

Friends of
Taupō Swamp
& Catchment

Friends of Taupō Swamp & Catchment Submissions 2019

Environment Committee
Greater Wellington Regional Council
Thursday 20 June 2019

Plimmerton Farm Development:

Summary

Presentation by representatives from six Porirua Environmental groups: Friends of Taupo Swamp & Catchment, QEII National Trust, Kapiti – Mana Forest and Bird, Guardians of Pauatahanui Inlet (GOPI), Porirua Harbour and Catchment Community Trust (PHT), and the Pukerua Bay Residents' Association.

Background:

The proposed development of the area of rural land north of Plimmerton, known as Plimmerton Farm by Plimmerton Farm Development Ltd is raising many concerns within the Porirua community and across the region as a whole. The Porirua City Council are currently holding open days during which the public are invited to ask questions and give feedback.

Members of the group above have already been engaging with PCC and with the Gillies Group project team over the draft precinct plans for the area. We see this as just the start to a long term commitment to ensure that the best possible environmental outcomes result should any development proceed.

What we are observing is causing us a number of concerns. The area in question comprises the catchment for one of New Zealand's finest harakeke swamps, not to forget one of GWRC's Key Native Ecosystems. The land itself holds significant ecological values, all of which could be impacted adversely by fast and ill-informed development.

Our concerns are twofold:

- **the significant ecological values of the area of the Farm**
- **the proposed planning processes which will determine environmental outcomes for the Swamp, its Catchment, for Taupo Stream and for any adjacent waterways entering Porirua Harbour – from now and over the next 25-30 years.**

We will talk briefly to these issues, and the Committee can also refer to the Handout for reference.

We are here to seek your support for the best possible outcomes for one of the few remaining wetland systems of its type in the Wellington Region. We are requesting that the Committee consider these points:

- A. That Greater Wellington Regional Council undertake an independent peer reviewed study which
 - explores the nature and extent of all the current wetlands and how they contribute to the ecological values of the Catchment on Plimmerton Farm
 - explores the nature and extent of effects of potential damage by the proposed development
- B. Our group urges GWRC to seriously question the SPP process as flagged by the Porirua City Council, on the grounds that there is simply not enough current objective

information upon which the public, and the MfE can best make a decision. We note with concern that the time line is short: PCC intends to lodge an SPP application for consideration by the MfE on Friday July 19th.

- C. Our group urges GWRC to make submissions, and further submissions, on the PCC/PDL (Plimmerton Farm Development) plan change accordingly, in accordance with its statutory functions, and that it defends its position: and,

- D. That GWRC robustly assesses any application for consents PDL makes to GWRC and if effects can't be avoided that those consent applications are declined, and that those decision are defended with appeals if necessary.

- E. Our group also requests from GWRC the fastest possible implementation of the recommendations of the Te Awarua-o- Porirua Whaitua Implementation Programme. Many of these recommendations have a direct relevance to the proposed development on Plimmerton Farm. Moreover, this is very relevant to those groups already lining up as rural properties within the City environs are coming onto the market. We have been advised that the processes around the Plimmerton Farm Development will create a precedent for what is to come. There is much at stake.

June 19th, 2019

Submission: Porirua Draft Growth Strategy.

From: Friends of Taupo Swamp and Catchment Incorporated. (FOTSC)

February 2019

Friends of the Taupo Swamp and Catchment Incorporated is a community led group which formed in 2018, largely out of concern for the protection and enhancement of the Taupo Swamp and Catchment and its ecological values. The aim is to work alongside key national and local bodies, other key community groups and landowners and engage with the local community in order to protect, monitor, restore, and advocate for the future of this functioning and vibrant ecological system.

Principle 2: A Harbour Centred City

Background to this FOTSC submission:

Porirua is already below national bottom lines for harbour water quality in a number of places. We note that the Draft Growth Strategy affirms that the harbour (and its catchment) is our Taonga, thus we are keenly following the proposed greenfield developments in the city's northern growth area, as defined by the areas of Grays Farm, the Plimmerton Farm, and the Mt Welcome farm. All these areas form part of the catchment for the nationally recognised and ecologically significant Taupo Swamp and its various waterways. Whatever comes down the Taupo Stream flows onto Plimmerton beach and into the harbour.

Our concerns are as follows:

Whilst development of open farm land in Porirua City has been and will be an inevitable part of the city's growth, our group urges that any consents given for future developers take into account the **area's unique landforms**, and provide for the **protection of the biodiversity and ecological values** in those areas. At the heart of any future change to landscapes must be that of **water quality**.

While the Draft Growth Strategy broadly acknowledges such issues, and talks about 'water-sensitive urban design approaches', we are keen to see explicit detail in all greenfield planning and consenting. Any consented earthworks must only take place with an improved consideration of water management and quality than is currently the case in Porirua.

We have concerns in regard to:

- Wastewater management
- Stormwater management
- Stream water quality – in particular possible sediment and/or contaminants arising from earthworks, particularly if they are the cut and fill type already consented and occurring in the City
- The protection and maintenance of indigenous vegetation in the catchment
- Any loss of stream habitat in the catchment due to inappropriate piping or bridging

Mt Welcome farm development. In addition we wish it noted that:

- We have concerns about the placement of some proposed housing developments as shown in the current concept plan for that area. One example: the proximity of affordable (cheaper?) housing to the QEII covenanted area.
- Any consents in environmentally unique and ecologically sensitive areas (such as the covenanted bush & surrounds in the Mt Welcome block), be considered conditional on there being a ban on cat ownership in that development.

We urge that:

- At the very least water quality in the Taupo Swamp catchment and out into the harbour is NO WORSE than currently, during and after any development of the areas identified in paragraph one above. (*National Policy Statement on Freshwater Management*).
- Water sensitive design approaches being insisted on at all levels of consent, and strict enforcement of all consents at all stages in light of this
- Developers be required to fund base line measurements for current water quality before any development commences
- Future Project Plans from developers show explicit plans for water quality controls

And finally:

- We understand that in order not to worsen water quality in the harbours, Porirua can only do greenfield development if it offsets at least the additional loading from greenfield with improvements (ie reduced loading) coming from existing developed areas (which means well done density housing, intelligent intensification, and possible retrofitting of some water related services).

Judy McKoy

Bill McAulay

On behalf of Friends of Taupo Swamp and Catchment Inc.

GWRC Environment Committee Meeting

Thursday, 20th June 2019

Taupō Swamp and its Catchment

1. Friends of Taupō Swamp & Catchment (FOTSC)

The Friends of Taupō Swamp & Catchment is a not for profit Incorporated Society which has grown out of concern for the protection and enhancement of the Taupō Swamp Wetland Complex.

We are here to share our concerns with you about the impact on water quality that could result from development of the Plimmerton Farm site. Moreover, we have particular concerns about the Streamlined Planning Process for this development, as recently announced by Porirua City Council.

Our group's objective is to advocate for the Taupō Swamp Wetland Complex and the surrounding catchment to ensure that the ecological values are protected, maintained and enhanced.

We are concerned that this development will have a negative effect and our key concerns are that:

- The development will alter the hydrology of the wetland complex via undertaking significant cut and fill earthworks on Plimmerton Farm.
- The run-off of sediment will be unavoidable as a result of this development and will have a negative impact on the entire wetland complex.
- Significant wetland arms will be lost or degraded via the development encroaching on the edges and the large-scale cut and fill earthworks which are proposed.
- The stormwater retention designs currently proposed will utilise the existing wetland arms within Plimmerton Farm and this will directly impact on the ecological functioning of the overall wetland complex.
- There will be an increase in weed species and mammalian predators as a result of the development which will have a direct negative impact on the wetland values.
- And also, that the process of consent and development must be better informed in terms of biodiversity values and optimum water quality in all areas of the Taupō Swamp Wetland Complex which lie within the proposed development or which are affected by it.

2. The Ecological Values of Taupō Swamp

The Taupō Swamp Wetland Complex is a nationally representative example of a topogenous lowland freshwater mire (peat forming wetland) which is naturally uncommon within the Wellington and is one of only a few which have a largely intact indigenous vegetation cover (Cromarty, 1995).

Taupō Swamp has been identified and ranked as a Wetland of National Importance for biodiversity (Ausseil et al, 2008), a Key Native Ecosystem (Greater Wellington Regional Council, 2016) and an Outstanding Natural Wetland (Guest, 2018). The Taupō Swamp wetland complex and associated tributaries support a variety of native At Risk-Declining/Threatened plant, bird and fish communities. Examples include the regionally endangered swamp nettle (*Urtica perconfusa*), the Australasian Bittern (*Botaurus poiciloptilus*) – Threatened Nationally Critical, Marsh Crake (*Porzana pusilla affinis*) and Spotless Crake (*Porzana tabuensis tabuensis*), longfin eel (*Anguilla diffebachii*) and giant

kokopu (*Galaxias argenteus*) all At Risk-Declining. Taupō stream and all its tributaries have been classed as a 'significant indigenous ecosystem', scoring in the top eight percent of Wellington sites in terms of Biotic integrity for freshwater fish (Perrie, 2018).

Additional supporting information is provided in Appendix 1 (below).

3. Statutory Considerations

- GWRC's functions under the Resource Management Act (RMA) include:
 - The control of land use so water quality is **maintain and enhanced** [section 30(1)(c)(ii)];
 - The control of land use so water quantity is **maintained** [section 30(1)(c)(iii)];
 - The **maintenance** of indigenous biological diversity [section 30(1)(ga)];
 - The control of discharges of contaminants (including sediment) into or onto land, or into water [section 30(1)(f)]; and,
 - The control of taking, use, damming, and diversion of water [section 30(1)(e)].
- Under section 6 of the RMA **all persons shall recognise and provide for:**
 - **the protection** of outstanding natural features and landscapes from inappropriate subdivision, use, and development [(section 6(b)); and,
 - **the protection** of areas of significant indigenous vegetation and significant habitats of indigenous fauna [section 6(c)].
- The **natural values of Taupō Swamp** and parts of its catchment **have been acknowledged:** for example,
 - Taupō Stream (and all its tributaries) is listed as a **River with Significant Indigenous Ecosystems** in GWRC's Regional Policy Statement;
 - Taupō Swamp is a **GWRC Key Native Ecosystem;**
 - The Taupō Swamp complex (which is more than just the land owned by QEII) is an **Outstanding Natural Wetland** in GWRC's proposed Natural Resources Plan;
 - Taupō Swamp is an **Outstanding Natural Feature** in the draft District Plan for Porirua; and,
 - Taupō Stream and parts of its catchment are **Significant Natural Areas** in the draft District Plan for Porirua.
- The **obligations** under section 6 of the RMA are **imposed on all persons.**
- Therefore, the **obligations** under section 6 of the RMA are **imposed on all GWRC councillors.**
- The **obligation** under section 6 of the RMA **imposed on all GWRC** councillors is to **protect Taupō Swamp and its catchment.**
- The residential development of Plimmerton Farm can only proceed if:
 - There is a change to the district plan (the land is currently zoned rural); and,
 - GWRC grants consent to earthworks, culverting, watercourse reclamations, stream diversions, etc.

Note: PCC and PDL does not yet know what consents from GWRC are needed, or if those will be granted.

- No information has been provided by PDL or PCC to date to show that:
 - Adverse effects on Taupō Swamp will be avoided; and or protection achieved.
- Porirua City Council intends to ask the Minister for the Environment's permission to use the RMA 2017 provisions relating to the 'Streamlined Planning Process' (**SPP**).
- Although an SPP is part of the legislation, so are GWRC's obligations under sections 6 and 30 of the RMA.
- The SPP process is simply intended to speed up the rezoning process (from a district council perspective).
- The SPP does not obviate any of GWRC's obligations.
- GWRC will be the consenting authority, in respect of consents need to use and dam water, stream diversions, culverting and reclaiming streams and discharging contaminants.
- But GWRC is also able, and fundamentally obligated, to make submissions on PCC/PDL's plan change.
- There is **no certainty adverse effects** on Taupō Swamp and its catchment **will be avoided.**
- There is **no certainty the protection** required by sections 6(b) and (c) of the RMA **will be achieved.**

4. Next Steps: The FOTSC therefore ask that

- GWRC opposes and makes submissions, and further submissions, on the PCC/PDL plan change in accordance with its statutory functions and defends its position.
- GWRC robustly assesses any application for consent PDL makes to GWRC and if effects can't be avoided that those consent applications are declined, and that those decisions are defended with appeals if necessary.
- GWRC undertakes an independent peer reviewed study on the biodiversity, wetland/freshwater connectivity and the hydrological impacts of the proposed development.
- GWRC implement the recommendations of the Te Awarua-o- Porirua Whaitua Implementation Programme.

Appendix 1: Taupō swamp wetland complex values summary

Wetland Loss in New Zealand

The original extent (pre-human) of freshwater wetlands in New Zealand was 2.4 million hectares. Since human occupation, wetland loss has largely been caused by land development for agriculture with the highest proportion of loss in the lowlands. Nationally wetland loss equates to less than 10% of the original extent. Loss and degradation of remaining wetlands is still continuing (Ausseil et al, 2011b).

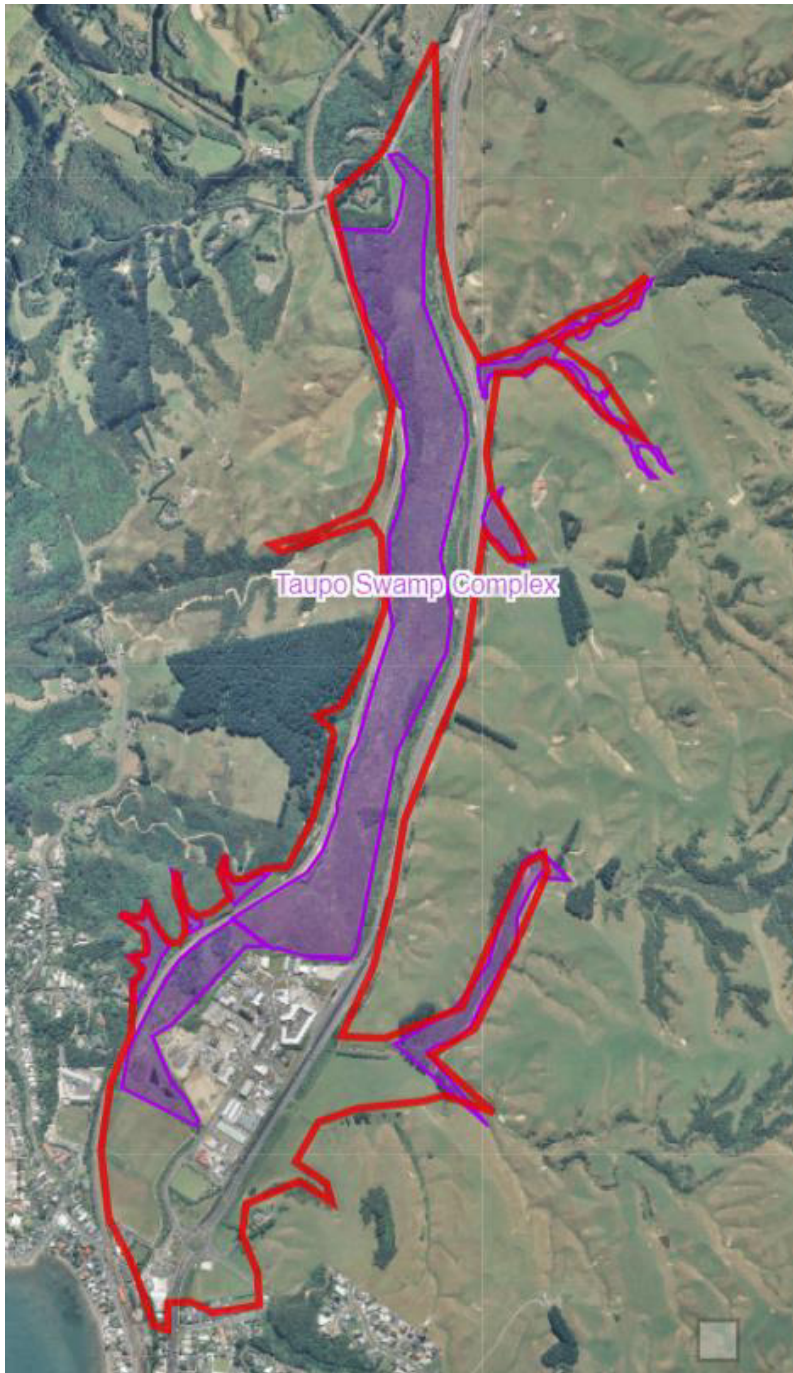
In the Wellington region the loss has been greater than the national average with only estimated 2.3% of original wetland extent remaining (MFE, 2007).

Taupō Swamp wetland complex is a large wetland largely located between State Highway 1 and the North Island Main Trunk Line between Plimmerton and Pukerua Bay (Map 1). It is one of the largest remaining harakeke swamps in the Wellington region and provides habitat for uncommon indigenous species of plants and fauna.

The pre-human extent of Taupō Swamp Wetland complex was approximately 110 hectares (red outline). Around 45 hectares remain purple areas (Map 2).



Map 1. Location map of Taupō Swamp wetland complex.



Map 2. Comparison between the pre-human extent of the wetland (red line) and the current extent of the wetland (purple).

Landowners of Taupō Swamp wetland complex

The main body of the wetland (29.7ha) is owned by Queen Elizabeth II National Trust (QEII) with the next largest area remaining at the southern end owned by Porirua City Council. The remaining arms of the wetland are privately owned.

Landowners	No. of hectares
QEII	29.7
Porirua City Council	6.1
Botha (private landowner)	0.7
Coppieters	0.1
Plimmerton Developments Ltd – 3 areas	6.4

Ecological significance of Taupō Swamp wetland complex

Status

Taupō Swamp is a nationally representative example of a topogenous lowland freshwater mire (peat forming wetland) that is uncommon in the Wellington region and is one of only a few lowland topogenous mires in the Wellington Region that have a largely indigenous vegetation cover (Cromarty, 1995).

In 2008, in a Landcare Research report, Taupō Swamp was identified and ranked as a Wetland of National Importance for biodiversity (Ausseil et al, 2008).

Greater Wellington Regional Council identifies Taupō Swamp complex as a Key Native Ecosystem (Greater Wellington Regional Council, 2016).

The Greater Wellington Regional Council's Proposed Natural Resource Plan identifies

- Taupō Swamp wetland complex as a Significant Natural Wetland (Boffa Miskell, 2011), however following submissions by QEII and others, the officers report has recommended elevation to 'Outstanding Natural Wetland' (Guest, 2018).
- Taupō stream and all its tributaries as 'significant indigenous ecosystem'. The stream scored in the top eight percent of Wellington sites in terms of Biotic integrity for freshwater fish. (Perrie, 2018).
- Taupō pā as a Sites of significance to Ngāti Toa Rangatira. (Greater Wellington Regional Council, 2015)
- Taupō Stream Mouth as a Sites of significance to Ngāti Toa Rangatira. (Greater Wellington Regional Council, 2015)

Flora

The vegetation of the wetland reflects variations in ground and water levels. Plant communities are diverse with 205 plant species recorded in surveys between 1949 and 2016. (Wildlands, 2016). In the lower and wetter areas, harakeke, raupo and sedges dominate. In drier area and around the edges it is dominated by shrubs such as Coprosma, bracken fern, kanuka, tutu and cabbage trees. (Wildlands, 2016).

Table 1: Nationally and regionally threatened plant species recorded in and adjacent to Taupō Swamp, Plimmerton (Van Meeuwen-Dijkgraaf, 2016).

Species	Common Name	National Threat Classification	Regional Threat Status
<i>Urtica perconfusa</i>	Swamp nettle	At Risk-Declining	Regionally endangered
<i>Ranunculus macropus</i>	Swamp buttercup	Data Deficient	Data deficient
<i>Lindsaea linearis</i>	fern	Not Threatened	Gradual Decline
<i>Epilobium pallidiflorum</i>	Swamp willowherb	Not Threatened	Sparse
<i>Gonocarpus incanus</i>	herb	Not Threatened	Sparse
<i>Sparganium subglobosum</i>	burr-reed	Not Threatened	Sparse
<i>Carex diandra</i>	sedge	Not Threatened	Data deficient
<i>Epilobium chionanthum</i>	marsh willowherb	Not Threatened	Data deficient
<i>Galium trilobum</i>	Native bedstraw	Not Threatened	Data deficient

Fauna

There are 19 indigenous bird species recorded in Taupō Swamp complex. Six of these species have a national threat ranking.

Table 2: Threatened indigenous bird species recorded in Taupō Swamp, Plimmerton (Van Meeuwen-Dijkgraaf, 2016).

Species	Common Name	Threat Classification
<i>Botaurus poiciloptilus</i>	Bittern	Threatened-Nationally Critical
<i>Haematopus finschi</i>	New Zealand pied oystercatcher	At Risk-Declining
<i>Larus novaehollandiae scopulinus</i>	Red-billed gull	At Risk-Declining
<i>Porzana pusilla affinis</i>	Marsh crake	At Risk-Declining
<i>Porzana tabuensis tabuensis</i>	Spotless crake	At Risk-Declining
<i>Haematopus unicolor</i>	Variable oystercatcher	At Risk-Recovering

Fish

Nine indigenous freshwater fish species have been recorded in Taupō Swamp, six are migratory species and four species classified as At Risk – declining.

Table 3: Threatened freshwater fish recorded in Taupō Swamp (Van Meeuwen-Dijkgraaf, 2016).

Scientific name	Common name	Conservation status
<i>Anguilla dieffenbachii</i>	longfin eel	At Risk – Declining
<i>Galaxias argenteus</i>	giant kōkopu	At Risk – Declining
<i>Galaxias maculatus</i>	īnanga	At Risk – Declining
<i>Gobiomorphus huttoni</i>	Redfin bully	At Risk - Declining

Taupō Swamp wetland complex

The catchment of Taupō swamp wetland complex is approximately 665 hectares. Most of the catchment is used for agricultural, however there are a large number of lifestyle properties.



Map 3. Taupō Swamp wetland complex catchment.

Threats

Modification, destruction, and fragmentation of wetland ecosystems in the catchment are the main threats to wetlands. Factors include:

- (i) Urban and rural development - filling in gullies and ephemeral streams
- (ii) Land use intensification
- (iii) Pest plants
- (iv) Pest animals
- (v) Grazing animals
- (vi) Loss of hydraulic connectivity
- (vii) Creating barriers to species movement
- (viii) Contamination of freshwater and coastal ecosystems by sediments, pollutants, and nutrients from land use, stormwater and sewage discharges.
- (ix) Drainage of wetlands, channelling or piping of natural waterways, and abstraction of water for human uses.
- (x) Climate change induced rainfall frequency and intensity

Threats to indigenous fish species

- (i) Sedimentation – destroys feeding ability and habitat of fish
- (ii) Flashiness – increased run-off from impervious surfaces
- (iii) Contamination – run-off from roads, industry, and households
- (iv) Loss of connectivity -perched culverts, destruction of habitat by piping streams
- (v) Piping or straightening streams

Geological Significance

Taupō Swamp was formed from a series of large earthquakes over c3,000 years. Originally it was part of the Porirua Harbour however uplifting changed it to an estuary at the southern end and eventually to a freshwater wetland. Taupō Swamp wetland complex is of geological significance to the Wellington region because

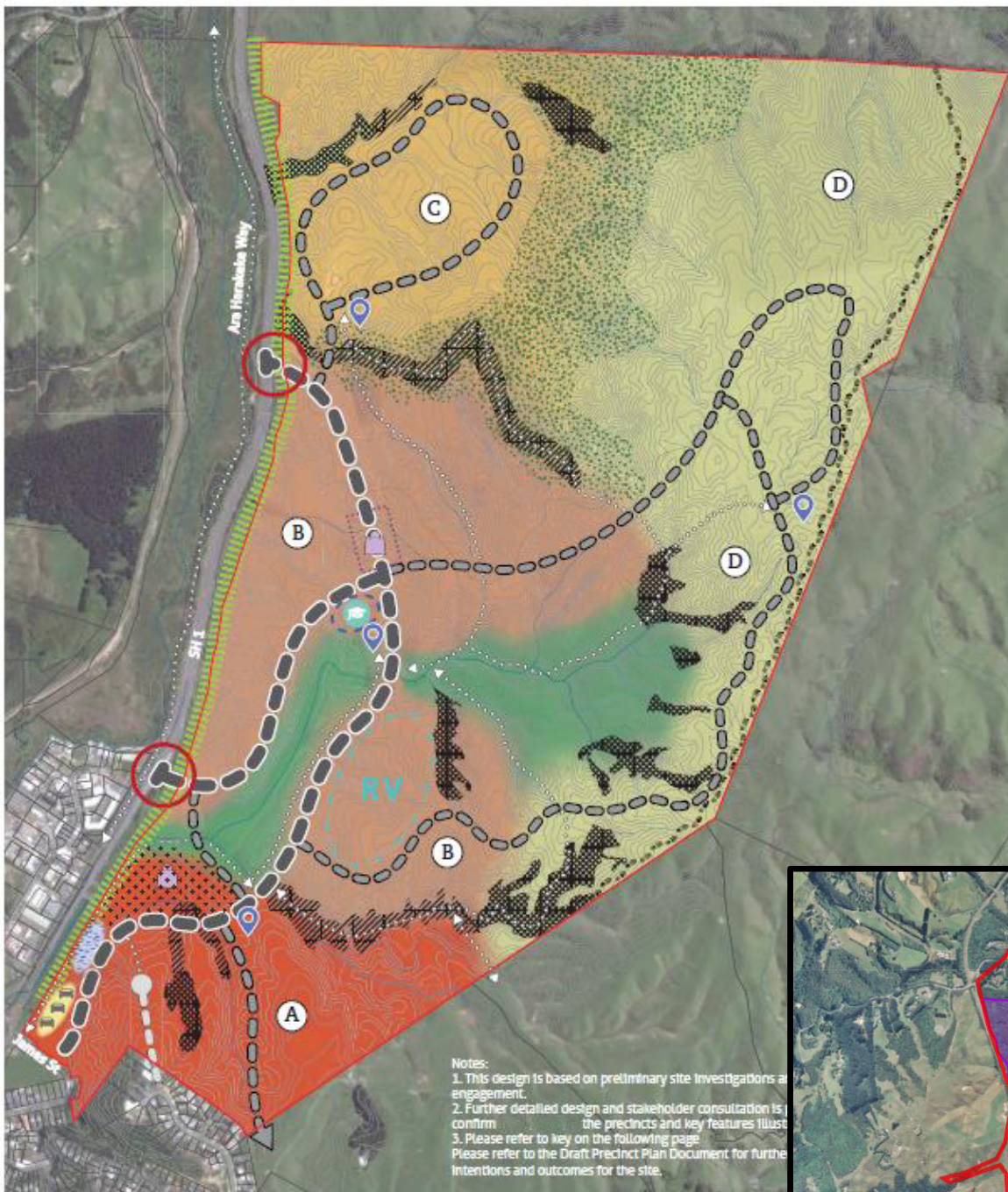
1. It is an unusual landform in the Wellington region - it is a drowned valley and was gradually raised by large earthquakes (c7) over several thousand years 5500 to 3,100 years ago
2. Is a rare depository of very recent sediments - sediments below Taupō Swamp are a continuous record over 5,500 years
3. Preserves useful evidence of past large earthquakes in the Wellington region as it lies between 2 faults – Ohariu and Pukerua and 3,100 years ago a large earthquake on Wellington fault lifted it above sea level creating fresh water ponding. Further 2,300 years ago the Ohariu fault lifted it again changed to a freshwater wetland (Cochrane, 2002, 2003).

References

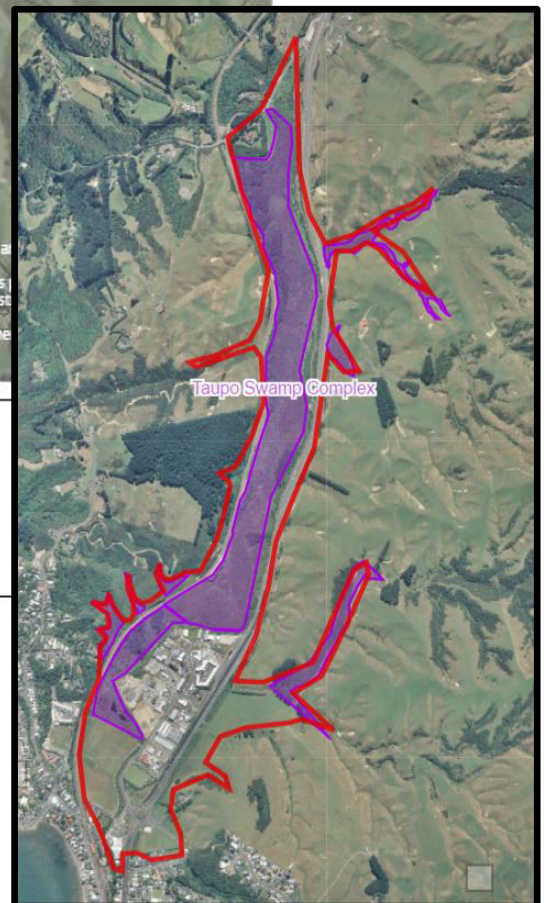
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D R A F T P R E C I N C T P L A N

M A P



Notes:
1. This design is based on preliminary site investigations and engagement.
2. Further detailed design and stakeholder consultation is required to confirm the precincts and key features illustrated.
3. Please refer to key on the following page.
Please refer to the Draft Precinct Plan Document for further intentions and outcomes for the site.



ED ELEMENT DESIGN ENGEO local laschke Rutherford TDG
URBAN Engineers HARRISON GRIERSON ENVELOPE ENGINEERING NOW Stantec
LAND STRUTURE MANAGER

P L I M M E R T O N F