Responses from Regional Councils, Department of Conservation and other organisations to request for information about OMB to include in the application

Iwi and hapu

Hollei Gbrielson, Ngati Rangi

I have a few questions or proposed way forward that I would like to discuss:

- I think being able to have a hui with either yourself or Richard Hill in the first instance is a preference.
- We would like to identify the spread of OMB in the Ngāti Rangi rohe
- What control measures will Landcare/Horizons employ in the ability to remove/control the insect if it deviates from its desired use?
- We recognise that controlled tests have been conducted within an environment with controlled variables, prior to release or full use of this control agent, are any real world tests proposed (obviously in a control way – and I see tests have been ongoing for several years so excuse my naivety!)
- Will the wider approach to OMB control include the use of the biological control agent and herbicides?

Any guidance or feedback on this would be helpful, Richard I have cc'd you in so hopefully you can help me with my queries.

Anne-Marie Broughton, Te Kaahui o Rauru

Thank you for the opportunity to provide comments on the application to the EPA by Horizons Regional Council, on behalf of a group of regional councils and DOC, for permission to introduce a tiny gall-forming mite from Europe to reduce the damage caused by old man's beard.

Given the evidence that this species will not transfer to native species and will reduce the impact of a pest species, we are not opposed to its introduction. We request a continued cautious approach to managing the risks around this biocontrol agent.

Please provide an update if/when there are trials or releases within or near our rohe.

Regional Councils

Ashlee Lawrence, Biosecurity Officer, Northland Regional Council

OMB is currently an Eradication Plant under our RPMS and will remain as such under our upcoming 10-year Regional Pest Management Plan. There are very few sites of OMB in Northland – we have two current surveillance sites and none active. We have three reports of suspected OMB in the past three years, however these were all a case of mothplant or native clematis being mistaken for OMB.

I have attached the OMB excerpt from our recent cost benefit analysis completed for our RPMP review.

Ron Matthews, Biosecurity Team Manager, Central/South Environmental Services Unit, Auckland Council

Old Man's Beard is classified as a total control pest plant under our current RPMS and we only have approximately 4 sites that are managed throughout Auckland. These are fairly isolated and good control is being achieved. I believe eradication at this point is a real probability within the next few years. Occasionally new sites are found and are managed accordingly. Therefore with this in mind, I have answered your questions as below.

What is the current status of old man's beard in your region? Total control: Eradication program is progressing well in all four sites.

How does omb affect environmental values in your region? Very little due to status of low incidence.

What control or containment measures are undertaken by the council? Eradication on all known sites.

How does omb affect economic values in your region? Do you have any monetary estimates of management costs or cost benefit analyses. Little effect due to control. Potential to cost millions if allowed to establish. Currently we are spending less than 2K annually on its control.

Are other organisations in your region (TAs, infrastructure orgs, community groups etc) affected by old man's beard? Are they key stakeholders in this application? No

Does omb confer any benefits? None known.

Hamish Hodgson, Biosecurity Officer, Waikato Regional Council

OMB is classed as a progressive containment pest plant species in the Waikato Regional Pest Management Plan and we currently have about 200 known sites. The sites are spread throughout the region but are particularly prevalent and becoming more established in the Taupo and King Country areas, as well as along the banks of the Waikato River.

Waikato Regional Council staff and contractors spend roughly 700 hours per annum on the control of OMB, which is done so through spraying and cut and pasting stems. Roughly $25 000 is spent on external contactors per year and costs are increasing.

OMB has been found near the popular Okoroire hot springs and golf course, which is near the Kaimi Rangers. This area is desirable for locals and tourists alike. The banks of the Waikato River are also potentially impacted in a similar way.

With the current level of investment, the spread of OMB in the region has been reduce, however its density is increasing particularly in the Taupo area.

Other major stakeholders in the Waikato region that are effected by OMB include the Department of Conservation and the Forestry industry.

Darin Underhill, Biosecurity Team Leader -Plant Pest; Mark Mitchell, Principal Biosecurity Advisor; Hawke's Bay Regional Council

An answer to some of your questions regarding OMB in Hawke's Bay:

1. OMB is well established and is found throughout Hawke's Bay. It is designated in our RPMS as a Total Control Plant north of SH5 (Napier/Taupo Rd).

2. OMB has an impact on environmental values within the region, particularly where it isn't being controlled by smothering out desirable plants, particularly native bush and stream planting protection.

3. OMB is actively controlled by Council and landowners north of SH5. South of this control is being carried out in some high biodiversity sites such as wetlands, riparian reserves and QEII's. This is mainly being done by HBRC.

4. It only affects economic values in regard to the cost of control. Currently approximately $120,000 is being spent on OMB control by the HBRC and affected landowners. A CBA is being prepared for our RPMP. I have attached …the draft….. As it stands, the programme has come out negative. This is not surprising given old man's beard is an ecological weed and the ecosystem monetary values used were very low. These values have since been realigned to recent research that Imogen Basset (AC) compiled. We will not be rerunning the CBA until July/August, I suspect it will still come out negative.

5. DOC are involved but that's about it (for other organisations)

6. OMB doesn't convey any benefits to my knowledge

Phil Karaitiana, Gisborne District Council

Old man's beard in the Gisborne Region can be found in light to moderate infestations with patchy high density to the south and west of Gisborne with light infestations in urban localities to little or nil incursions northward of Gisborne.

· Current status was (Limited Control – RPMS) They are now listed as a Site Lead species in our proposed new RPMP.

· Has an adverse effect by overtopping native, commercial pine forests and amenity plantings causing canopy collapse overtime in areas where heavy uncontrolled infestations may occur.

· We have had two Omb bio agents releases in our region, Old man's beard Leaf mine in 1996 and Old man's beard Leaf fungus in 1997. Negligible impact.

Council has only carried out control activities on isolated scattered infestations along road corridors where adjacent control has been undertaken by private landowners. In past years RPMS exacerbator costs have been sought from DOC for Omb control along riparian margins and some Scenic Reserves.

· Economic loss in our region has not been quantified commercial pine production could be affected but to date this is not an issue.

· Department of Conservation, Nga Whenua Rahui, local Iwi groups, QEII, Gisborne District Council, commercial forest industry.

· Omb confers no benefits to our region.

Jack Keast, Environmental Management , Horizons Regional Council

1. Could you please provide me with some details about how omb is dealt with in the region - HRC Pest plant Team OMB budget 2016-2017: $126,750. This is our current spend for OMB control throughout the region. Our current RPMP has areas where we do and do not undertake OMB control, so this money only reflects what we spend in our priority areas. To actually control OMB over the whole region would be magnitudes more money, and probably physically impossible with current techniques. Outside of our priority areas we only give advice and info to landowners, and occasionally help out for a day here and there with community groups etc. Our Biodiversity team also controls OMB in their priority bush blocks which are dotted all over the region (inside and outside of our priority areas), but specific OMB costings here are tricky to find as all weeds are controlled in these blocks using the same budget.

As a team we have also costed out what we think it would cost us to fully service just our priority areas over the next 5 years, including control works and surveys. This figure comes out at $966,500.

These costs also don't take into account staff time and overheads, which would increase the costs by a significant amount.

Current Control methods boil down to Aerial Spraying, and ground control which is either Ground Spraying or Stump Treatment (cut and paste). Aerial costs are roughly $1500 an hour, depending on the operator, and ground control costs are roughly $60 an hour or $80 with a motorised sprayer. Each technique has its own advantages and disadvantages. Aerial spraying means you can reach inaccessible country, cover a lot of ground and get good quality coverage onto the canopy of a plant. The downsides are high costs, non-target damage and finding suitable weather to get the job done. Ground control is more targeted, meaning less collateral damage, but is also slower and you cover a lot less ground.

A CBA for OMB was created to help HRC make decisions for their latest RPMP. Please see other document (Other Mapped Progressive Containment Pest Plants) for information on this.

Biodiversity group: the HRC biodiversity group looks after a wide range of high value habitats, including wetlands, bush remnants and dune lakes. They control a range of pests in these areas (which aren't limited to the Pest plant teams priority areas) making OMB a big risk. The annual spend on OMB would be between $20-40 thousand dollars, with the exact dollar figure fluctuating yearly.

River Management Group. HRC river management group are in charge of all the flood management and river bank protection works. A lot of the works are what is termed "soft engineering" which include tree plantings and willows planted into river banks, as opposed to "hard engineering" which is stop banks, gates, weirs and rock linings. All these plantings are at risk from OMB, as they can be pulled down by OMB, rendering them ineffective as flood or bank protection. Currently there are a lot of plantings along the rivers which are being negatively impacted by OMB, and this is increasing with the increase in stream fencing requirements. The River engineering group spend between $20 – 40 thousand dollars per year, and this figure fluctuates yearly but can be expected to increase.

Landscape Values: Horizons has some large outstanding natural features, such as the Manawatu Gorge, Taihape high country, Volcanic plateau, Makuri Gorge, Ruahine and Tararua ranges and many large rivers including the Manawatu and Rangitikei. All of these areas have high ecological, recreational and economic values attached to them, although this is hard to quantify with a dollar figure. All of these values are threatened by OMB, as the very thing that makes them unique or special may be destroyed by the weed. Given time, OMB will take over and destroy the forests, riparian margins and wetlands which are associated with these locations. The Manawatu and Makuri gorges, Rangitikei river gorge, Manawatu river and other landscape features are already heavily infested with OMB, and work is being done to prevent this damage from occurring in the other locations.

Residents in the Rangitikei district are rated a target rated for funding specifically used to control OMB. This rating gathers $95,000 per year, and Horizons also puts 200 staff hours to this, at a total cost of around $17,000. This money goes to fund a community group called the Rangitikei Environment Group (REG). REG works to control OMB throughout the district on public and private land.

2. Do you have a regional Maori liaison komiti or network? Do you have an hrc Maori co-ordinator that I can contact?

Jerald Twomey, HRC Senior Policy Analyst – Iwi. Jerald.twomey@horizons.govt.nz 021 2277 464.

No formal komiti that I am aware of, best to ask Jerald though

3. Are there other organisations in Horizons, including the community orgs, that I could usefully contact for information about costs and adverse effects of omb?

HRC river scheme committees (contacts through HRC).

Community groups: Rangitikei Environment Group, (REG, contact through HRC),

Taihape farmers group (contact is Fraser Gordon, contact through HRC),

Way to go Pongoroa (contact Helen Gordon ahgordon@farmside.co.nz),

Wanganui pensioner group: contact is Rod Pearce 06 3457892.

Robin van Zoelen, Biosecurity Officer, Tasman District Council.

In the Tasman/Nelson Region apart from all of Golden Bay and the Upper Buller Catchment there is no designated pest status for Old Man's Beard, due to the widespread distribution. In the Golden Bay area, which includes part of the Takaka hill to Kaiteriteri and all of the Upper Buller Catchment it is designated as a Progressive Control pest in our current RPMS.

OMB impacts on environmental values by degrading and replacing indigenous species and suppressing regeneration. In modified environments exotic plants are degraded/destroyed. The landscape values in river valleys when deciduous trees lose their leaves and the mass of OMB vines becomes more obvious these values are degraded. OMB can modify the environment so much that others weeds can establish in situ and impede access to waterways and other environs.

Council supports community initiatives like Project Devine, and other local groups with limited inputs. Reserves Department and Engineering Riverworks engage contractors to destroy OMB in carrying out annual work programmes. Contribute funds to the aerial control programme run by DoC in the Upper Buller Catchment. Fund land care Research biological control programme, including additional funding for the Bark Beetle project and conjunction with other Councils.

Cost for OMB control in Tasman District. Project Devine $$255,000, this costing is only for OMB control, Upper Buller Catchment $20,000, Riverworks $30,000, Reserves $15,000, Bark Beetle project $6,000. Total $326,000.

Forestry companies also incur cost in dealing with OMB, due to Health and Safety in regard to vines hooked up in trees for felling, and also it impedes access for silviculture work. Private land owners incur costs when restoration work is implemented to restore native habitats, and further ongoing controls. DoC incurs costs in some of its reserves in areas outside of Golden Bay. Individuals on rural and urban properties also incur control costs

Project Devine has a significant operation dealing with introduced vines including OMB, from Golden Bay to the base of the Takaka Hill on the Motueka side.

OMB does not confer any benefits.

Hamish Hodgson, Biosecurtiy Officer, Waikato Regional Council

OMB is classed as a progressive containment pest plant species in the Waikato Regional Pest Management Plan and we currently have about 200 known sites. The sites are spread throughout the region but are particularly prevalent and becoming more established in the Taupo and King Country areas, as well as along the banks of the Waikato River.

Waikato Regional Council staff and contractors spend roughly 700 hours per annum on the control of OMB, which is done so through spraying and cut and pasting stems. Roughly $25 000 is spent on external contactors per year and costs are increasing.

OMB has been found near the popular Okoroire hot springs and golf course, which is near the Kaimi Rangers. This area is desirable for locals and tourists alike. The banks of the Waikato River are also potentially impacted in a similar way.

With the current level of investment, the spread of OMB in the region has been reduce, however its density is increasing particularly in the Taupo area.

Other major stakeholders in the Waikato region that are effected by OMB include the Department of Conservation and the Forestry industry.

Other organisations

Athol Sanson, Parks & Reserves Team Leader, Rangitikei District Council

All testing has been done under a controlled environment. What is the lowest temperature the mite has been exposed to in this testing or is known to overwinter at? Why I ask this is that our major infestations for OMB are around Taihape and as we know Taihape has some real temperature extremes in winter. This morning was -4degc.

From my part I believe this is the way forward for control of this pest plant and what you are proposing is a major breakthrough for control. It sounds very promising.

The risks of introducing the mite versus the use of toxic agrichemicals in sensitive environments may be a close one.

Ross McNeill, Chief Executive, Rangitikei District Council

Further to your request for feedback regarding the introduction of *Aceria vitalbae* for the control of *Clematis vitalba* and having regard to the subsequent email between Athol Sanson (Parks & Reserves Team Leader) and Richard Hill at Landcare, the Rangitikei District Council would like to provide feedback as follows.

We have read with interest your proposal for the tentative introduction on the *Aceria vitalbae* mite especially around the trails on our indigenous clematis and also exotic varieties. We have also looked closely at the potential beneficial and adverse effects that the introduction of this mite may have in the wider environment.

Athol's email discussion with Richard Hills was regarding the temperature tolerances that the mite can survive. As you are aware our region has quite a range of climatic extremes. He will represent our thoughts in his submission following this correspondence.

The potential release of this mite has also been discussed in a recent Rangitikei Environment Group meeting with all in agreement that the mites release looks promising.

OMB is a major plant pest in our region both in the Northern (Taihape) and Southern (Turakina) areas and grows in such inaccessible locations we believe the long term control/containment of this pest plant can only be achieved by biological controls.

Our region's current control measures for the containment of OMB is lessening the impact of this pest plant in our urban and rural areas; however, in the long term the use of significant amounts of agrichemicals in sensitive environments will need to be closely watched and controlled. The use of biological controls, such as the mite, will be a much more cost-effective solution.

The risks of introducing the mite versus the use of harmful agrichemicals in sensitive environments may be a close one. The mite has been tested on our indigenous clematis and some subspecies (which will be the host range). We understand from Richard Hill's report that leaf damage by the mite may reduce native plant populations. Balancing this is certainty that the mite will lessen the impact of agrichemicals entering waterways and will also lessen the potential overspray onto desirable plants. Any reduction of agrichemical use will be beneficial to our communities as well as presenting real cost savings over time.

The Rangitikei District Council supports the release and trial of *Aceria vitalbae* at this early stage of consultation and welcomes any further correspondence.

From our part we believe this is the way forward for control of this pest plant and what you are proposing is a promising breakthrough for OMB control.

Gareth Eloff, Manager, Policy and Operations, Queen Elizabeth II National Trust

- What is the occurrence of OMB (*Clematis vitalba)* in QEII covenants? What impact does it have on how covenants are managed?

  A relatively large number of QEII covenants have OMB recorded within them. In the Horizons region, this indicatively includes approximately 440 relatively discreet Blocks collectively making up 104 covenants (30%-50% of all registered).

  Covenants are managed for their 'open space' values. Management actions like weed and pest control are largely undertaken by landowners and partner agencies- with advice from QEII reps. Reps will monitor and record changes in our database QUiC. The scale and degree of OMB infestation, coupled with regional approaches all help to dictate the response. Reps usually advise on a progressive approach based on achieving any particular outcome.

  This ranges from attempting FULL ERADICATION where infestations are easily quantified and complete control is within reasonable expectations, through to PROGRESSIVE CONTROL where the achievability should prevent an increase in the current situation, but may not necessarily result in eradication. In many instances, this is a LANDSCAPE wide issue, and any attempts to control OMB within covenants is largely futile due to the rapid rate of ongoing and progressive re-infestation that renders any ongoing control within the local means as futile. In these instances, the site will be marked as EXEMPT, which indicates an issue well beyond the means of the landowner to control.

  Across the Horizons Region, 102 (or around 25%) out of the 440 blocks have been marked as EXEMPT which indicates a landscape wide issue beyond the means of the landowners to do anything about. The Tarararu district has around 35% covenants infested (possibly up to 50%), and this is much the same in the Manawatu.

- What is the current management regime on affected land and how successful is it?

  In the Horizons Region, many sites have had the benefit of council funded contractors doing control. A very limited number of sites benefitted from BCF funding to be able to engage contractors. Where these activities have taken place, and there is ongoing follow up, then OMB has been successfully controlled. In all other situations, the landscape wide issues associated with OMB are an ongoing threat to open space and many landowners struggle to keep up with the pressures. Direct Rep involvement is limited to time, and occasional/incidental control work. Reps have in recent years been able to access support funding to a limited degree to provide basic equipment and resources to landowners.

- Do you have any details about current management costs?

  Specifics are Unknown, as these costs are largely borne by the landowner.

  Reps do spend around 4 hours per covenant with issues per year. Anecdotally, this could imply around 1000 hours spend on advocacy and management around issues including OMB. An

independent study by the University of Waikato Institute for Business Research recently showed that around 15% of costs of maintaining covenants went to weed control.

- Do you have any comment on the possible effects of introducing the control agent?

Probably the most feasible option available to curb the landscape wide issue over the longer term

- Any other comments that you think might be helpful.

Comments from Regional Reps:

"OMB is a major threat in Tararua. In some areas it is rampant along roadsides and rivers and with the increase of seed in the landscape there has been a dramatic increase in spread in the last few years. This will get worse as waterways are fenced off to help with water quality and OMB spreads to these areas. There are still areas of Tararua it hasn't got to yet but it will eventually.

Currently I have recorded it in 35% of covenants but is likely that it could already be in 50%. The way it has spread in the region over the last few years I would expect it to possibly be in 90% by another 10 - 20 years. One thing that has slowed the spread in some areas is the equally dramatic increase in deer numbers as the plant is palatable when young.

Control methods are as explained by Trev.

Unfortunately I only have a few owners that do active control work. Many have good intentions but farmers are generally time poor and controlling OMB normally never makes it above the bottom of the list for most. Horizons Regional Council do control in high value sites and this includes a number of covenants.

It can be successfully controlled especially if got onto early and the terrain in right. In broken terrain, especially areas with steep banks and deep gorges control is difficult. The broken terrain provides plenty of light for it to establish and it loves scrambling up banks re-rooting where it touches the ground all the way up. The broken terrain also makes getting around to find and control extremely time consuming. Some larger covenants with steep broken terrain are just not economic to control.

With the amount of seed in the landscape and re-infestation one of the main troubles with control is that is is not just a one time hit. It is currently perpetual.

I have costings for two covenants where there has been control. These are covenants 5/05/016 & 5/05/159 - multiblock covenants on the same property covering 103 hectares. They are close to the Manawatu River which has widespread infestation along it's banks.

Prior to 2013 $6000 was spent of BCF money.

Another BCF application was made with funding support also from Horizons and the LO.

2013-2015 $22100 spent on control over entire area 103ha. ($71.50/ha/yr)

2016-2017 $10500 spent on control over 59ha. ($89/ha/yr)

In 2015 after discussions with LO, Horizons and contractors we decided to no longer do control over 44ha. These blocks had lower values, other weed issues and many gorge banks requiring abseiling for some of the control. It was decided that control in these blocks was not viable with the funds available and to concentrate on a smaller area.

The BCF funding has now been used and future control will be funded by Horizons and LO. The control area may need further reduction depending on available funds.

The QEII property Awapikopiko is quite close to these covenants but is further away from the infestation of the Manawatu River and is a lot easier terrain. One days work here by me each year has seen effective control for the 28 ha ($14.30/ha/yr)

Any biological control has to be a help and for much of the region and many of the covenants these are probably the only hope long term".

And

…" In my area this is pretty much a regional council problem and they could answer all those questions themselves. Probably 50% of covenants have OMB to a greater or lesser extent, or on the boundary, but most owners are not too bad at controlling it on their patches. It's very much an edge plant, so doesn't seem to establish well in dense shade, but will take advantage of slow to recover light wells. Once established it is a tricky customer, but young plants are relatively easy to control, and most of my covenantors recognise this and have stepped up, but reinfestation is ongoing and frustrating. If there is a biological control available then bring it on. It can't do any worse than what is already there. As a biological control it won't annihilate OMB, but should just knock it's effect down to a level where it is of no consequence".