



# **Hells Gates Dam Feasibility Progress Report #1**

## Reporting Period: May-July 2017

On the 15 May 2017, Townsville Enterprise appointed a consortium of Townsville businesses, led by the Snowy Mountains Engineering Company (SMEC), to undertake the feasibility study for the proposed Hells Gates Dam.



The SMEC consortium proposal incorporates 6 milestones.

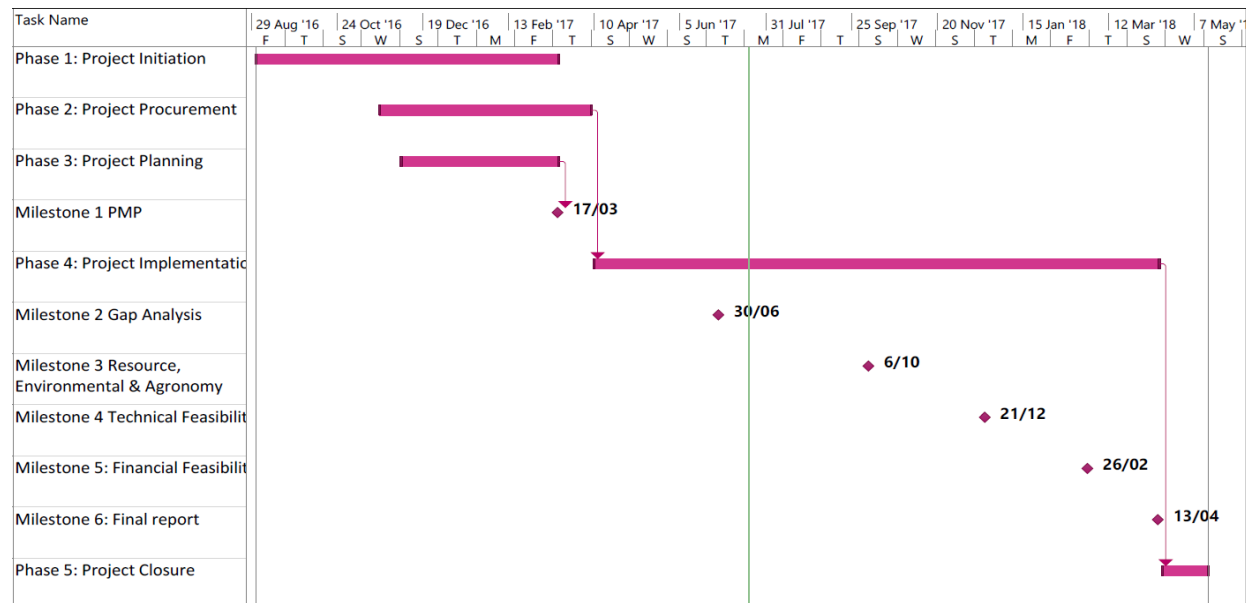
Milestone #	Milestone Overview
Milestone 1: Project Inception and Planning	Project inception workshops (Townsville and Charters Towers) & finalisation of consultancy project plan based on Grant Deed, Consultancy Agreement & outcomes of Project Inception Workshops.
Milestone 2: Information Identification and Gap Analysis	Detailed review of previous literature, studies, reports & findings. Identify design (engineering), hydrology, geotechnical, hydraulic, cost information &/or reliability gaps. Outline risk & proposed process/methodology/approach to redress gaps to ensure information currency, relevance & reliability.
Milestone 3: Agronomy assessment and Water Resource, Environmental and Social Impact Analysis	Assessment of regional agronomy (land & crop capability), water demand & impact on applicable statutory water resource plan & resource operations plan under the <i>Water Act 2000</i> & details on the approach, potential actions required to comply & potential implications for future water planning activities. Identification & assessment of the environmental, and indigenous interests (native title & cultural) considerations & impacts.
Milestone 4: Technical Feasibility Analysis	Technical feasibility assessment of: water storage; hydro energy; water transport; agribusiness; & support infrastructure requirements, options, design & cost.
Milestone 5: Financial Feasibility and Economic Impact	Financial/Social Feasibility (Cost Benefit Analysis), Economic Impact Assessment (Input/Output Analysis) and sustainability evaluation of the project based on Building Queensland Preliminary Business Case framework. Investment Development Pathway analysis.
Milestone 6: Final Feasibility Report	Final Hells Gates Dam Feasibility Assessment incorporating the key considerations, factors and findings from Milestones 2 through 5.

The Study will be complete in April 2018 in line with the project schedule below.

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## Progress during reporting period:

The Hells Gates Dam Feasibility Study is on schedule with SMEC having delivered Milestones 1 and 2 and starting on Milestone 3.



## Milestone 1: Project Inception and Planning

Project inception workshops (Townsville and Charters Towers) & finalisation of consultancy project plan based on Grant Deed, Consultancy Agreement & outcomes of Project Inception Workshops.

Milestone deliverables:

- 3-day Inception workshop of project personnel and stakeholders with site visit
- Project Management Plan incorporating: Approvals and Revisions; Governance; Communication and Reporting; Objectives and Scope; Project Milestones (Deliverables); Project Schedule; Project Payment Schedule; Project Stakeholders Communication and Relations; Risk Management Plan.

**Status = Complete.**

## Milestone 2: Gap Analysis

Detailed review of previous literature, studies, reports & findings. Identify design (engineering), hydrology, geotechnical, hydraulic, cost information &/or reliability gaps. Outline risk & proposed process, methodology and approach to redress gaps to ensure information currency, relevance & reliability.

Milestone deliverables:

- Gap Analysis Workshop
- Digital copy of all reports, information, investigations, or data obtained as part of this milestone
- Gap Register ranking criticality of missing information and options for addressing gap
- Updated risk management analysis incorporating identified information risks and mitigation measures
- Report discussing the outcomes of the gap analysis, including recommendations for further action.

**Status = Complete.**

### **Milestone 3: Agronomy, Water Resource and Environmental Analysis**

The SMEC consortium has commenced activities and tasks associated with Milestone 3. These activities are significantly field based with a focus on: -

- Topography (LiDAR collection)
- Water resource assessment – quantity, reliability and quality. Terrain and IQQM modelling to determine flow, yield and reliability
- Environmental assessment – potential effects of inundation, land use change and agricultural activities with focus on: matters of State and National Environmental Significance; effects on the environmental values and water quality objectives; potential effects on Great Barrier Reef (Reef 2050 & Reef Water Quality Protection Plan 2013); mitigation measures and approvals pathway
- Land tenure and Native Title – land tenure status, impediments and risks and Native Title interests. Determine project footprint and current land tenure and Native Title interests; high-level assessment of tenure and title requirements; land planning (Planning Scheme) impediments; impact on Native Title
- Cultural heritage – Indigenous and other. Cultural heritage review, processes and procedures; and, traditional owner consultation
- Soil and environmental suitability – land use and water demand. Soil and land survey; crop suitability and market assessment; irrigation and crop production risk; best fit land use; environmental risk assessment
- Water market assessment – supply and demand analysis based on best fit land use & crop assessment

#### **Milestone Deliverables:**

- Environmental Assessment Report
- Water Resources Report
- Produce a Land Tenure Report
- Indigenous Interest Report
- Land Capability Assessment Report
- Crop Determination Report

#### **Status = Commenced (Due 6/10)**

Milestone 3 involves significant consultation with major stakeholders with a focus on landholders; Indigenous groups; and, state and local authorities. Field work will be undertaken including cultural and environmental observation, LiDAR collection (aircraft) and soil sampling. The first of a series of briefings will be provided to Federal and State Ministers and Members of Parliament and a public meeting will be convened (Charters Towers 8/8) to brief interested members of the public on the scope and objectives of the study and activities and tasks required to deliver the study.

#### **Project Contacts:**

Further information on the Hells Gates Dam Feasibility Study are available by contacting the Project Manager on [hellsgate@tel.com.au](mailto:hellsgate@tel.com.au) or telephone 0408 190 751.