



Part of Genesis Energy's wind farm near Martinborough

Harnessing Wellington's wind energy

Greater Wellington begins a community consultation process this month on a possible wind farm development at Puketiro, an area to the east of Battle Hill Farm Forest Park. The consultation follows completion of two feasibility studies of wind energy generation developments on land owned or managed by Greater Wellington. Cr Chris Laidlaw, Chair of Greater Wellington's Landcare Committee welcomes the community consultation...

At Greater Wellington, we're committed to raising the energy self-sufficiency of this region. A lot of the energy we currently use is derived from non-renewable sources and we simply cannot afford the luxury of that. We have extensive park and forest lands that can deliver a double benefit because wind energy generation can be achieved in harmony with the other environmental objectives in such areas at a distance from urban areas. The advantage of wind energy is that it imposes a minimum footprint on the land.

Over the past two years Greater Wellington has carried out feasibility studies of wind generation developments on three sites owned or managed by Greater Wellington – Puketiro, Mt Climie and Belmont Regional Park. The first two studies have been completed and analysis of the larger Belmont site is still underway. The impact of building a wind farm at Puketiro is relatively low. The nearest urban area is Whitby in Porirua City, six kilometres from the proposed site.

Undoubtedly, wind energy developments on Greater Wellington land can make a very useful difference for the region and we now want to hear what the community thinks.

Greater Wellington invites you to have your say.

Cr Chris Laidlaw Chair, Landcare Committee Greater Wellington

Although the Mt Climie ridge has outstanding wind energy potential, there are evident risks to parts of the local ecology and for that reason, we are erring on the side of caution and will be not be proceeding further with this site at this stage. Instead, we have identified Puketiro as the ideal place to start. A wind farm development at Puketiro could provide the region with at least 26MW of energy, enough to power about 13,000 homes.

Have your say – Puketiro wind farm consultation inside

Quality for Life



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Greater Wellington news





The Sink F69 Charitable Trust was formed solely for the acquisition of the retired *HMNZS Wellington,* a Leander class frigate. The vessel will be sunk to create an artificial marine reef and recreational diver attraction off Wellington's south coast. In preparation for life under the sea, the former *HMNZS Wellington* is now moored in front of the Museum of New Zealand Te Papa Tongarewa at Taranaki Wharf and is open to the public Friday nights and weekends. Sink date is 12 November 2005, or the next calm weather day.

Further information is online at www.diverwreck.co.nz/f69

Trees for sale

The Akura Conservation Centre in Masterton has reopened again to the public.

Greater Wellington's Akura Conservation Centre stocks a wide range of native and exotic trees, all of which are selected for their suitability

to the region. The centre provides the trees for Greater Wellington's erosion control and shelter schemes.

The trees are suitable for shelter, shade, beautification, timber, erosion control or restoring native tree and wetland habitat. Expert staff can provide advice on tree selection and planting and can arrange for purchased trees to be planted.





Peter Cameron, Akura Conservation Centre nursery manager

Akura Conservation Centre, Akura Road, Masterton.
Open: 1 June to 30 September
Hours: Monday to Friday 8.00am till 4.30pm Saturday 9.00am till 11.00am
Phone: 06 370 5614
Email: akura@gw.govt.nz
www.gw.govt.nz

Txt 2 u

Sending a text message to find out when the next bus is due, is about to become reality for some Hutt Valley bus users.

On Friday 8 July, Greater Wellington will launch a pilot service in the Hutt Valley to assess how popular the text service will be. The launch of the pilot coincides with the school holidays so students can become familiar with the service and have greater flexibility in their travel plans. The trial excludes Eastbourne and Wainuiomata bus stops.



If there is a positive public response to the Hutt Valley trial, there are plans to extend the text service capability to bus and train services across the region.

For further information contact the Ridewell Service Centre on 0800 801 700 or visit **http://busandtrainnetwork.gw.govt.nz/**

The former HMNZS Wellington moored in front of Te Papa

Greater Wellington promotes **Quality for Life** by ensuring our environment is protected while meeting the economic, cultural and social needs of the community.

Puketiro wind farm consultation



Proposed site

The photo was taken in Seaview Road, Paremata. It is approximately 7km from this point to the nearest wind turbine.

Wind turbines of 1750kW capacity were placed on the photograph using computer software to give the correct scale. Each turbine tower is 66m high and the blades are 33m long.

The simulation is based on 22 wind turbines. However, only 15 of these can be positioned on Greater Wellington land. The remaining seven are on the property boundary. We have not yet reached agreement with the landowner.

Fifteen turbines of 1750kW maximum output give a total of 26.25MW or 22 turbines gives 38.5 MW. More turbines could be placed on adjacent properties but this would require agreement between a developer, the landowners and Greater Wellington. Up to 13 additional turbines could be placed on Greater Wellington land to the north of those in the photo but this requires access through private property, which has not been obtained.



If all Greater Wellington and adjacent private land was developed, then the total wind farm could be approximately 90MW. Such an agreement may or may not eventuate. If it does, then the full extent of an enhanced wind farm development would be made public as part of the resource consent process.

Proposed wind farm site from Seaview Road, Paremata. Camera focal length 50mm. Wind turbines positioned by Garrad Hassan international wind energy consultants using Windfarmer computer software.







1. Why is Greater Wellington considering making the Puketiro site available?

One of the key elements of Greater Wellington's (GW's) *Towards a sustainable region* is sustainable energy – particularly wind energy. Two years ago Greater Wellington decided to investigate energy potential on selected parts of land we own or manage (around 50,000 hectares).

2. What are the benefits for the community?

The annual energy output from a wind farm at Puketiro would be equivalent to that used in around 13,000 homes. As power to the region travels a distance, some energy is lost in transit. Generating power locally minimises this loss and slightly reduces the cost of wholesale power. There would also be an increase in the security of supply.

3. What are the benefits for Greater Wellington?

The development promotes Greater Wellington's objectives of a more sustainable region.

4. How much will it cost?

It will cost around \$50 million for a 26MW (megawatt) wind farm.

5. Who will pay for it?

All development costs will be paid by the wind energy development company selected by Greater Wellington. Greater Wellington will collect site rent from the developer and this would be used to help fund other expenditure in the region.

6. Will my rates increase?

No, there will be no rates increase. Greater Wellington is not investing any money in the project.

7. Am I likely to see the turbines from where I live?

The draft map opposite shows the number of turbines that can be seen from various areas.

8. Will there be any noise from the turbines?

The turbines will be located a kilometre or more from the nearest houses so the noise, if any, will be minimal. Wind turbines do not normally operate below wind speeds of about 15 km/h so on still nights when distant sounds can sometimes be heard, the turbines will not be operating. A developer would have to comply with New Zealand Standards for wind turbine noise levels and local authority maximum noise limits.

9. Will access to Puketiro be affected?

There is an extensive forestry roading network on the Puketiro site, primarily constructed for logging pine trees. Only minor work would be needed to make the roads suitable for transporting wind farm equipment. Wind turbines would be kept clear of these roads and short tracks would be built to the platforms where the wind turbines are placed. For safety reasons, access to the site would be restricted during the construction phase of about 12 months. Once a wind farm is operating, access to the site would be no different than it is at present.

12. What happens to water supply?

Recent legislation allows wind turbines to be placed on GW land but Greater Wellington has to be satisfied that a development will not impact on water collection. The site is not part of an active water collection area.

13. What happens to forestry?

There are no pine trees planted on some of the ridges because there is too much wind. In other parts, pines will have to be removed to allow the turbines to fully capture the wind. There are few native trees on the site, mainly in the lower gullies. A wind energy development on the ridges will not interfere with native trees and our current plantation forestry activities would be able to co-exist.

14. Where will the generated power go?

There are a number of ways the power could leave the site. This depends on the developer, the local network company (United Networks) and Transpower. It could either be connected to one of Transpower's lines that cross or is adjacent to the site or taken to Transpower's substation at Pauatahanui. Power lines from the site are likely to be overhead and subject to further consultation. Power lines between turbines would be underground.

15. Are there any risks to Greater Wellington?

The risks are relatively low as GW is not investing any money in the project. We would protect against any costs we might incur by requiring a bond, in case a developer starts the project then abandons it. The developer's activities on-site would be covered through a contract with GW and resource consent conditions.

16. Is Greater Wellington looking at other sites?

GW has investigated two other possible sites. Mt Climie ridge, to the east of Upper Hutt, showed very good wind speed but there were other issues of concern. GW has decided not to proceed further with this site.

We expect to finish investigations at the Belmont Regional Park site in about six months. If a favourable site is found, then GW is committed to public consultation after the initial studies are completed.

17. Is this the only public consultation?

At this stage, Greater Wellington is only asking whether or not we should make the land available for development. If we decide to proceed, then the energy developer will need to apply for a number of resource consents that will require public notification. There will be a further opportunity for public input.

18. How can I have my say?

Complete the submission form opposite. It's also available online at **www.gw.govt.nz** or by phone 04 384 5708. There will also be the opportunity for those who make a submission to speak at Council hearings.

10. Will I be able to visit the wind turbines?

Yes, you will be able to walk to them from Battle Hill Farm Forest Park. It would take about 1–1.5 hours from the park entrance. Access by horse or cycling will also be possible. Motorised access will continue to be restricted.

11. Will it impact Battle Hill Farm Forest Park?

The impact, if any, on the regional park, will be minimal. We have reached agreement in principle, to access the wind farm site through private property.

19. Where can I get more information?

More information, including background reports, is available online at **www.gw.govt.nz.** This page also has links to other wind energy related webpages. You can email any queries to **info@gw.govt.nz** or phone Greater Wellington on 04 384 5708.

20. What happens next?

Public submissions close on **1 August 2005** and public hearings will be held in September or October. GW will then make a decision on whether or not to proceed. If we do proceed, proposals to construct a wind farm will be invited from the electricity industry. A developer could be selected early in 2006. It could take a year to obtain resource consents and up to another year to construct the wind farm. Project completion could be in 2008 or 2009.



FreePost submission form

Have your say

We need your feedback on this proposal.

We need to receive your submission by 5pm on **Monday 1 August 2005.**

Online submission forms are available at www.gw.govt.nz

Please note that any submission you make may become publicly available if a request for it is made under the Local Government Official Information and Meetings Act 1987. If you are making a submission as an individual, Greater Wellington will consider removing your personal details if you request this in your submission.

Should Greater Wellington Regional Cour	ncil make	its land at Puketiro
available for a wind farm development?	Yes	🔿 No

Comments

Y

If you would like to comment on your response, please do so below. (Use more pages if needed.)

fold here Mr/Mrs/Ms/Dr Address Telephone number I am writing this submission ○ as an individual ○ on behalf of an organisation Please name the organisation ○ Business Community ○ Other Type of organisation Do you want to present your submission at a hearing?) Yes O No If you answer yes, Greater Wellington will contact you prior to the hearing date. >~ Fold and tape this page and post it to Greater Wellington Regional Council (freepost), or fax it to 385 6960

or drop it into the Greater Wellington Regional Council, 142 Wakefield Street, Wellington.

For more information see www.gw.govt.nz

Existing wind turbines in the Wellington and Manawatu regions

	kW output from each turbine	Approx blade length in metres	Approx tower height in metres
Brooklyn	225	13	31
Martinborough	550 and 600	19	46
Tararua near Palmerston North	660	23	45
Te Apiti near Woodville	1650	35	70

History

The Wellington Regional Water Board was responsible for the wholesale water supply in Wellington before Greater Wellington took over responsibility in 1980. The Water Board purchased the Puketiro farm land in 1976, primarily for it to become part of a future water catchment.

The Puketiro site ridges vary between 360m and 490m above sea level.

Size of wind turbines

The actual size of the wind turbines for any proposed development would be chosen by the developer. A number of factors would have to be considered so we can only provide general information at this stage.

A likely size range is 500kW to 3000kW for each turbine (a household fan heater is about 1-2kW). For 500kW turbines, the towers are about 45m tall and the blades 20m long. A notional turbine of 1750kW, which has been used in the montage, would have towers about 66m tall and blades 36m long. Large turbines of 3000kW involve towers about 80m tall with blades of 45m.



Puketiro wind farm consultation submission form

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We need to receive your submission by 5pm on **Monday 1 August 2005.**

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Greater WELLINGTON REGIONAL COUNCIL



Puketiro Wind Farm Consultation Freepost 3156 Greater Wellington Regional Council P O Box 11646 Wellington

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Take the 2005 City Safari challenge

The inaugural City Safari last year, an orienteering event with a difference, showed just how good the region's public transport really is. City Safari allows the use of buses and trains...

Last year's event began in downtown Lower Hutt with checkpoints spread from Petone to Haywards and right across the Hutt Valley. Winners of the six-hour event were Wellington multi-sporters Al Cross and Nigel Corry. Winners of the three-hour event were Lower Hutt family Debbie, Claire and Martin Angliss, who entered the event to help Claire work towards her Duke of Edinburgh silver award.

This year's event on Saturday 6 August will start in Lower Hutt near the transport hub at Westfield Queensgate, with new boundaries and checkpoints. Wainuiomata and Eastbourne are included, which both have good bus services, and give access to the firebreaks of the eastern hills and bush tracks in East Harbour Regional Park.

Organiser Michael Wood of Orienteering Hutt Valley, says "Last year's entrants were very impressed with the transport network and reported great interest from other passengers and bus and train staff. Teams used buses or trains up to seven times during the event, using day passes provided by Cityline Hutt Valley and Tranz Metro. It would be great to develop the City Safari into a 24-hour competition throughout Wellington using ferries as well!"

Contact: Michael Wood on 04 566 2645 or visit www.mapsport.co.nz/hvoc/hvoc.html

Perfect way to celebrate Arbor Day

Improving a unique wetland at MacKays Crossing in Queen Elizabeth Park was the focus of this year's Greater Wellington Arbor Day celebrations in early June. The wetland restoration is a joint project between Greater Wellington and Transit NZ. Around 200 people came along to the park on 7 June to help plant the first trees.

For further information contact Penelope Evison on 04 803 0382, email **parks@gw.govt.nz** or online at **www.gw.govt.nz**







Greater Wellington guides

There are now eight brochures in Greater Wellington's regional parks and forests series:

- Battle Hill Farm Forest Park
- East Harbour Regional Park
- Hutt River Trail
- Kaitoke Regional Park
- Mountain biking in the regional parks and forests
- Queen Elizabeth Park
- Regional parks and forests
- Walking in the regional parks and forests



For further information contact Penelope Evison on 04 803 0382, email **parks@gw.govt.nz** or online at **www.gw.govt.nz**

Transforming the iron road

A leftover strip of land between a nine-year-old subdivision and the railway could have been left wild or sold for commercial use...

Instead, residents of Millwood Estate, Silverstream, Upper Hutt banded together to transform the area. With funding from Greater Wellington, support from Upper Hutt Forest & Bird and keen residents, the group is seeing their dream become a reality.

Committee member Keith Johnson says, "We didn't know what to do with this land which was jointly owned by the residents. We didn't want to see it sold or commercially developed."

"We've used large supplies of soil to form mounds to alter the profile of the land and provide a barrier between the houses and the railway, and we've planted hundreds of native trees over the winter months."

"It should look quite attractive, not only for us but also for people travelling on the train."

The area is also important ecologically because it is beside Hulls Creek which connects with a restoration area near the former Silverstream Railway.

"We always have ducks and are seeing other birds like waxeyes (tahou), the native pigeon (kereru), tui and kingfisher (kotare). If we can plant a lot of trees it will encourage them," Keith says.

For more information contact John Gibson, Greater Wellington on 04 801 1039 or email john.gibson@gw.govt.nz

Keith Johnson and members of the Millwood Care Group hard at work on a planting day.

Quality for Life



0800 496 734

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Contact your regional councillors

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On track transformation

The first refurbished English electric began operating on the Johnsonville line last month. The photographs show the 'before' and 'after' transformation.







(From left to right) Daniel Atioo, Frank Moody, Shiva Reedy, Brent Walker, Malcolm Laird, Tore Martin from Tranz Metro

2005/06 Annual Plan and Amendment to the Long-term **Council Community Plan**



The Wellington region Civil Defence Emergency Management Group (CDEMG) recently signed off on 'the Plan' which puts in place procedures and arrangements to ensure that in any emergency - the communities of the Wellington region are resilient.

Chairperson of the Wellington region CDEM Group Upper Hutt Mayor Wayne Guppy says "We can all be better prepared to deal with, and recover from, a disaster. Individuals, families and organisations all have a role to play in emergency management. As a community we must be ready for any emergencies and have the knowledge, skills and resources to respond."

The plan reflects the high level of co-operation between all those involved in emergency management in the region.

Significant events in our region

1855	the Richter scale.	ake on the Wairarapa fault line measuring 8.2 on ter scale. This earthquake caused significant ion to properties across the region and one person ed.			
1909	<i>SS Penguin</i> shipw people on board	rrecked at Cape Terawhiti. 75 of 102 died.			
1918	· ·	nic. Up to 800 people in the Wellington veen a third and a half of the region's nfected.			
1940	Plane crash in Waikanae. Fifteen people were killed.				
1942	Earthquake in Masterton measuring 7.2 on the Richter scale caused considerable damage across the Wairarapa.				
1968	Cyclone Giselle caused winds of up to 200kph and the sinking of the <i>Wahine</i> ferry on Barrett Reef in Wellington Harbour. Fifty-one of the 733 people on board died.				
1976	Hutt Valley surface flooding due to heavy rain. All roads were disrupted and many severe slips occurred on hillsides.				
1998	Kapiti river flooding caused the death of one person.				
2003/4	03/4 Major flooding on the Kapiti Coast, the Hutt Valley and Wairarapa.				
Top six risks facing our region					
*		Wellington fault event affecting all of central New Zealand.			
		Pandemic or emerging disease (e.g. SARS, influenza type event).			

3. Storm Rain, wind, hail, lightning. Hutt River (a 440-year event). 4. Flooding v seas and coastal erosion

	M 025 640 8681 sandra.greig@gw.govt.nz Upper Hutt	2003-2013	5.	Coastal storm	Heavy seas and coastal erosion (event affecting whole region's coastline).	
	Rex Kirton	On 9 June Greater Wellington adopted the 2005/06 Annual Plan and	6.	Tsunami	Locally generated.	
M	T/F 04 528 4751 M 021 435 277 rex.kirton@gw.govt.nz	1 021 435 277		Copies of the Wellington Region Civil Defence Emergency Management Group Plan are available from the Civil Defence Emergency Management (CDEM) Group Office, Greater Wellington, 142 Wakefield Street, Wellington or online at www.wrcdemg.govt.nz		

P O Box 11646 142 Wakefield Street Wellington T 04 <u>384 5708</u> W www.gw.govt.nz

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