



englishman river
WATER SERVICE

DATE: April 6, 2016

REPORT TO: ENGLISHMAN RIVER WATER SERVICE MANAGEMENT BOARD

FROM: ENGLISHMAN RIVER WATER SERVICE MANAGEMENT COMMITTEE

SUBJECT: DRAFT PREDESIGN REPORT (UPDATE)
WATER INTAKE, TREATMENT PLANT AND SUPPLY MAINS.

PURPOSE: TO OBTAIN ENGLISHMAN RIVER WATER SERVICE MANAGEMENT BOARD APPROVAL OF THE DRAFT PREDESIGN REPORT (UPDATE), WATER INTAKE, TREATMENT PLANT AND SUPPLY MAINS

EXECUTIVE SUMMARY:

The Draft Predesign Report (Update) - Water Intake, Treatment and Supply Mains, prepared by CH2M Hill, dated December 10, 2015 is complete. The main purpose of the updated redesign report was to review and confirm the first phase of the water treatment plant capacity. The report formally concludes and recommends the first phase of the water treatment plant capacity to be 16 million liters per day.

The next steps for consulting services include 60% detailed design and contract document preparation, with tendering for the project to start in late summer.

RECOMMENDATION(S):

1. THAT the report from the Englishman River Water Service Management Committee dated April 6, 2016, entitled Draft Predesign Report (Update), Water Intake, Treatment Plant and Supply Mains be received;
2. AND THAT the Englishman River Water Service Management Board recommend the Joint Ventures adopt the report titled "Draft Predesign Report (Update) - Water Intake, Treatment Plant, and Supply Mains", prepared by CH2M Hill, dated December 10, 2015.

BACKGROUND:

These technical documents were prepared to give the ERWS guidance in implementing and proceeding with immediate planning needs, capital infrastructure works, budget preparation and potential land acquisition.

The updated predesign report is now complete and engaged the services of CH2M Hill to determine the type of water intake structure, raw water pump station location, confirmation of water treatment technology, plant size and location. Kerr Wood Leidal (a sub consultant to CH2M Hill) determined the hydraulics of the Englishman River for water extraction, aquatic effects based on the new intake location and water model analysis for the transmission water supply mains. Other investigations such as geotechnical, archaeological and biological assessments were also undertaken in an effort to comply with senior government permitting requirements.

The next phase (Phase 4 - currently proceeding) will require detailed design and tender preparation in order to complete the water treatment plant, water intake and required water transmission mains.

In accordance with the adopted Project Implementation Plan, the current proposed project schedule is as follows:

- **Phase 4**
 - Detailed design to 60 % review - April 2016
 - Detailed design to a 90 % review - May 2016
- **Phase 5**
 - Preparation of specification and contract documentation - June 2016
 - Tendering - August 2016
- **Phase 6**
 - Construction - November 2016 to June 2018
- **Phase 7**
 - Commissioning - July to September 2018

REFERENCES

- Project Implementation Plan
- Phase 1 - Conceptual Planning, Budgeting and Scheduling (dated April 2011)
- Phase 2 - Water Treatment Pilot Testing and Aquifer Storage and Recovery Feasibility Analysis (dated April 2014)
- Phase 3 - Final Predesign Report (24 MLD Option), Water Intake, Treatment Plant, and Supply Mains (dated June 2014)