KARAKIA

No karakia was required, as a karakia was conducted at the commencement of the workshop prior to the meeting.

1 APOLOGIES AND INTRODUCTIONS

An apology was received and sustained from Cherie Williams for lateness.

REGISTER OF INTEREST

The Committee noted the Register of Interest with no changes.

2 CONFIRMATION OF MINUTES

2.1 Minutes of the Canterbury Water Management Strategy Waimakariri Zone Committee meeting – 10 April 2017

Amendments to the minutes to be forwarded to staff by email.

Moved C McKay seconded C Latham

THAT the CWMS Waimakariri Zone Committee:

(a) Amends the minutes of the Canterbury Water Management Strategy Waimakariri Zone Committee meeting, held 10 April 2017, as below:

- Item 3, Regional Committee Meeting – 11 April 2017, second bullet point: In-depth reports from members would be presented at alternate meeting, not bi-monthly, as meetings are not held each month.
- Item 3.2, paragraph 8, sentence 1: insert after “queried”, “how the GMP booklet, produced by a number of industry organisations, would be updated, and”.

- Item 6.1, paragraph three:
  - Item 6.1, motion: replace “Accepts” with “Receives”.

(b) **Confirms** the circulated minutes of the Canterbury Water Management Strategy Waimakariri Zone Committee meeting, held 10 April 2017, as a true and accurate record.

CARRIED

3 **DENITRIFICATION WALL PILOT STUDY IN SILVERSTREAM RESERVE – BRIEFING** - L Burbury (Senior Scientist, ESR) Groundwater team) and M Close (Principal Scientist, Waters, Waste and Social Systems Group)

M Close spoke to a PowerPoint presentation, of which a hardcopy was tabled for Committee members’ reference. He noted that he had met with Nigel Harris, as a representative of Te Ngāi Tūāhuriri, regarding this study.

M Close advised that ESR staff were planning to research and demonstrate practical ways of mitigating nitrates in low level waterways. He outlined the nitrogen cycle and commented on how the proposed research intended to address nitrates in the soil as well as nitrates which have leached into groundwater.

M Close presented a map of Canterbury waterways which identified where nitrates were present, emphasising that Canterbury’s main aquifers are oxic and do not naturally remove nitrates.

M Close explained the process of denitrification includes bacteria which breathe nitrate in lieu of oxygen. Bacteria will be attracted to the ‘wall’ by incorporating woodchips as a food source. The process will convert nitrates to innocuous nitrogen gas. He showed examples of similar projects in other parts of the world. The research team’s main query is whether the ‘wall’ system would work in heterogeneous, fast flowing alluvial gravel aquifers.

C McKay queried the minimum requirement for optimum efficiency. L Burbury replied it was dependent on the desired outcome. The bacteria breathe using either nitrogen or oxygen, however if neither are available, it will utilise other elements.

L Burbury provided background to the first ‘wall’ installed in the Waikato region. In relation to the preferred site of Silverstream, it meets the criteria the research team required; nitrogen is present in the groundwater, it is accessible and it is a reasonable distance from a river. He commented that the ‘wall’ is planned to be 300 metres from the river, which is close enough for the trial but far enough away to intercept any major issues. Geophysics is being utilised on the trial, with 3D modelling enabling the analysis of water flows.

L Burbury advised that the research team are nearing the end of year one of the 3 year field study, which has included site selection, geophysical field investigation, and resource consent application; adding that consultation with the Rūnanga will continue.

L Burbury highlighted possible risks, noting baseline data would be collected for future comparisons.

M Close commented that the distance of the ‘wall’ to the river, with monitoring wells in between, would help inform the optimum distance and effectiveness of any future ‘walls’.
J Roper-Lindsay queried the long term nature of the ‘wall’. M Close advised that some of the original sites are 20-30 years old. L Burbury stated the ‘walls’ are still working, however, they are not as effective as they were when first installed.

J Roper-Lindsay queried funding for the research. M Close replied that by the time current funding period is over (four years), the team would have data that could be utilised. L Burbury added that if the infrastructure is not damaged, then there is potential for it to be utilised by students in the relevant fields of study.

C Latham queried how much water flow the ‘wall’ would capture. M Close advised that the wall would be sixty metres wide, and the research would document the effects on the water passing through it.

G Edge was not convinced of the practicality, economics or effectiveness of the proposed research. He stated that it was an engineered solution that did not address the source issue, with added pollution and environmental risks. L Burbury acknowledged G Edge’s concerns, stating the research was aimed at mitigating nitrogen currently in the groundwater. He added the wall was a potential ‘targeted’ approach to address sites where high nitrate concentrations could be addressed, rather than a catchment-wide solution. D Ashby added that there was also a risk of carrying out the study, which could turn out to be impractical on a larger scale, however he supported the project being undertaken.

G Walton also expressed support for the project.

M Griffin advised that regular updates would be provided on the progress of the project.

Moved G Walton seconded C McKay

THAT the CWMS Waimakariri Zone Committee:

(a) Receives this briefing with consideration to the issues and options being considered as part of the development of the Waimakariri Land & Water Solutions Programme.

CARRIED

G Edge, C Williams and C Williams against

G Edge objected to the project being considered as part of the Waimakariri Land & Water Solutions Programme.

4 COMMITTEE UPDATES – Zone Committee Members, A Arps (Waimakariri Zone Delivery Team Leader, ECan) and M Griffin (Facilitator, ECan)

- Priority Project Meetings

  Biodiversity Stakeholder Group meeting 19 April 2017

  J Roper-Lindsay spoke briefly to the tabled report, adding she had also arranged invitations for the Biodiversity Stakeholders Group to attend the next Science Stakeholders Advisory Group workshop.

  She highlighted that the Canterbury Biodiversity Strategy sets out Goals and Actions which could be applied to the LWRP regulatory framework.

- CWMS Regional Committee Meeting – 11 April 2017

  C Latham tabled a report and took it as read. She advised that the next meeting would be 13 June 2017.
Action List

M Griffin reminded members of an upcoming workshop scheduled for Monday, 15 May 2017. Staff would prepare and distribute an agenda to members.

M Griffin tabled the committee’s initial draft recommendations on groundwater as discussed in their 24 April workshop, advising that this would be the format followed to advance the draft recommendations for the solutions programme.

M Griffin elaborated on the Action List tabled for members’ reference.

Lees Valley Farmers Group

M Dodson provided a verbal update on Lees Valley. He advised that staff have been in communication with New Zealand Beef and Lamb who are supporting the Farmers Group. The next steps required an update from the group on what their immediate requirements were, as well as an outline on their future plans. Staff would continue to progress the matter.

4.1 CWMS Target: Recreation and Amenity Opportunities River and Lake Swimming in the Canterbury Region – D Olykan and A Fulton

G Edge reported that all Zone Committees were now being requested to provide feedback by 2 June 2017 on swimming sites.

S Stewart sought clarification on input, and if the Waimakariri District Council and Community Boards could be consulted for input. G Edge advised that initial feedback was being sought from the Zone Committees only at this stage to assist this CWMS Regional Committee Working Group on this task. He believed wider consultation would be undertaken.

4.2 CWMS Target: Recreation and Amenity Opportunities Priority Recreation and Amenity Restoration Sites – D Olykan and A Fulton

J Roper-Lindsay sought clarification on what sites were being sought for restoration and/or what was being proposed to be restored. Staff to follow up and provide a response to members.

4.3 Waimakariri Zone Delivery Quarterly Update - May 2017

- A Arps provided an update on Pond C, a storm water catchment pond on Flaxton Road and Fernside Road. Regular updates would be provided in the future.
- Staff have been in discussion with farmers in the Eyre catchment and will be implementing an infiltration trial. No consent has yet been issued.
- The Henry Hudson report has been delivered to the Cam River Rehabilitation Subcommittee. The Subcommittee has allocated funds towards the work plans for the upper reach of the Tuahiwi Stream and the Southbrook, west of Townsend Road.
- First 500 project will have at least three projects underway by the time the Committee meets again in June.
- Riparian Guide: is being updated with input from the ECan Biodiversity Team with plans to develop an interactive tool in the future. S Stewart queried whether the other Zones Committees would be undertaking similar plan. A Arp replied that he was not aware of their plans, but
noted similar guides may be developed for other Zones based on what is developed for the Waimakariri.

- A Arps advised the Committee on upcoming IMS applications.
- A Arps also advised that the Nutrient Management and Water Use Efficiency groups plan to meet each quarter for a more collaborative approach going forward.

C McKay queried engagement with farmers regarding the GMP campaign, in particular the orange zones as these are farms that should have already applied for a consent. A Arps replied that although the orange zone farms are being encouraged to participate, there has been resistance. C McKay would like to see engagement with these farms followed through.

4.4 Waimakariri Water Zone Committee April Update

Moved C McKay  seconded G Edge

THAT the CWMS Waimakariri Zone Committee:

(a) Receives these updates for its information and with regard to the committee’s 5 Year Outcomes and 2017 community engagement priorities.

CARRIED

5 GENERAL BUSINESS  – D Ashby and Zone Committee members

5.1 Clare Williams announced her resignation from the Waimakariri Zone Committee effective immediately. She advised that Te Rūnanga o Ngai Tūāhuriri have appointed Nigel Harris to be her replacement.

C McKay, on behalf of the Committee, thanked Clare Williams for her significant contribution to the Committee, noting her involvement from its inception, along with her involvement in the other Zone Committees, which she will also be stepping down from. C McKay wished Clare Williams well in the future.

Mahara Te Aika supported Clare Williams in her announcement with a moving waiata to close.

THERE BEING NO FURTHER BUSINESS, THE MEETING WAS CLOSED AT 6.22PM WITH KARAKIA CONDUCTED BY S BRAGG.

CONFIRMED

__________________________________________
Chairperson

__________________________________________
Date