

DWSRF PLANNING TECHNICAL REVIEW CHECKLIST

SECTION I – PROJECT INFORMATION

A. General Project Information

Complete Technical Package Received Date: 4/19/2017

Applicant Name: North Yuba Water District

Project Title: Forbestown Ditch

DWSRF Project Number: 5810006-001P

DWSRF Project Category: F

B. Water System Information

Describe the water system:

North Yuba Water District (Recipient) is a community water system located in Northern Yuba County approximately 20 miles east of Oroville. The Recipient has an approximate 3,105 population and 784 service connection that serves drinking water to the following cities, Forbestown, Challenge-Brownsville, and Rackerby. The water system receives surface water diverted from the South Fork of the Feather River and then conveyed to Forbestown Ditch. The Forbestown Water Treatment Plant (FWTP) treats the raw water from the ditch, which is located 10 miles from the diversion point. Flows from the ditch can be sent to the FWTP or be diverted to the on-site raw water storage reservoir of 10 million gallons. Within the treatment plant, the raw water is pre-chlorinated and pre-treated with an aluminum flocculation, and clarification to remove the heavier raw water solids. Once finish with the treatment process, the treated water is post-chlorinated and sent to an on-site treated water storage tank prior to distribution.

Agency with regulatory jurisdiction over water system has been verified.

SWRCB (District 21- Valley) **LPA (Insert LPA County)** **Other (Insert Regulatory Agency)**

- Current population served by the water system: 3,105
- Current number of total service connections: 784

Please describe the ranked problem:

The Recipients raw water conveyance infrastructure has failed over the years due to the erosion of dirt and rocks, chemical pollutions from unlawful dumping. The open and unlined conveyance ditch is susceptible to both natural and human-caused pollutants, vandalism, damage due to fire, unauthorized withdrawals, and significant water loss. Losses of leakage and evaporation range from 50 and up to 70 percent of flows received. Also, Aluminum is a naturally occurring metal that is presented in the raw water along the alignment of the ditch. At the SF14 Diversion point, aluminum concentrations are lower than the limit of 200 ug/L and higher concentrations of aluminum are collected as raw water proceeds towards the FWTP.

SECTION II – PROJECT REPORT REVIEW

A. Project Alternative Analysis

Describe the scope of the planning project:

The Recipient planning project will consist of providing engineering and final design for Forbestown Ditch. The objective is to repair a 10 mile existing unlined open conveyance canal. This project was originally a construction project and then converted to a planning project because the water system was not ready to proceed. The technical memorandum/preliminary engineering evaluation was developed by a previous consultant, Forsgren Associates. The pre-design preliminary engineering memorandum was prepared Kennedy/Jenkins Consultants. NorthStar will be the current consultant that will review the work previously completed and base their decision with further evaluation. The pipe will run from the diversion point, Woodleaf Turnout SF-14 to the Forbestown Water Treatment Plant. A viable alternative that Forsgren Associates presented was a 36-inch diameter N-12 High-Density Polyethylene Advanced Drainage System (N-12 HDPE ADS) pipe. The pipeline will be installed along the entire existing alignment from Forbestown Ditch and Dobbins-Oregon House Canal (DOHC) except the cascade section. The cascade section location is 2.2 miles downstream of the Woodleaf siphon and 0.4 miles upstream of Costa Creek siphon along the Forbestown Ditch. This section has a 400 feet elevation difference that will remain unimproved and will require detailed engineering design at the upper/lower ends. Overall, NorthStar will provide an updated engineering report with a summary of evaluated alternatives based on their pre-design geotechnical & surveying and select a construction project.

Will consolidation be considered as a potential alternative?

YES

NO

If no, describe why consolidation will not be considered:

Consolidation will not solve the water system's problem regarding the water loss and contamination due to the existing unlined open conveyance canal.

If evaluating a new source, does the project include drilling a test well?

YES

NO

N/A

If no, describe why the applicant does not require a test well:

If evaluating treatment, does the project include a pilot study?

YES

NO

N/A

If no, describe why the applicant does not require a pilot study:

Are there easements or land that will be purchased for the Project?

YES

NO

If yes, describe the easements and why they're needed:

SECTION III – PROJECT APPROVAL

A. Division of Drinking Water Consultation

Did the DDW review and approve the Scope of the Project?

YES

N/A

Date approved by District Engineer: 4/21/17 (Attach approval documents – letter or email from DDW)

Approved By District Engineer: Reese Crenshaw

Explain why DDW approval is not required (if applicable):

B. Schedule

Insert key deliverables of the planning project (modify table as needed):

Deliverables	Tentative Deadline from the Financing Agreement Execution Date expressed in Months
▪ Design Basis Memorandum	2 months
▪ Pre-Design Geotechnical & Surveying Report	4 months
▪ Updated Engineering Report	10 months
▪ CEQA/NEPA	16 months
▪ Draft Plans and Specifications (95%)	17 months
▪ Final Plans and Specifications	18 months

C. Findings

Project meets all eligibility requirements for financing according to the DWSRF Policy and current Intended Use Plan.

PM has checked eWRIMS database to confirm that applicant complies with Water Code Section 5103 and has updated LGTS accordingly.

PM has updated project information in LGTS.

PM has uploaded a word version of the Scope of the Project into LGTS.

Total project cost: \$500,000

Eligible project cost: \$500,000

Explain any difference between requested costs and approved costs (N/A):

Other Comments:

This project was originally a construction project, it was converted to a planning because the water system was not ready to proceed. The technical memorandum/preliminary engineering evaluation was developed by Forsgren Associates. The pre-design preliminary engineering memorandum was prepared by Kennedy/Jenkins Consultants.

D. Special Conditions

List any technical special conditions from the PM or DDW:

- a) Recipient shall not proceed with the evaluation of pre-design geotechnical & surveying until written authorization is received from the Division.
- b) Recipient shall not proceed with the design of plans and specifications until written authorization is received from the Division.

E. Project Technical Checklist Attachments and Approval

Attach the following documents:

- Scope of the Project w/ budget sheet and schedule
- DDW approval email/letter

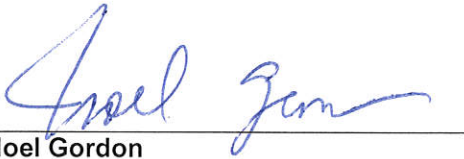
The technical portion of the Project is complete. I recommend the Project be approved for funding purposes. The Applicant is ready to enter into a DWSRF Planning financing agreement.



Fabian Ramos
Project Manager

4/28/2017

Date



Noel Gordon
Senior Sanitary Engineer

5/3/2017

Date