

| Report    | 14.105  |
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| Committee | Strategy and Policy                           |
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## Wairarapa Water Use Project update

#### 1. Purpose

To update the committee on the Wairarapa Water Use Project (WWUP) prefeasibility work programme.

## 2. Background

The aim of the prefeasibility work programme is to determine the most viable site(s) to proceed through to full feasibility investigations.

The prefeasibility work programme has been prepared in accordance with feedback received during and following a workshop between the Irrigation Acceleration Fund (IAF) and WWUP on 5th December 2013, and a subsequent meeting on 26th February 2014.

Feedback on investigation priorities was also received from community drop in days, individual feedback and discussions, workshops with the Stakeholder Advisory Group, the Leadership Group (Leaders Forum) and GWRC staff. The experiences and lessons from other water scheme projects throughout the country have also been taken into account.

The prefeasibility work programme follows on from the investigations complete to date, the major two technical studies being:

- Scheme Options Identification April 2013
- Options Refinement Report August 2013

The Options Refinement Report identified five preferred storage locations (reduced down from the original 242 potential sites), complemented by three 'reserve' storage sites which may be brought in if one or more of the preferred sites was discounted.

The overall philosophy behind the investigations to be undertaken during the prefeasibility phase is:

- Conduct only those investigation tasks that are necessary to help decide what schemes should proceed through to the full feasibility phase if work can be delayed until feasibility phase, then this approach should be adopted
- Identify significant fatal flaws in any schemes before utilising resources (time and money) on investigations
- High level economics viability assessment for each of the sites (this process will be repeated as costs become more refined throughout prefeasibility)
- Match the various project components (storages, distribution, demand, etc.) of each site to get comparable cost estimates for each site.

## 3. Investigation components

In determining the work programme, it was critical that sufficient allowance was made in the programme for:

- Collating investigation outcomes
- Adjusting the programme especially if one or more the 'reserve' storages' has to be brought in and/or other storage sites re-assessed
- Liaising with and receiving feedback from the community in general, affected landowners, IAF steering group, stakeholder advisory group, leaders forum and governance group
- Development of an agreed work programme for the full feasibility phase
- Advising affected landowners as early as possible and before media releases
- Commencing the work programme with an investigation of potential fatal flaw areas which may render whole schemes out of contention.

An overview of the prefeasibility work programme is highlighted in sections A and B below, and an indicative work programme, which was released initially to affected landowners and key stakeholders in the last week, can be found at **Attachment 1**.

## 4. Overview of Prefeasibility work programme

## A. Generic, and ongoing tasks or investigations

- Task: Communications
- Task: Project management and co-ordination
- Task: On plains storage
- Task: Water Demand
- Task: Economic Assessment of Preferred Sites

#### **B.** Technical Investigations

#### Workstream 1: Command Area and River Conveyance

- Activity 1a): Use of Rivers for Conveyancing
- Activity 1a): On-Plains Storage
- Activity 1c): Refine Target Command Area
- Review Point 1 Confirm Storages for Workstream 2 and Command Area

#### Workstream 2: Storages Geotechnical Assessment

- Activity 2a): Geotechnical Assessment of Shortlisted Storage Sites
- Review Point 2 Confirm Storages for Workstream 3

#### Workstream 3: Distribution Geotechnical & Cost Evaluation

- Activity 3a): Engineering Assumptions Review
- Activity 3b): Derive Supply-Demand Modelling Proxy
- Activity 3c): Identification of Distribution Arrangement Options & Prioritisation
- Review Point 3A Confirm Multi-Storage Scheme Options
- Activity 3d): Geotechnical Assessment of Distribution
- Activity 3e): Develop Models of Distribution Arrangements, Cost Estimates & Identify Risks
- Review Point 3B Confirm Storages and Command Area for Remaining Workstreams

#### Workstream 4: Supporting 'Non-Engineering' Studies

- Activity 4a): Planning/Preparation for On-site Investigations
- Activity 4b): On-site Planning
- Activity 4c): Project Scoping for Feasibility
- **Review Point 4** Confirm scope and budget for Workstream 5 ad hoc studies

# Workstream 5: Site-specific environmental, financial, cultural and social studies

• Activity 5a): High-level investigation of several priority issues

#### Workstream 6: Coordination, Liaison and Reporting

- Activity 6a): Consolidate study outcomes and draft report(s)
- Review Point 5 Develop likely recommendations
- Activity 6b): Share and receive feedback on likely recommendations

- Review Point 6 Confirm final recommendations
- Activity 6c) Ratification and release of decisions

## 5. Review points

To accommodate the above process, a number of Review Points have been built into the programme to allow a reassessment of the work required for each Workstream to ensure that the project's resources are targeted correctly and are adjusted as findings are made and conclusions reached. These Review Points are particularly important in the context of this investigation as they allow the project team and others to reassess the direction the project is taking.

## 6. Timing

The work programme has been structured so that 'active' investigations will be completed by the end of March 2015 and the whole prefeasibility phase is completed by 30 June 2015 including scoping for the full feasibility phase.

The completion date of 30 June 2015 coincides with the end of current committed funding by Greater Wellington Regional Council.

## 7. The decision-making process and significance

No decision is being sought in this report.

## 8. Recommendations

That the Committee:

- 1. Receives the report.
- 2. Notes the content of the report.

Report prepared by: Report approved by:

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Attachment 1: Indicative pre-feasibility work programme: March 2014 to June 2015