

**WELLINGTON RECREATIONAL MARINE FISHERS ASSOCIATION
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9 August 2005

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Mr Richard Little
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With reference to Resource consent application by Meridian Energy Ltd

Wellington City Council reference No SR 131428
Greater Wellington Regional Council reference No WGN 060001

In particular

WGN 0600001 Ohau Bay

Coastal Permit 24576, 24577, 24578, 24579, 24580, 24581, 24582, 24583

In particular

WGN 060001 Oteranga Bay

Coastal Permit 24569, 24570, 24571, 24572, 24573

Dear Sir/Madam

Re: Objection to the following proposals

WGN 0600001 Ohau Bay

1 TOTALLY OPPOSED TO ANY CONSTRUCTION WITHIN THE WATERS OF OHAU BAY.

Reason

- The marine assessment reports commissioned by Meridian are inadequate and wrongly describe this bay's ecosystem as having no value.
- Information presented has wrongly described the currents, marine life and inter tidal zone of Ohau Bay. This misinformation has then been loaded onto a computer simulation programme, which has then been presented to mislead those who would have no knowledge of this bay's importance.
- Any construction in this bay will have a massive detrimental impact on commercial and recreational marine specie. Ohau Bay has been a traditional feeding area for orcas. Any construction in this bay would deny these mammals a food source.
- The errors and misinformation contained within the reports are identified in detail below.

Ohau Bay Coastal Permit 24576, 24577, 24578, 24579, 24580, 24581, 24582, 24583

There MUST NOT be any permit granted for any construction within the waters of Ohau Bay.
The errors and misinformation contained within the reports are identified in detail below.

WGN 0600001 Oteranga Bay

2 TO: OPPOSE THE CONSTRUCTION, BY SHEET PILING, OF A CAUSEWAY INTO OTERANGA BAY.

Reason

- The marine assessment reports commissioned by Meridian are inadequate and wrongly describe this bay as having no value.
- Information presented has wrongly described the currents, marine life and inter tidal zone of Oteranga Bay. This misinformation has then been loaded onto a computer simulation programme, which has then been presented to mislead those who would have no knowledge of this bays importance
- Using the beach as backfill behind a sheet-piling causeway is unacceptable.
- Extracting still more of the beach, as backfill when the shingle and sand is washed out is unacceptable.

Oteranga Bay Coastal Permit 24569, 24570, 24571, 24572, 24573

The marine report for this beach has been compiled to support the wind farm at the detriment of this beach's marine and inter tidal ecosystems.

This beach provides a major food source for the region's number one recreational fish, moki, which is also targeted by commercial fishers. We object to Coastal Permit No. 24571, 24572.

The reports failed to mention the importance of this beach's ecosystem that provides a food source for moki. The reports do not mention one adverse effect.

The reports fail to describe the impact from digging up this beach. Coastal Permit No. 24571 would destroy the moki food source.

This beach, for nearly fifty years, has been the traditional fishing water for moki by the members of the Wellington Surfcasting and Angling Club. We most strongly object to Coastal Permit No. 24569, 24570, which would deny us access. We would welcome managed access for our club members or other organised fishing clubs as the Hutt City Council administer for Pencarrow Beach.

WGN 060001

Roading and earthworks

We question whether Coastal Permit No. 24566 has an adequate Risk Management Plan. The reports describe both Ohau and Oteranga Bay as having “low biodiversity /ecological value and the exposed nature of the site means that the ecological effects of constructing the berthing structure will be localized and are considered insignificant.”

In view of this obvious misinformation, and the other errors presented in the marine assessment reports, it also follows the Risk Management Plan would have been compiled to disregard the importance of clean sand and water to the marine environment. The Risk Management Plan must be reviewed and include a description that recognises the importance of the inter tidal zone, as four reports have described ways to destroy it.

WGN 060001 Oteranga Bay

3 SUPPORT THE FOLLOWING PROPOSAL

The construction of a purpose built pile-supported causeway that extends over the existing beach that is capable of lasting the duration of the expected life of the wind farm (applicant suggests twenty-five years) with a minimum of maintenance. Access for new parts through the lifetime of the wind farm is a stated requirement for a causeway.

Reason

Private industry is required to do this so it is illogical and unacceptable to find a state owned enterprise even suggesting the beach could be destroyed to suit themselves. There will be enough damage to marine ecosystems caused by mud run off and dust storms without intentionally destroying the marine life that settles on this beach. With a projected one point seven million cubic meters of dirt being shifted and roads cut along ridge lines for the 400 tonne, five meter wide special construction crane, there will be massive run off into the sea. This country is totally different to the Te Apiti wind turbine site as strong southerlies regularly burn off new growth around this coast and it will take many years for this country to recover.

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On behalf of the Committee of the Wellington Recreational Marine Fishers Association I would like to comment in detail on the unnecessary impact on marine ecosystems presented in the proposed plan.

Meridian Energy Ltd has applied for resource consent to erect seventy wind turbines on the south west coast. They have also applied for resource consent to have an option to build a causeway and two breakwalls in Ohau Bay or a causeway in Oteranga Bay. This is based on information contained within four reports describing the marine ecosystem in those two bays.

The reports produced for Meridian Energy Ltd by ASR Ltd are

- Assessment of Physical Effects of the Construction of Access and Protection Structures at Ohau Bay, Wellington.

- Assessment of Marine Ecological Effects of the Construction of an Access Berthing Structure at Ohau Bay, Wellington
- Assessment of Physical Effects of the Construction of Access and Protection Structures at Oteranga Bay, Wellington.
- Assessment of Marine Ecological Effects of the Construction of an Access Berthing Structure at Oteranga Bay, Wellington

These reports contain some seriously misleading information and recommendations. The recommended design of the berthing structures would have an unnecessary impact on marine ecosystems.

One of the reports advises that the berthing structure will be in place “during the operation of the wind farm, and the berthing structure will be used intermittently to bring in new parts as necessary”.

In reality the structure will be used by other wind farm projects that have already been identified, sixty in Long Gully, and an undisclosed number on Wrights Hill, Ohariu Valley towards Titahi Bay. The reports have recommended using the beach as backfill and if damaged by waves, reusing the beach as backfill.

This is totally unacceptable and a reflection on the poor advice offered to Meridian in describing the marine environment.

Private industry would not be allowed to do that and if it is going to be required, for in excess of twenty-five years, then it should be a maintenance free, solid construction. I had a major part in selecting the site and design of the Owhiro Bay boat ramp and it has already stood up to five storms producing sixteen metre waves in the Cook Strait, without any repairs.

The reports describing Ohau Bay include misleading statements such as

“Low biodiversity /ecological value and the exposed nature of the site means that the ecological effects of constructing the berthing structure will be localized and are considered insignificant.”

Nothing could be further from the truth and a berthing structure and two breakwalls 120 and 60 meters long within this bay which is only two hundred and fifty meters wide will have an immeasurable impact on a marine ecosystem not identified or described in the reports compiled by ASR.

“Ecological effects to the area between the access road and the berthing structure (the back beach), which will be regraded and provide source of fill for the sheet pile berthing structure, are considered insignificant.” The reason to declare the beach ecosystem as insignificant is now clear, as the consultants have recommended using the beach as backfill.

However the report states, “With respect to sediment in Ohau Bay, this pocket beach is essentially a closed system.” To then recommend using the beach as fill can only be described as environmental vandalism.

The reports propose that if they take up the option of building breakwalls in Ohau Bay. “the immediate colonisation of the Akmon structures could be viewed to partially off set this temporary loss of reef habitat. Indeed, if the structures were to be left permanently in the bay, it could be argued that relatively greater stable habitat has been created (albeit artificial) and the breakwall was enhancing the total biodiversity”. This is an unbelievable statement and it is proof that the marine life within this bay has not been identified or understood by these consultants.

The consultants then go on to make a further unbelievable statement “the proposed structure in Ohau Bay is likely to have an insignificant impact on the overall physical processes within the Bay.”

Any breakwall or construction in Ohau Bay would only be the beginning of a decline in the fish biomass, as not only would the “large range of larval forms are present in the water column throughout the year” be subjected to the estimated three hundred barge trips a year but as the current circuits the bay they would eventually all be smashed to death on the breakwall or by the ship’s props. The consultants, however, observed “the vast quantities of drift-algae that are washed into the bay, which are then covered by the very mobile beach sediments, where they decompose in low oxygen conditions”. In making this statement they have confirmed their failure understand the value of the beach to the region’s marine life.

In a blatant attempt to mislead all involved as to the importance of Ohau Bay, the marine consultant expressed the view “that relatively greater stable habitat has been created (albeit artificial) and the breakwall was enhancing the total biodiversity”. This is crazy advice. You only have to take a trip around our coast at night to see what happens when the wind blows onshore in the summer. All around our harbours, councils smother the important sandy beaches with reclamations and then protect them with rocks and concrete from demolition sites. Harbours are major spawning grounds but without sandy beaches the fish eggs drift onto the rocks and are smashed to death. This dead ecosystem then becomes the food source for a rat population that continues to grow in spite of poison and our fish biomass declines. Everything is connected and if a state owned enterprise still wants to intentionally destroy known fish spawning areas it will ensure the forty specie already identified by Statistics NZ, as being below sustainable levels, will never recover. (Monitoring Progress Towards a Sustainable New Zealand 2002, Statistics New Zealand) The planned increase in marine reserves will cause further stress, as they are not the tools to increase fish stocks.

The report says of the beach that “sub tidally, the soft sediments are comprised of fine sands that become overlaid with fine silt further off shore”. I find it hard to believe that they found little life on this beach of sand. Sand supports life and when the sand is extracted as it has been from the Orongorongo River to Pencarrow not only does it kill a beach but the ecosystem of the lakes, Fitzroy and Pencarrow, have collapsed. This destruction I described in a story in the NZ Fishing Coast to Coast magazine called “They are Killing our Beaches... Everything is Connected.” Then as if to justify it was acceptable to destroy this beach in another report they “find the inter tidal zone is a mix of shingle and sand with huge piles of driftwood topping the steeply sloping beach”. The photos I have include, some taken thirty-five years ago and this year, support the observation of those who fish Ohau Bay, as they see a beach of sand at low tide. Driftwood on the west coast beaches perform a function when they arrive after floods and after drying out are taken back out to sea on the next spring tide storm where another ecosystem can begin life until they arrive on another beach or sink to the bottom. This beach has at times huge stacks of wood or seaweed on it, which provides life for the beaches ecosystem. It is not something to condemn as having no value, as it comes and goes without man’s intervention.

In the “summary” the description of Ohau Bay is designed to fool those who have no understanding of beach ecosystems within the Wellington region and especially of this bay. Meridian state “The shallow subtidal, inter tidal and back beach zones in the area of the proposed berthing structure and through to the access road, have low biodiversity and are occupied by only a few hardy species capable of existing in the physically harsh mobile sand and sand/shingle substrates” at Ohau Bay. They missed it. This beach is far more important than that.

Then in the next section where the berthing structure is proposed, a picture of devastation is again described as they continue to devalue the importance of the inter tidal marine ecosystem of Ohau Bay. “The mobile abrasive sand/shingle (inter tidal) and sand (Subtidal) habitat make the area of the bay where the berthing structure is proposed a very difficult place for marine (and terrestrial) organisms to exist”. They missed a world they obviously have no knowledge of, and yet in the summary Meridian think they have a “good

understanding of the existing physical processes within Ohau Bay”. Nothing could be further from the truth. They looked but they did not see.

It is a major concern that we see yet another marine consultant has placed no value on a beach of sand. This report clearly demonstrates what happens when the inter tidal zone and the importance of sand has been missed out of the New Zealand Coastal Policy Statement (NZCPS), even though it was reviewed in its formation by over sixty scientists and advisors at the time. Marine consultants in New Zealand continue to describe the inter tidal marine environment as having no value, yet we know it is twenty percent more productive than the open sea and four percent better than land. This misreporting of the marine environment through the resource consent process is too common, as they have been contracted to support the project and not knock it. The marine consultants contracted by Meridian Energy Ltd have not been able to identify one adverse effect; therefore it now falls to the public and Government bodies such as the Department of Conservation, Ministry of Fisheries and Ministry for the Environment to identify the adverse effects. The impact of building in Ohau Bay will be an environmental disaster as the impact will not just be on the ecosystem of the streams, but on the whole food chain including shellfish, crayfish, fish eggs, yellow eyed mullet, kahawai and onto dolphins and orcas.

When I was recently invited to review the New Zealand Coastal Policy Statement I identified that there were thirty-five areas where we were legally destroying the marine environment. They included the inter tidal zone, the importance of sand, and that we do not recognise the importance of fish spawning areas. The reports confirms that the waters of Ohau Bay collect the drifting surface currents which would have been warmed by the sun on the outgoing current from the north. This current from the north carries with it the fish eggs from those specie that have spawned in the warmer waters and, once in Ohau Bay depending on the current, stay there for a while.

We have arrived at very interesting point in time as I have been involved in a research programme by the Foundation for Research Science and Technology designing science programmes to discover New Zealand’s “Natural Ecosystems”. One of the Strategic Portfolio Outlines is called the Protection and Restoration of Marine Ecosystems and Environments. This programme has a Target Outcome, which states, “To sustain, enhance and restore marine biodiversity and natural ecosystems and their life supporting capacity for the benefit of New Zealand’s people, environment and economy.” The marine life of Ohau Bay deserves to be left alone and not destroyed by this generation.

The reports state that the “currents within the Bay are primary wave driven and are directed into the bay down both sides and then off shore through the eastern mid bay area”. No one who has visited Ohau Point can believe that this is included in a marine report describing our coast. For anyone to describe Ohau Bay as only having mainly wind driven waves is unbelievable, as often the current within this bay can be clearly seen from the overlooking hills. While there can be a slowly turning surface current in times of stable weather patterns there is often quite a strong current raging three hundred meters away. At Ohau Point the current can be so strong that it generates three metre pressure waves producing little whirlpools into the Bay.

These warmer waters are essential for eggs to mature as Ohau Bay has a fine clean sand identical to adjacent Te Ikaamru Bay, however, the sand’s importance is not described in the report or in the NZCPS. The mud that will run off from the construction into the sand will kill the shore shellfish beds, as NIWA have already proved that it will. What has not been described by science is that the fish eggs also arrive onto the beaches inter tidal zone and they will be rolled in the mud, smothered and destroyed.

We are advised that the marine reports were compiled from a visit in April and then loaded into a simulation computer programme. Selecting this time of the year has been a deliberate attempt to misinform, as the Cook Strait currents are generally quite slow at this time of year due to stable weather patterns. It is at this time of year the Cook Strait power cables are re-laid or repaired. The report states that “Cook Strait

experiences power full tidal induced currents caused by the lunar semidiurnal tide component.” The description of what causes the fast currents in the Cook Strait is not true and has been distorted from science reports designed to support other projects. Lunar patterns are only one component and this theory can be easily disproved.

When I published a study of what causes the Makara eddy in the NZ Seafood magazine in 1997, and a description of what causes the fast currents in the Cook Strait in the NZ Fishing Coast to Coast magazine in 2003 (Look out Rocks), it was based on thirty five years of fishing at anchor around the Wellington coasts and noting and comparing what others were experiencing around the region on the same day. It can now be easily proved that the moon has little to do with causing the fast currents in the Cook Strait. Only describing that the currents are caused by moon phases fails to explain why the current can be seen travelling in the same direction for 12 to 16 hours at a time or why there can be no current all day on spring tides and fast currents on quarter moon phases. However, once all the factors are taken into account fairly accurate predictions can be made of the Cook Strait currents, something the reports fail to explain.

Scientific studies of the Cook Strait have concluded “it is not possible to make simple statements about the current regime of Cook Strait. (T.E.W. Harris, Greater Cook Strait). The information derived from the simulation of the computer programme as to where and how sand travels within these bays is taking only one dimension into account and explains the odd reasoning behind the theory of how the sand arrives. While considerable time and effort has gone into explaining the movement of sand around this coast, it will not be true, and should be dismissed, as all the factors were not taken into account.

Description of the marine life within Ohau Bay that was not observed by the consultant

As described in the report, Ohau Bay can at times receive a large amount of driftwood after the major rivers around Wanganui have been in flood. “A range of human derived litter (plastic, ropes, cans etc.) can be found on the beach, most washed into this natural trap for anything floating along the south – west coast.” What the report has omitted to say is that during the prevailing northwesterly winds from October to January a huge pile of seaweed arrives on this beach just as it does on the Makara Beach. Photos taken of Ohau Beach and Makara Beach show similar seaweed build up.

It is then that the inter tidal life of sand hoppers and kelp flies play their part in providing a food source for the yellow eyed mullet, piper, horse mackerel and warehou that can be found in this bay. The massive schools then in turn attract eaglerays, kahawai, kingfish, snapper and trevally. Sightings have been made of a number of eaglerays driving the baitfish onto the beach in a mass of foam. However the breakwalls planned for Ohau Bay would prevent the seaweed from reaching the beach and so a whole food chain would be lost. I cannot believe the study only found three species of sand hopper on Ohau Beach as in my yellow eyed mullet research we collected at least thirty different species off Makara Beach. These are held at Te Papa awaiting description as the method I used to collect them had not been used before and it is expected science will discover new species to add to the already identified one hundred and fifty different species. Finding only three species suggests the research was designed to devalue the Ohau and Oteranga beaches.

Through the early summer months large schools of warehou followed by orcas visit Ohau Bay. Commercial fishers report that they see orcas feeding on the warehou as they travel around the coast to spawn in Ohau Bay. Many have witnessed the adult orcas eating the eaglerays in Te Ikaamru and Ohau Bay and a few have seen the baby orcas chasing the baitfish into the shallows of Ohau Bay. Commercial fishers target the warehou spawning in Ohau Bay and I have been informed that one boat alone would catch thirty tonne a year in this bay. On the point between Ohau and Te Ikaamru Bays is the seaweed that butterfish eat and they, along with warehou are commercial species, as recreational fishers take few.

Commercial fishers of the region are most concerned about the impact that a berthing structure, coupled with a breakwall, would have on their livelihood as they take twenty five bins of butterfish a time, when they are

spawning, off the northern point. The very experienced commercial fisher I know is also concerned that if the waters were to be slowed down another seaweed would take over and smother the seaweed butterfish eat. It is obvious any structure in Ohau Bay combined with the projected three hundred barge trips and propeller wash will have a serious impact on the biomass of a number fish species observed in the water column throughout the year.

The reports describe Oteranga Bay as having

“exposure to wind and wave action from the south, and the mobile abrasive sand/shingle habitat and the anoxic conditions at very shallow depths in the sediment, make this area of the bay a very difficult place for marine (and terrestrial) organisms to exist.” They missed it. While the consultant was observing that there was no marine life in this bay within days four anglers fishing between 9am and 12pm, caught forty moki casting out three metres on the same day. One angler alone has caught ninety-seven moki off this beach in eight WSAC fishing competition days. Oteranga Bay and its ecosystem can hardly be described as insignificant. Oteranga Bay is the region’s number one moki fishing beach. Moki is Wellington’s equivalent to the north’s snapper and a person who had no knowledge of the region’s marine environment could easily be fooled that there was no life on the beach, if they did not know what they were looking at.

In summer after the seaweed has been on the beach for a while the sand hoppers increase rapidly in numbers and at times they can be ankle deep in this bay. The sand hoppers then provide a food source for the nocturnal life as we see geckos and hedgehogs eating them at night and sea birds in the morning.

From these descriptions the report then goes on to recommend, “the berthing structure would likely be constructed from sheet piles and filled with local material (i.e. beach gravels).” That is totally unacceptable, given we know the value of a beach with sand today.

However in their description of the sand they have made it obvious why the beach should not be used as backfill for a sheet pile berthing structure when they observed there “is little “new” sediment moving into the shallow bays” and “thus, with respect to sediment in Oteranga Bay, this pocket beach is essentially a closed system.”

Summary

Both Oteranga and Ohau Bay are important for different reasons and as the berthing facility has an unlimited life span, as “during the operation of the wind farm, the berthing structure will be used intermittently to bring in new parts as necessary”. I believe that the causeway must be a permanent low maintenance wharf constructed in Oteranga Bay. It must also be made accessible for the other wind farms planned for the immediate area.

While it is in New Zealand’s best interest to harness renewable and easily accessible energy such as wind passing through the hills of Cook Strait, I believe every effort should be made to minimise the impact on the Cook Strait marine ecosystems.

The project called West Wind, as proposed by Meridian, looks like it will be making an attempt to minimise the impact on shellfish and the fish eggs from the fish spawning in Te Ikaamru, Opau, Oteranga and Ohau Bays from the mud and dust storms that are unavoidable in such major construction projects. I doubt that this can be managed as Meridian describe, as they have not been provided with any information that describes the importance of clean beach sand. In fact throughout the reports they describe the beach as having “low biodiversity /ecological value”.

When this type of misinformation is introduced into a computer programme to simulate marine conditions it directly lead’s to a report that totally misses the importance of Ohau Bay. Using computers to describe

marine conditions will only be as good as the input and a bit like playing fishing games on computers, you learnt nothing about the real world.

The errors have been reproduced in the Meridian document “Construction Effects and Management Report” which is cause for concern as the impact on this environment from cutting tracks and filling in gullies will create mud and dust storms for years. I have been involved in the Stage Two Oceans Policy working group for some years and we should all be working towards a managed marine environment. I find it most disturbing for a state owned enterprise such as Meridian to have recommended the cheap option of bringing the wind turbine parts ashore at the expense of the marine environment, and to have commissioned reports that devalue two very important beaches to achieve their plans.

This disregard for the marine environment also raises other points. What else has been fudged over to achieve the aims of this project?

Concerns in brief

The marine ecosystem in Ohau Bay is too important to be destroyed.

A permanent maintenance free facility construction in Oteranga Bay is the only option for offloading the turbines and associated equipment to build wind turbines.

In view of the fact that the facility is expected to last the duration of the life of the wind turbines, and other projects are planned in the immediate area, should we not be building a permanent facility in Oteranga Bay?

This would it be a far better option than a sheet piling type facility that has to be repaired by digging up the beach and an ecosystem after every big sea. An ecosystem that the reports fail to describe.

We reserve the right to be heard

Yours sincerely

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