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Waitaki
DISTRICT COUNCIL
TE KAUNIHERA Ā ROHE O WAITAKI

To the members of the Upper Waitaki Zone Water Management Committee

MEMBERSHIP

Barry Shepherd (Chairman)	Peter Skelton
Mathew Bayliss	John Wilkie
Jay Graybill	Murray Cox
Lisa Anderson	Gary Kircher
Simon Cameron	Richard Subtil
Sandra Hampstead Tipene	
Moeraki Representative (vacant)	

Notice is given of the Meeting of the Upper Waitaki Water Zone Management Committee to be held on Friday 16 September, 2016, at 9.30am

VENUE: Mackenzie Country Inn, Twizel

BUSINESS: As per agenda attached

WAYNE BARNETT
CHIEF EXECUTIVE OFFICER, MACKENZIE DISTRICT COUNCIL

MICHAEL ROSS
CHIEF EXECUTIVE OFFICER, WAITAKI DISTRICT COUNCIL

	<p align="center">Upper Waitaki Zone Committee Meeting</p> <p align="center">Friday 16 September 2016</p> <p align="center">9:30am</p> <p align="center">Mackenzie Country Inn, Twizel</p>	
9:00 am	Arrive / Cup of tea	
9:30	Standing Items: Apologies, Confirmation of Minutes, Correspondence, Regional Committee update, Facilitator Update	Page 3
10:00	New thinking: Opportunities and challenges of measuring nitrogen leaching at the farm scale – presentation and discussion	Sam Carrick Landcare Research
10:40	Zip Delivery: Hydrogeology Investigations	Nicole Calder -Steele, Environment Canterbury Page 8
11:00	<i>Morning Tea</i>	
11:15	ZIP Delivery: Aquaculture Environment Plans	Rick Ramsay Aquaculture Information Group
11:40	ZIP Delivery: Biodiversity project decision, funding update, and planting toolkit discussion	Rob Carson -Iles, Environment Canterbury Page 10
12:00	ZIP Delivery: Update from Zone Team	Michael Hid, Environment Canterbury
12:20	Zone Committee: Communications	Gerald Raymond Environment Canterbury
12:40	General Business <i>General Public</i>	
1:00PM	<i>Meeting Close and Lunch</i>	

**ENVIRONMENT CANTERBURY
MACKENZIE AND WAITAKI DISTRICT COUNCILS**

**MINUTES OF THE MEETING OF THE UPPER WAITAKI ZONE WATER
MANAGEMENT COMMITTEE, HELD AT THE MACKENZIE COUNTRY INN,
TWIZEL, ON AUGUST 19, 2016 AT 9.31 AM**

PRESENT:

Barry Shepherd (Chair)
Simon Cameron
Mathew Bayliss
Sandra Hampstead-Tipene
John Wilkie
Richard Subtil
Murray Cox
Jay Graybill

IN ATTENDANCE:

Nic Newman, Zone Committee Facilitator
Keri-Ann Little, Committee Secretary, Mackenzie District Council
Ian Lyttle, Environment Canterbury
John Benn, Department of Conservation
Shirley Hayward, Environment Canterbury
Jason Holland, Environment Canterbury
Helen Shaw, Environment Canterbury
Elinor Watson, Genesis Energy
Lisa Orchard, Genesis Energy
Aaron Hakkaart, Mackenzie District Council
Pat Shuker, Twizel Community resident
Helen Totham, Timaru Herald Reporter
2 Members of the public

WELCOME:

The Chair welcomed all members and visitors to the meeting.

APOLOGIES:

Resolved that an apology be received from Commissioner Peter Skelton and Gary Kircher.

Chair/ Jay Graybill

MINUTES AND MATTERS ARISING:

Resolved that the minutes of the meeting held on 15 July 2016, be confirmed and adopted as a correct record.

Chair/ Simon Cameron

CORRESPONDENCE:

The Chair will distribute the Regional committee summary from the recent meeting to all members.

REGIONAL COMMITTEE UPDATE:

Attached to the agenda was a copy of the Chair's 9 August 2016 meeting report to the Regional committee.

The Chair and Mr Cameron attended a recent Chair and Deputy's meeting. Mr Cameron reported useful meeting discussions regarding Plan Change 5 and the Orari Temuka Opihi Pareora (OTOP) zone water committee were beneficial. He said OTOP reported difficulty locating a water source in their zone. He added that the Ashburton Zone are currently investigating the possibility of a storage Lake being formed. He noted Environment Canterbury had welcomed a New Science Director Stefanie Rixecker to the Team of Directors.

The Zone Committee agreed an invite be extended to Peter Scott to attend Zone Committee meetings on a permanent basis. Mr Subtil highlighted Mr Scott is the only listed nominee for the new South Canterbury constituency. The Chair stated he would contact Mr Scott and encourage him to attend the Zone Committee meetings.

IMMEDIATE STEPS BIODIVERSITY REVIEW:

Mr Newman provided feedback to Committee Members regarding the review of Immediate Steps programme which was completed in early 2015.

The Committee provided feedback regarding the proposed changes, which were criteria expansion with Community engagement, more targeted focus, streamlined admin and Zone Manager sign off for under \$5,000, longer term projects and limited carry over of uncommitted funds and discretion to fund 100%.

Committee members agreed monthly Zone Committee meetings were timely enough for all sign off regarding funding decisions and all funding allocation should be approved by the Committee. Email was suggested as a viable option for early sign off if required.

Mr Bayliss said less concerned about financial consequences, however he believes the Zone Committee needs to take ownership of decisions. He suggested feedback provided from the Zone Manager regarding follow up and completed projects.

Mr Graybill added a financial report included for the Committee's information regarding spent and unspent funds would be beneficial.

Mr Subtil suggested unspent funds could be used to engage available expertise and funding for the purchase of native plantings appropriate for the habitat while identifying preferable planting areas for landowners.

The Committee agreed to streamlined administration but were not comfortable with the \$5,000 sign off by the Zone Manager. Mr Newman said he liaise with Robert Carson –lles highlighting a plan for projects to be undertaken with the whole committee involved.

The Committee discussed the need for advertising in local town's portraying a consistent message of the Zone Committees work while updating the Committees profile. Suggested a more personalised message maybe more effective in engaging the Community.

Mr Newman suggested a Communication paper be included in the Zone Committee agenda for further discussion at the next meeting.

GENESIS ENERGY:

The Chair welcomed Elinor Watson and Lisa Orchard from Genesis Energy to the meeting. Ms Watson provided Committee Members an update on works at Lake Tekapo.

Ms Watson updated the Zone Committee on Genesis Energy and the Tekapo Power Scheme as a whole.

Ms Orchard updated the Committee on the Tekapo Intake Gate Project. She said Genesis Energy propose to construct, operate and maintain a new intake gate for the Tekapo power scheme adjacent to the southern shoreline of Lake Tekapo.

The Chair thanked Ms Orchard and Ms Watson for their presentation.

The Committee adjourned for morning tea at 10:57am and reconvened at 11:21am.

PLAN CHANGE 5 UPDATE:

Mr Newman updated the Zone Committee members on the hearing schedule for Plan Change 5.

The hearing commences on Monday 22 August and the current hearing schedule is available on the ECan website. The latest version of the schedule is attached as Appendix 1 of this agenda. Please note this may be subject to further change and for all enquiries about the schedule please contact Sarah Drummond at Environment Canterbury.

LAKE MIDDLETON INVESTIGATION:

Helen Shaw provided Committee members with an update on initial investigations at Lake Middleton. She invited Committee members to engage in discussion regarding Lake Middleton not meeting its water quality outcomes and suggestions for next steps moving forward.

Mr Lyttle reported Shelton Downs impacts on Lake Middleton, he had been working with the Landowners regarding an application for submission with the inclusion of overseer and an FEP, to farm over the whole property including a sensitive Lake Zone. He added that remedial work had been completed on "Middleton Stream" removing vegetation and soil around the streambed and fencing off of the stream itself.

Ms Shaw spoke to a powerpoint presentation outlining the reconnection of Lake Ohau and Lake Middleton.

The Committee suggested "Middleton Stream" and Lake Middleton be included on the Water quality input list (TLI monitoring list).

The Committee asked for more information to identify where the problems are coming from, regarding urgent water quality testing on both Lake Middleton and "Middleton Stream", ground water and boundary, water intake and discharge points.

Confirm the FEP and fencing is undertaken. Peer review of the information gathered to allow for further use of the information recorded.

Mr Bayliss noted that all sensitive Lakes should be included on the water quality testing requirement list.

MACKENZIE DISTRICT COUNCIL:

Aaron Hakkaart, Senior Planner – District Plan Review, Mackenzie District Council provided an update to Committee Members on Freedom Camping and the District Plan Review.

Mr Hakkaart reported the Freedom Camping bylaw had been through the consultation and submission process, self-contained conditions had been tightened up. The Regional freedom camping operational group had produced a strategy. He said Tourism New Zealand had been involved with the Regional strategy.

Cr Cox said there should be a strong messages being sent back to Councils from this Committee regarding enforcement of bylaws. He said Local Government need to come up with a mechanism to collect a tax.

Mr Hakkaart reported the District Plan review process is currently underway.

Enforcement and education is essential added Mr Bayliss. He suggested the Zone Committee provide the following feedback regarding their concerns including water management strategy, Biodiversity, land use around sensitive water bodies, recreational amenities and access, economic growth, ensuring infrastructure is installed to support activities etc. water quality for urban and town water supplies and stormwater and industrial.

Mr Haakkart thanked the Zone Committee for their feedback and said he will report back to the Zone Committee when the review had processed further with highlighted areas of importance for the Zone Committee to consider.

GENERAL BUSINESS; GENERAL PUBLIC:

Aquaculture Environment Plan and Nutrient Modelling:

Mr Lyttle reported he had meet with Mr Ramsay, Mt Cook Alpine Salmon regarding the preparation of an Aquaculture Environment Plan, this will assist Mt Cook Alpine Salmon with how they assess nitrogen losses using a mass balance system. He noted the review will be completed and reviewed before 11 November 2016 and the application submitted before 1 December 2016.

Mr Newman suggested he approach a local industry person regarding an update and presentation to the Zone Committee outlining the Aquaculture Environment Plan progress.

Kellands Pond:

The Chair asked for an update on Kellands Pond at Wairepo Arm. Ms Shaw said she had requested the area to include the scope of work for sensitive local Lakes testing.

Metering Deadline:

The Chair requested a report from Mike Hide updating the Committee on meter progress be included at the next meeting. He highlighted the 25 August 2016 deadline had been reached.

Swimming Survey:

The Chair hoped all Committee members had participated in the Swimming survey.

Mackenzie Irrigation Company:

The Chair informed the Committee for their information that the Mackenzie Irrigation Company had changed their constitution to sell/transfer shares to the Duntroon Irrigation Company.

At the committee request, Mr Newman said he will invite a representative from the Mackenzie Irrigation Company to attend a Zone Committee meeting to update the committee on the company and how they contribute to the CWMS in the Zone. .

Mr Bayliss asked for the September Zone meeting recreational data re jetboating and swimming be included.

NEXT MEETING:

The next meeting will be on Friday 16 September 2016 at the Mackenzie Country Inn in Twizel.

**THERE BEING NO FURTHER BUSINESS
THE CHAIRMAN DECLARED THE MEETING CLOSED AT 1:15PM**

CHAIRMAN: _____

DATE: _____

AGENDA ITEM NO:	SUBJECT MATTER: Hydrogeology investigations
REPORT BY: Nicole Calder-Steele	
DATE OF MEETING: 16 th September 2016	

Purpose

To update the committee on hydrogeological investigations in the upper Waitaki that contribute to the delivery of your Zone Implementation Programme (ZIP).

Action Required

This paper is primarily for information only. No specific action from the zone committee is required.

Background

As surface water dominates the upper Waitaki hydrological system, there has been very little investigation into the catchment's groundwater resource. Existing work was largely to inform decisions relating to surface water and its management, not for an enhancing hydrogeological understanding.

What we plan to do

To increase our knowledge of the groundwater resource, ground and surface water interaction, to deliver on ZIP recommendations, and to support future planning processes; I plan to undertake the following work in the upper Waitaki Zone:

- combined ground and surface water monitoring
- groundwater level (piezometric) surveys
- aquifer pumping and displacement tests.

To conduct groundwater investigations, the groundwater team will require access to properties. We will approach landowners and occupiers for permission before accessing wells on properties. I am anticipating that we will be installing temporary piezometers (small diameter wells), and potentially drilling permanent wells in some locations. We will avoid installing these on private property wherever possible. Nothing will be installed on private property without landowner permission or checking for buried services. Any installed wells will be subject to the same policies and plans as any other wells.

I plan to undertake groundwater/surface water monitoring programs in two locations; Kellands Pond and the lower Tekapo River. The intention is for these programs to be established before summer 2016/2017 and run until approximately September 2017. Their purpose is as follows:

- Kellands Pond/Wairepo: to understand groundwater flow paths to and around the pond and any seasonal changes, to address the ZIP recommendation. This program will also serve as a means to identify the groundwater divide near Lake Ohau/Ohau River and any seasonal variation in this.
- Lower Tekapo River: to determine whether the river is perched (i.e. disconnected from groundwater) in its lower reaches as has been suggested in previous literature, or if there is just a seasonal disassociation.

The groundwater level surveys will occur on two scales. The first is on a local scale, with the intention of identifying the extent of the groundwater area that feeds into the sensitive lake zones. To understand groundwater flow on a catchment scale, I also plan to conduct a large-scale survey, covering as much of the flat area as possible.

Currently there is limited knowledge of the hydraulic properties of the geological material in the area. I intend to conduct constant-rate and variable-rate pumping tests on suitably yielding wells to gain a better understanding of aquifer properties. I will also conduct displacement (slug) tests to determine aquifer properties in slow flowing groundwater areas, such as in glacial deposits.

Depending on resources, I also hope to survey and map springs. This will help identify where groundwater is close to the surface, or where bedrock fractures, or seepage areas are.

I intend to conduct the above investigations in order to better understand groundwater flow and occurrence in the upper Waitaki. The results of these investigations will be published in individual reports, and also in an upper Waitaki groundwater resource summary report. The investigations will aid in addressing ZIP recommendations and supporting any future planning processes.

I plan to return to present findings from each investigation in due course.

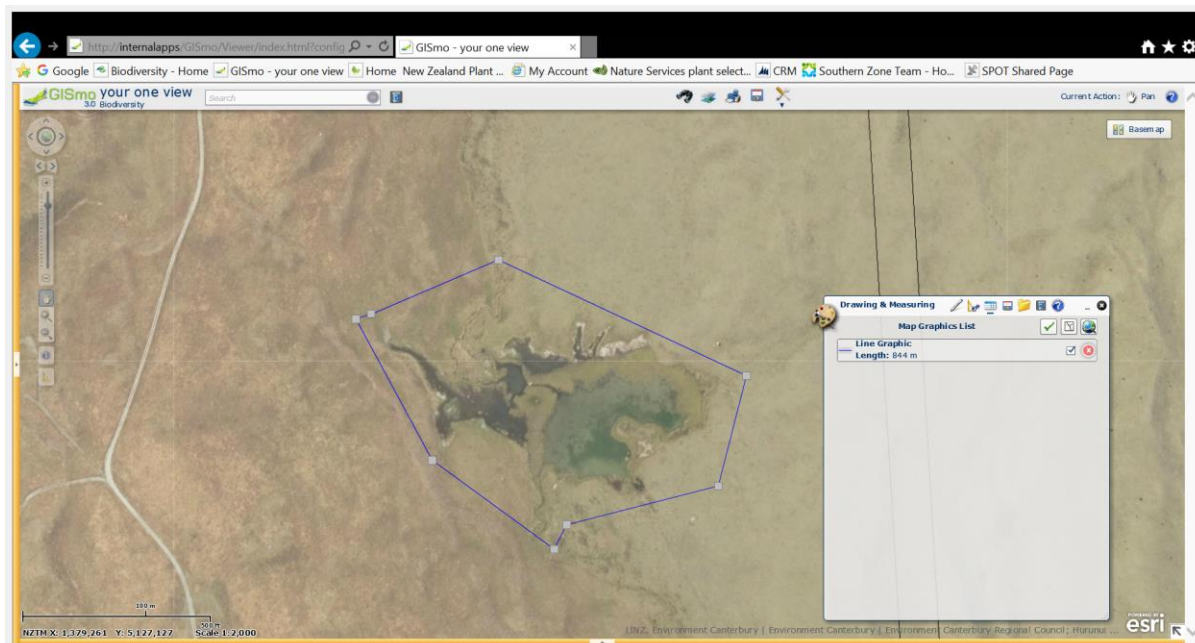
AGENDA ITEM NO:	SUBJECT MATTER: Immediate Steps Biodiversity Decisions
REPORT BY: Robert Carson-Iles	
DATE OF MEETING: 16 September 2016	

Spending to date (IMS fund Upper Waitaki):

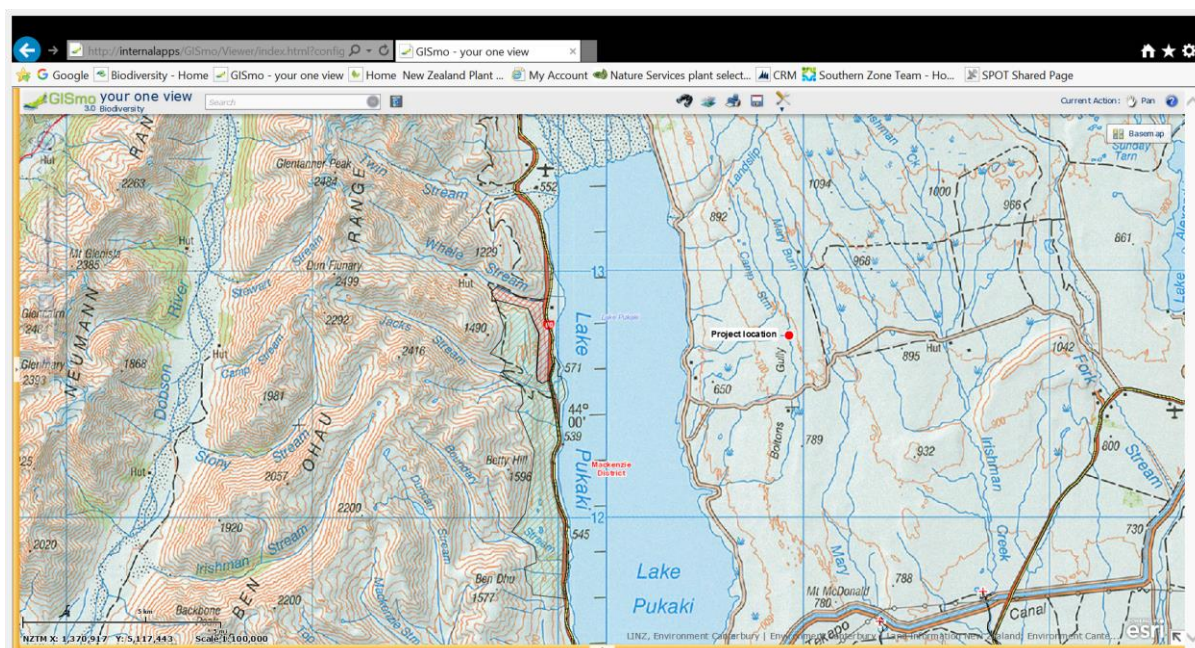
Application Year	Project Name	Amount Allocated
2015/2016	Otematata Wetlands Walkway	\$12,200
2015-2016	Bignose Twaddles Swamp	\$10,000
2016-2018	Willowburn Incentives	\$171,500
2016-2018	Upper Waitaki Pre-emptive weed control	\$90,000
2015/2016	Six Mile Creek Wilding Pine Control	\$18,000
2015/2016	Maryburn fencing – House Hill	\$16,177
2015/2016	Tekapo Regional Park stage 1	\$4,890
2015/2016	Fraser Wetland Willow Control	\$15,000
2015/2016	Omarama School	\$2,228
2013/2014	Ahuriri Tributary Longjaw Protection	\$8,190
2014/2015	Barclays Wetland Fencing	\$23,923
2012/2013	Ben Avon Willow Control	\$11,500
2011/2012	Fraser Stream Spring Protection	\$8,000
2012/2013	Grampian Grays River Fencing	\$10,000
2012/2013	Lower Maryburn Wetland	\$5,300
2012/2013	Mailbox Inlet Springs Protection	\$38,400
2013/2014	Maryburn-Irishman Alder Control	\$45,000
2013/2014	Pukaki Tarns Wilding Control	\$68,000
2013/2014	Stockyard Creek Protection	\$6,600
2012/2013	Upper Wairepo Wetland Wilding Control	\$8,000
2011/2012	Wairepo Wetland	\$10,932
2012/2013	Willowburn Wetland Protection	\$10,200
	Total allocated (to end of 2018)	\$594,130

Boultons Gully Lagoon

Proposed project*	Project details in brief	Land tenure	Cultural Value**	Ecological score	Funding requested (Total cost in brackets)
Boultons Gully Lagoon Protect and enhance a kettle hole tarn, associated wetlands and ephemeral turf communities.	Threat(s): Stock browsing and pugging Proposed activities: Erect 850 m of stock fence	Private	-	32/39	\$12,480 (\$4,160)
<p>Recommendations: This is a great example of a kettle hole tarn which is fed by a stream running along the lateral moraine. Around the permanently wet tarn there are wetland areas and ephemeral turf communities. Fencing off this area will allow vegetation species to recover from browsing and will prevent damage by stock. The project aligns with the Zone Implementation Plan recommendations especially:</p> <p>4.3 Kaitiakitanga (h) protecting and enhancing wetlands</p> <p>5.4 Biodiversity 4.3 wetlands ... identify priority wetlands to prevent or reverse degrading effects.</p> <p>5.4 Biodiversity 4.7 Riparian protection</p> <p>I recommend that this project be approved.</p>					



Project design



Project location

General update:

I recently carried out the audits for the 'Maryburn Fencing – House Hill' and the 'Bignose Twaddles Swamp' fencing projects. Both of these fencing jobs have been done as was agreed and carried out to a high standard. I look forward to seeing these areas recover. Well done to Simons Hill Station and Clifton Downs on their work and for taking steps to protect natural ecosystems on their property. A few photos are included below.

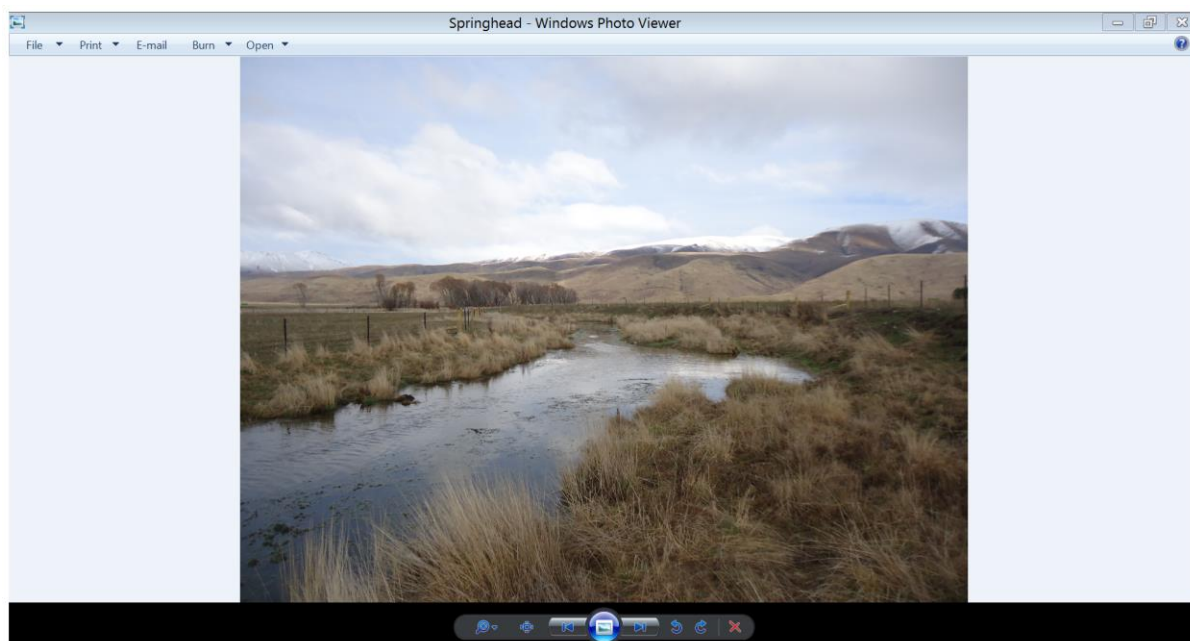


Figure 1: Fencing around a spring head, Bignose Twaddles Swamp project.

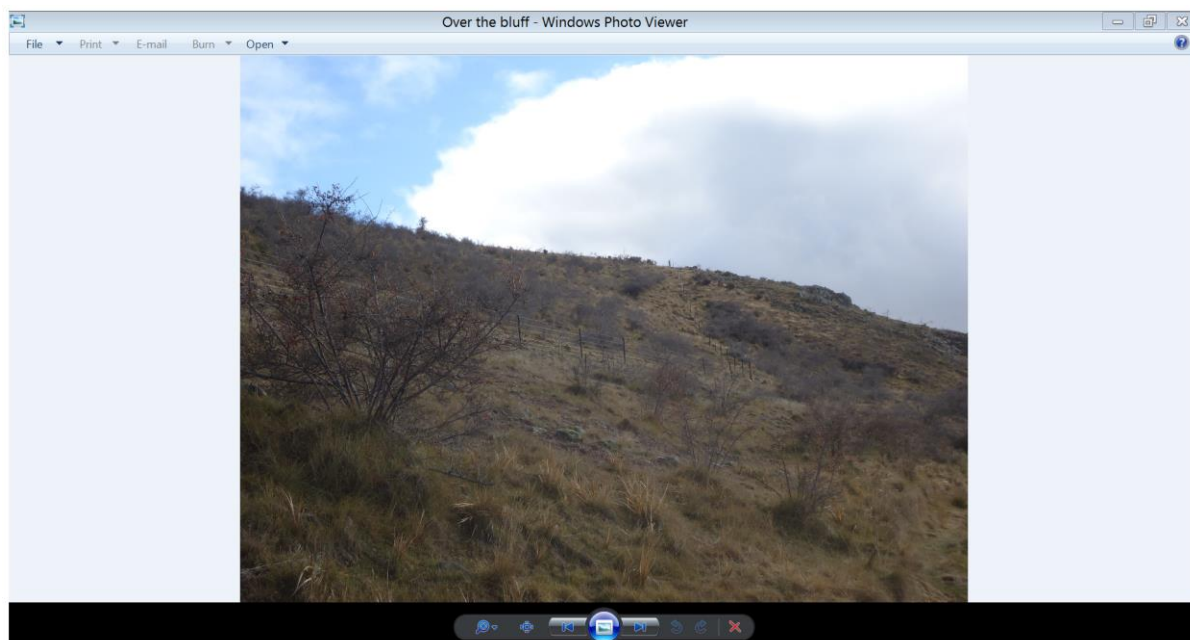


Figure 2: Fence line going up and over a bluff, Maryburn fencing – House Hill project. Because of the terrain a very large riparian buffer has been created. Simons Hill Station has now completely fenced the true left of the Maryburn on its property.