



GWRC response to concerns raised at the meeting between the community and Greater Wellington Regional Council on 14 November 2015 regarding spraying of herbicides in Queen Elizabeth Park on 26 October 2015

Meeting between residents of Raumati and Paekakariki and staff of GWRC and the Chair of GWRC (Cr Laidlaw) and Kapiti representative on GWRC (Cr. Nigel Wilson), facilitated by Di Buchan.

At the meeting, Nigel Corry (General Manager Environment, GWRC) apologised for the spraying operation occurring on a public holiday, and promised that it would not happen again. **A letter of apology to the Kāpiti Community is attached to this document as Appendix 1.**

This document contains:

1. a summary of the concerns expressed and questions raised by the community representatives who attended the meeting, as recorded and summarised by Chris Cosslett and reviewed by Di Buchan
2. the GWRC response to those concerns
3. links and references to more detailed information supporting this response.

Meeting notes - Possible health and environmental impacts of herbicides used in the park

- People are concerned about the human health impacts of exposure to the various chemicals used in the park. This is particularly so in light of the recent declaration by the WHO that glyphosate possibly a carcinogen, but concern is not limited to glyphosate. Concerns were also raised about the use of 2,4-D, a hormonal herbicide, in the Labour Day aerial spray operation.
- It should not be assumed that agri-chemicals are as safe as chemical companies and scientists tell us – Greater Wellington should take a precautionary approach in its use of chemicals.
- There was concern about the impacts of chemicals on aquatic ecosystems, given that some chemicals are applied directly to streams and in other cases drift reaches waterways.
- The possible persistence of agri-chemicals in the environment and their mobility through the food chain was also raised as an issue.
- People are concerned about possible impacts of herbicides on birds, insects and other wildlife as well as livestock and horses.
- The potential impacts on bees should be considered when making decisions about broad-scale spray operations. Bees could be over-sprayed if they are foraging on flowers within the spray zone, and also if they are travelling through the spray zone between their hives and flowers elsewhere. This can lead to contamination of honey.
- Concern was expressed about the widespread use of glyphosate by KCDC.

- The Council was asked about what monitoring of environmental impacts the council undertakes in relation to its spray operations in the park. Baseline monitoring prior to spray operations is needed so that impacts can be gauged. Monitoring should include the impacts on birds and aquatic ecosystems.

GWRC response –

- The Environmental Protection Authority (EPA) is responsible for putting controls in place to manage the risk of hazardous substances, including herbicides, to safeguard people and the environment. GWRC relies on EPA approvals for a range of herbicides to be used under specified conditions. When the EPA makes new determinations on the use of chemicals GWRC will comply with all regulations, licencing and use requirements.
- Glyphosate was not the substance applied by aerial spraying at QEP on 26 October. We acknowledge that there are international and local concerns regarding glyphosate. The World Health Organisation, European Union and United States Environmental Protection Agency are all investigating glyphosate safety at present. The NZ EPA is actively monitoring international developments, and will consider whether a formal review of glyphosate use in New Zealand is required after reviewing the overseas reports.
- Cr Laidlaw has written to the Chief Executive of the EPA encouraging a prompt assessment of the overseas reports given the high level of public interest in glyphosate at present.
- On 2 December, the NZ EPA advised GWRC that the European Food Safety Authority and EU Member States have finalised their assessment of glyphosate, and concluded that glyphosate is unlikely to be carcinogenic to humans.
- GWRC also comply with the conditions of resource consents or permitted activities from the Regional Air Quality Management Plan, Regional Discharges to Land Plan, Regional Freshwater Management Plan, and/or Proposed Natural Resources Plan, and the instructions for chemical application issued by manufacturers.
- GWRC regularly investigates and uses alternatives to herbicides. These include the use of biological controls, reducing the amount of herbicide used through more effective application techniques, and optimising land use by retiring unproductive areas.
- Spray-application of agri-chemicals specifically avoids streams and waterways, which are identified as “sensitive areas”.
- From time to time it is necessary to spray weeds that choke waterways in order to allow streams to flow and to reduce flooding or flood risk. For example GWRC has sprayed celery weed in the Whareroa Stream and its tributaries where it has blocked the stream to the extent that the water is unable to flow. There are rules regarding aquatic weed removal in the Regional Freshwater Plan and the Proposed Natural Resources Plan that GWRC and all other landowners and managers must comply with.

References –

http://www.epa.govt.nz/hazardous-substances/pop_hs_topics/glyphosate_learn/Pages/Glyphosate_regulation.aspx

http://www.epa.govt.nz/hazardous-substances/pop_hs_topics/glyphosate_learn/Pages/Glyphosate_safety.aspx

http://www.epa.govt.nz/Publications/About_Glyphosate_information_sheet.pdf

<http://www.gw.govt.nz/regional-plans-policies-and-strategies/>

[Document 1: Letter from GWRC Chair to EPA](#)

[Document 5: Update on Glyphosate Research](#)

[Document 2: Spray Plan](#)

[Document 3: Standard Operating Procedure for Aerial Spraying](#)

Meeting notes - Statements and questions raised regarding previous agreements about spraying

- In the past, management has agreed not to use aerial spraying in the park.
- Aerial spraying was not done in the park prior to four years ago.
- Why is Greater Wellington now using aerial spraying in the park?
- Greater Wellington should adhere to previous agreements regarding the use of herbicides in the park, otherwise the community will have to keep re-stating its case.

GWRC response –

- GWRC haven't been able to find an agreement not to use aerial spraying in QEP - not in our files, or in long-term institutional memory.
- We appreciate the community has concerns about potential spray drift from aerial spraying. Modern application methods mean that there is almost no drift from aerial application. This is evidenced by the clear demarcation line in the south of the park where the lupin spraying was carried out.
- Modern aerial application is far more precise than in the past because:
 - It is only undertaken in fine weather or still conditions, or a very light breeze suited to the location
 - It is applied evenly compared to a ground operator who can tend to “over-spray” areas to make sure everything is covered
 - The spray is applied in droplets from a boom so it goes straight down rather than a fine mist that tends to drift
 - The operations are tracked to make sure that the helicopter remains within the spray boundaries
 - Operators use sophisticated weather monitoring equipment to keep a very close eye on the wind conditions so work can be stopped if the wind comes up.

- GWRC has received advice and community feedback that we need to control weeds - especially gorse in farmed areas - for the following reasons:
 - Gorse and other legumes fix nitrogen. Adding nitrogen to naturally infertile soils making it difficult to restore natural vegetation communities even after the gorse has been removed
 - Gorse creates a high fire risk, especially in a dry climate. This is obviously a concern in areas of high public use and near homes.
 - Vigorous growth and a dense canopy results in a very long period of cover until native species can emerge. Because there is such a long history of farming in the park, there is also a depleted seed source for native plants.
 - Persistence of gorse and other weeds also creates an ongoing source of seed that persist in the soil and spread to neighbouring properties
 - Gorse has a strong negative impact on recreational use and the visual amenity of the park.
- Over the last four years GWRC has managed aerial spraying of just over 100 hectares of gorse and some thick lupin in the park with great success. This operation received a very positive response from the community. Prior to that we were unable to deal with these large scale weed infestations because of the height of the weeds (up to 4m tall) and the size of the problem. The farm licence holder at the time simply could not meet his obligations to control weeds because of these issues and with the methods available to him.
- Now that the main weed problems at QEP are almost dealt with, GWRC expects that there will be very little aerial spraying in the future.
 - It may still be needed for large scale weed infestations e.g. blackberry near the model aeroplane strip
 - The farm licence holder plans to invest in further pasture improvements. Tractor based spraying is the preferred option, but where the ground is too dangerous to traverse, or the weeds are too high, aerial spraying will be considered.
- GWRC acknowledges the community concern around aerial spraying and is keen to work with the community to address these through a revised spray protocol for QEP.

References –

[Document 3: Standard Operating Procedure for Aerial Spraying](#)

[Document 4: Sustainable Land Use Plan](#)

<http://www.scionresearch.com/research/forest-science/rural-fire-research/tools/new-zealand-fire-behaviour> - page 45

[Document 6: Photos and Results of Labour Day Aerial Spraying](#)

Meeting notes - Public access to the park and sprayed areas during and after spray operations

- During large-scale spraying operations in the past, the park was closed to ensure that the public could not be exposed to drift.
- During the Labour Day 2015 operation, people were allowed in the park during the aerial spray operation. People were exposed to spray drift while in the park for recreation.
- One resident reported experiencing spray drift from the Labour Day operation 130m away from the helicopter, and later experiencing headaches and nose bleeds.
- Signs are needed to ensure that people don't eat plants, e.g. watercress that may have been contaminated.

GWRC response –

- The areas of QEP where the spraying operation occurred on 26 October were closed to public access.
 - The boundary with the Yankee Trail was sprayed shortly after 7.10am when there were almost no people in the park, and none visible in the vicinity of the operational area
 - There was almost no wind, and since droplets were used (not mist) there was minimal risk of spray drift
 - Photos demonstrate how accurate the application of chemicals was, and that there was no drift
 - The chemical applied has a strong smell, and this remains on the sprayed vegetation. It is possible that this odour was thought to be spray drift.
- There is no legal requirement for spraying signage to meet any particular size standard. Usual industry practice is to erect signage of A4 size at public entry points to an operational area to advise that weed spraying is taking place. The signage erected at QEP for the aerial operation was A3 (twice the industry standard).
- During the spraying at QEP on 26 October rangers were present at the main public access points to advise park users that spraying was being undertaken in the park. The rangers were also fulfilling the role of weather watchers to ensure any changes of wind speed and/ or direction were immediately reported to the operational manager to ensure there was no possibility of spray drifting outside the spraying zone.
- GWRC wants to work with the community to on a revised protocol for spraying operations at QEP including closures, signage and notifications. We will begin this conversation at the public meeting planned for 9 December 2015.
- The following has already been agreed:
 - There will be no aerial spraying on weekends or public holidays.
 - GWRC has previously agreed that aerial spraying in the park near Te Ra School will occur outside of school hours (or at weekends or during school holidays).

References –

[Document 2: Spray plan for QEP](#)

[Document 3: Standard Operating Procedure for Aerial Spraying](#)

[Document 6: Photos and Results of Labour Day Aerial Spraying](#)

[Document 7: Public Notice](#)

[Document 8: Sign Locations](#)

[Document 9: Aerial Spraying Operation Sign](#)

Meeting notes - Public notification and information about the Labour Day operation

- Public notices and on-site signs warning the public about the Labour Day operation were inadequate.
- The community wants to know the details of chemicals used in this operation.

GWRC response –

- GWRC wants to work with the community to on a revised protocol for spraying operations at QEP including closures, signage and notifications. We will begin this conversation at the public meeting planned for 9 December 2015.
- The herbicide used in the aerial spraying program was Relay Super S, the active ingredient being 2,4-D as an ethyl-hexyl ester.
 - The chemical was applied at 3 litres per hectare mixed with 100 litres of water per hectare.
 - No other additives were used.
 - A total of 2250 litres of spray mix containing 68 litres of Relay Super S was applied to 22.6 hectares of the farmed area of the park to control thistles and lupins.
 - Relay Super S has a particular odour which is immediately recognisable as being herbicide but detecting odour does not indicate that the actual spray particles have drifted outside the operational area.

Meeting notes - Involvement of iwi

- Iwi were not specifically notified about the Labour Day spray operation. Given their special interest in water, iwi should be more directly involved in accordance with the provisions of the RMA.
- Tangata whenua should be represented on the Collaborative Working Group.

GWRC response –

- Aerial spraying is a permitted activity under the Regional Air Quality Plan and Proposed Natural Resources Plan. A range of notifications are required, but not a resource consent.
- GWRC consulted with local iwi on development of the Parks Network Plan and the QEP Farm Review.
- GWRC will invite tangata whenua to be represented on the Whareroa Collaboration Group, and ask whether they want to be notified about future spraying operations.

References –

<http://www.gw.govt.nz/regional-plans-policies-and-strategies/>

<http://www.gw.govt.nz/parks-policy-and-planning-documents/>

[Document 11: Farm Review](#)

[Document 14: Helicopter Report for 26 October](#)

Meeting notes - Consistency of the farming operation with the purposes of the park

- QEP is a recreation reserve under the Reserves Act 1977, therefore the interests of farming should be subservient to the public's use and enjoyment of the park. There is concern that under current arrangements, farming has precedence over public interests. (Refer to QEII Park Protectors document presented at the meeting.)
- The original charter document bequeathed the land to the public, primarily for the purpose of recreational use.
- The park was bequeathed for the purpose of creating an equestrian resource for the community.
- According to the Reserves Act and the Charter, the public should have access to and enjoyment of the whole park. The farming operation effectively excludes public access to large areas of the park.

GWRC response –

- GWRC manages the whole of Queen Elizabeth Park for a variety of uses as outlined in the Parks Network Plan.
- The Parks Network Plan notes agreed improvements to public access through areas that were previously closed and these include:
 - the new cycleway/ walkway (Te Ara o Whareroa) from Poplar Ave to Paekakariki
 - the Yankee trail is now fully lane fenced, which means that people may enjoy views of farm animals and farmland but retain a feeling of separation from farm animals (they feel safer and have cleaner shoes)
 - formalised access between the Yankee trail and Mackays Crossing via the dune swamp and eventing paddock for horse riding as well as walkers and mountain bikers (who use the Pukeko Path)
- See the reference below for the statutory and planning context for QEP.
- The place of farming in QEP was reviewed in 2012. The review showed “strong stakeholder support for the land management approach developed in the SLUP which retains farming at QEP as a way to manage open space values, and to maintain an accessibly rural activity (accessibly and physically) in an increasingly urban area.”
- The farming licence was tendered in 2014 following the results and recommendations of this review.
- The review identified principles, areas of work, and actions that continue to be worked through and implemented by both GWRC and the licensee.
- The new farm licence includes provision for educating people about modern farming methods and best practice land management. Once the new licence holder is settled in, we are looking forward to exploring ways in which this might be achieved.

- GWRC is undertaking significant stream retirement works over the tributaries of the Whareroa Stream. Fencing is set back around 10m on at least one side of the stream to allow for future planting and recreation access, much as can be observed on the Whareroa Stream itself.

References –

<http://www.gw.govt.nz/assets/Transport/Sustainable-Transport-2012/Parks-Network-Plan.pdf> - see sections 6.7.4 and 6.7.6

[Document 11: Farm Review](#)

[Document 13: Statutory and Strategic Plan](#)

Meeting notes - Expenditure of public money on farming

- Information about how much public money is spent supporting the farming operation should be publicly available.
- An analysis is needed of the cost of the farming operation to ratepayers, relative to the likely costs of alternatives to farming (see below).

GWRC response –

- The QEP budget is available to discuss in detail. See the reference below.
- As this was the first year of the new farming licence, GWRC agreed to a number of one-off projects to ready the farmed area for the new management approach (sheep and cattle).
- GWRC owns and funds the main farm assets including the water reticulation system and boundary fences. The latter includes the fences between the areas accessible for the public and those that are farmed, and the stream retirement fencing.
- The farm licence holder is responsible for returning the assets and pasture in the same or equivalent state as was received at the start of the licence period.

References –

[Document 15: Parks Operational Plan 2015-16](#)

[Document 16: Farm Licence: Capital Works Agreement](#)

Meeting notes - Alternatives to farming in the park

- Greater Wellington should explore alternative – sustainable – approaches to achieving the same public benefits (fire suppression, weed control, maintaining an open landscape) currently provided by farming.
- There may be other ways of making income from the park that are more environmentally sustainable, e.g. manuka honey.

GWRC response –

- GWRC undertook an extensive review of farming on QEP in 2012, including the options and implications of not farming (see reference).
- The review showed “strong stakeholder support for the land management approach developed in the SLUP which retains farming at QEP as a way to manage open space values, and to maintain an accessibly rural activity (accessibly and physically) in an increasingly urban area.”
- The farming licence was tendered in 2014 following the results and recommendations of this review.
- A review of the Parks Network Plan will begin in 2019, which will provide an opportunity to consider the values provided by the park and how these can be achieved.

References –

[Document 11: Farm Review](#)

Meeting notes - Concerns about the practices of “pasture renewal” and cropping:

- The possible ecological impacts of large-scale monocultures on the local ecology was raised. Plantain, rape and clover are all non-indigenous species and rape is not a naturalised component of the local ecosystem.
- The visual impact of crops, especially rape, which looks highly unnatural.
- The allergenic impacts of crops, especially rape.
- What happens at the end of the crop rotation? Once a paddock has been sprayed with glyphosate and an annual or perennial crop established, is the farmer then obliged to repeat the process every two to five years?
- Did Greater Wellington understand, at the time it entered into the current farm licence, the extent to which the practice of “pasture renewal” would be used in the park?

GWRC response –

- Yes - GWRC understood that pasture renewal would be part of the farm practice under the new licence agreement
- With the benefit of hindsight, we should have done more to raise community awareness of the process of pasture renewal before it began.
- The pasture on the farm in previous years was mainly annual ryegrasses, clover, brassicas, oats and summer barley, all of which were non-indigenous. It was returned to annual grasses as short-term tenure gave no reason to invest in perennial pastures.
- A small area of the farm has been sown with forage rape to reduce soil acidity, increase fertility, and allow permanent pasture to be established. Forage rape is a brassica: it is not the really bright yellow crop that people may be thinking of (rapeseed).
- The brassica is sowed and dressed with lime & fertiliser. It is grazed over summer by lambs, and cattle are break-fed over winter. Any gorse seed that germinates is sprayed out. The soil is then sown into permanent pasture – plantain and clover.
- Once the perennial pasture (plantain & clover) is sown, an emergent spray is needed around 6 weeks after germination to deal with weeds that may have also come up. This is followed up by a spray about every two years also to control weeds. Neither of these kills off the pasture.
- Beetham Pastoral's business model is based on implementing industry best practice, technology, planning and monitoring.

References –

<http://beethampastural.co.nz/>

[Document 17: Farm Grazing Map](#)

[Document 18: Agronomist Report](#)

Meeting notes - Fencing of streams and riparian restoration planting

- Questions were raised as to whether riparian fencing/planting as it is currently practised, is sufficient to address the impacts of agri-chemicals and livestock on streams.
- Riparian strips must be wide enough to provide effective ecological corridors. They need to be sufficiently wide to provide for wildlife movement and habitat, as well as nutrient attenuation. The width of riparian strips must be guided by scientific knowledge about these matters.
- The location and detail of areas to be retired and restored should be decided in consultation with community groups that are already undertaking restoration projects in the park.

GWRC response –

- The Proposed Natural Resources Plan for the Wellington Region encourages riparian management through policies and non-regulatory methods, but does not specify a set distance. Policy 101 encourages good management of riparian margins including: the exclusion of livestock; and the planting of appropriate riparian vegetation; and the management of pest plants and animals.
- Current practice for riparian management in QEP is a minimum of 5m, aiming for 10m, within the constraints of landforms and infrastructure. For example – wet areas adjacent to streams are fenced in; tracks or other infrastructure may prevent a wide riparian strip in some places.
- The Friends of QEP project funded by MFE includes stream shading trials using different vegetation types. This project will inform riparian planting in the park and throughout the region.
- Wetland and dune revegetation trials have also been carried out at QEP since 2011. The results of this would be still in draft form – and we will make them available when they are finalised.
- There are numerous opportunities for environmental restoration of currently retired areas across the park, to which GWRC has recently added a further 32ha following agreement of the new farm licence. GWRC will gladly work with the community to identify which of these areas should be addressed first. We are grateful for the work already undertaken and will be pleased to have your input in the future.

Meeting notes - Implementing Sustainable Land Use Plan provisions regarding wetlands

- Wetland restoration should take priority over farming in the park. This would be consistent with the SLUP and the Reserves Act.
- Areas identified as “wetland” in the SLUP and that are already enclosed by existing fences should be retired from grazing as a matter of priority. Retiring these wetlands would cost no money because they are already fenced. Community groups could undertake enhancement planting in these areas beginning with the next planting season.

GWRC response –

- GWRC has recently retired 22ha of wetlands, as part of the total 32 ha retirement, which will be restored over coming years. Restoration will involve weed management to allow the existing wetland species (seed stock) to re-establish. Plants have been ordered for the next few years, in consultation with the Friends of QEP.
- Recent investigations and groundwater monitoring results provided by the M2PP project show that the other “wet” areas identified in the SLUP are not wetland. These areas have therefore been included in the farming licence as productive land.
- As noted above, GWRC looks forward to working with the community to investigate water management options and undertake planting in the large wetland areas that have been retired.

References –

[Document 19: Groundwater Monitoring Results](#)

Meeting notes - Greater Wellington should be a leader in “good farming practice”

- People are disappointed that Greater Wellington has been slow to practice what it preaches in addressing the environmental impacts of farming on its own land. In the matters of fencing stock out of streams and chemical use, the actions of the Council should set an example to private landowners. There are still cases of stock having direct access to waterways on Council land.
- The term “good farming practice” is used in Greater Wellington documentation but how is it actually defined?

GWRC response –

- Since 2012, GWRC has made significant progress towards fencing all streams in Queen Elizabeth Park to exclude livestock, and expects to achieve this well before the deadline set in the Proposed Natural Resources Plan (31 July 2018). We would be happy to host a tour of the farmed area to show the

work that has been completed to date.

- GWRC is guided by the Sustainable Land Use Plan (2012) together with advice from our GWRC Land Management experts. Beetham Pastoral is recognised as a company that demonstrates leading and environmentally friendly farming practice.

References –

[Document 20: Presentation to Friends of QEP AGM](#)

3 December 2015

File Ref: PMGT-5-10

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To the Kapiti Community

Aerial spraying at Queen Elizabeth Park, Labour weekend

Further to recent meetings and newspaper articles, I would like to unreservedly apologise to those impacted by Greater Wellington Regional Council (Greater Wellington) undertaking an aerial spraying operation at Queen Elizabeth Park on Labour Day 2015. It is clear, that undertaking an aerial spray operation in the park on a public holiday was inappropriate timing, and we will not undertake aerial spray operations on weekends or public holidays again at any stage in the future.

As I stated at the community meeting of 14 November, Greater Wellington greatly underestimated the depth of feeling in the Kapiti community around the issue of spraying, and we have committed to work much more closely with the community in this regard.

Greater Wellington greatly values the involvement and interest of the community in the management of Queen Elizabeth Park. We are fully committed to repairing relationships that have been damaged as result of the Labour Day spraying, and continuing to make the park a great asset for the whole of the Wellington region.

Yours sincerely



Nigel Corry
General Manager
Environment Management

LETTER TO KAPITI COMMUNITY RE SPRAYINGDOCK

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

