINS LEFT. THIS POPULATION HAS BEEN SERIOUSLY DEPLETED BY ENTANGLEMENTS IN FISHING GEAR. GILLNETS IN PARTICULAR, USED BY BOTH COMMERCIAL AND AMATEUR FISHERS”.

After several years of debate and negotiation, the area from Maunganui Bluff to Pariokariwa Point was closed to gillnetting (see maps). Ongoing concerns are that Maui’s dolphins are found south of the protected area, and that the harbours are not included. Recent research has shown that Maui’s dolphins do enter the harbours, and hopefully the protected area will be extended into the harbours and further south. Another concern is the protected area does not regulate trawling, which is a lower risk than gillnetting but also does catch dolphins.

As you can see, there is an urgent need to improve protection for Maui’s dolphin. They are listed as Critically Endangered by the IUCN (iucnredlist.org). The next most endangered category is “Extinct”.

The last thing Maui’s dolphin needs is an additional human activity in their habitat that threatens them directly and/or threatens the ecology of the area.

On that topic, these are the notes I made at the meeting (Raglan Town Hall, 26.05.05 – ed.) from Shaw Mead’s outline of the main environmental effects of sand mining:

Impacts of sand mining:

- Removal of organisms
- Physical disruption
- Alteration of activities (e.g. spawning)
- Removal of epifauna can change infauna
- Changes in species composition
- Crushing of benthic organisms can cause increase in predators and scavengers

Some of these effects are evident outside the area of physical disruption, particularly in the plume of turbidity stirred up by sand mining

Effects depend on:

- Spatial extent of dredging
- Intensity of dredging
- Sediment type
- Exposure to natural disturbance
- Uniqueness of biological community in dredged area
- Temporal stability of the local ecology

General trends:

- In more complex habitats, impacts are greater
- The finer the sediments, the greater the impact
- Communities subject to greater natural disturbance tend to be more robust

Until we know more about what sort of activity is planned (depths, volume of sand to be removed, where will the left-over sand be deposited, etc.) it will be difficult to be more specific about the likely biological effects for this particular stretch of coast.

Even once more detailed information on the planned mining activity becomes available, the consensus seems to be that so little is known about the physical processes and ecology of the area that it will be difficult to predict the effects. Dr Mike Hilton's has made this point. For example, he says that the environmental impact assessments for Pakiri "do not establish the sustainability of the sand mining operations" and "Specifically they do not define the dimensions of the active sediment system, quantify the volume of the related resource, or state the period within which sustainability is achievable. Further, the AEE do not consider the cumulative effects of the extractions, either in terms of the total volume of sand mined or the cumulative effects of different anthropogenic activities."

When he talks about "sustainability" above he means that the amount of sand removed does not exceed the amount of sand coming into the system (through transport up the coast, etc.). Mike Hilton (Geography Department, Otago University) urges that we need much more rigorous AEEs to ensure that enough data is provided on physical and ecological processes to determine whether a particular sand mining operation will be sustainable in physical terms (e.g. will not cause coastal erosion) and in biological terms (e.g. will not affect food availability for species like Maui's dolphin).

For example, he says that: "The test of sustainability demands a quality of information and understanding of coastal systems that is well beyond that obtained in the past or accepted at present. There is a clear need for New Zealand's resource management legislation to be supplemented by technical guidelines that help ensure the test of sustainability is rigorously applied."

The applications for sand mining on the North Island west coast will certainly be a test case for that. Mark Brocklebie from Environment Waikato mentioned the need for an adequate AEE and for independent technical review. We'll need to keep a very close eye on the situation to make sure that happens."

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