

NEVADA IRRIGATION DISTRICT

ENGINEERING COMMITTEE

January 14, 2020

MINUTES

Committee Members Present:

Laura L. Peters, Director, Division IV
Nick Wilcox, Director, Division V

Staff Members Present:

Remleh Scherzinger, General Manager
Doug Roderick, Engineering Manager
Shannon Wood, Business Services Technician
Tonia M. Tabucchi Herrera, Senior Engineer

Public Comment

None

Minutes of the December 10, 2019, Special Engineering Committee

The Minutes were approved as submitted.

Doug Roderick, Engineering Manager closed item one and moved to item two.

E. George to Lake Wildwood Backbone Extension Pipeline (BEP) Project:

Doug Roderick, Engineering Manager, explained that this item was brought to the Engineering Committee to review the overall project and overall costs associated with the project. Mr. Roderick introduced Tonia M. Tabucchi Herrera, Senior Engineer and Project Manager who presented the item.

Ms. Tabucchi Herrera provided information regarding the Lake Wildwood Treated Water System and the Lake Wildwood Treated Water Plant:

- The Lake Wildwood Treated Water Plant is the sole source of treated water to the Lake Wildwood and Penn Valley treated water systems
- The sole source of raw water to the Lake Wildwood Treated Water Plant is supplied by the Newtown Canal, which is subject to high-rainfall events, explained as storm-water runoff that affects the water quality
- The Lake Wildwood Treated Water Plant was identified as reaching its capacity of four million gallons per day

Goals of the Backbone Extension Project are to:

- Provide supplemental treated water to the Lake Wildwood area and emergency treated water from the interconnection from the E. George System to the Lake Wildwood System
- Provide the availability of treated water service to the adjoining parcels as well as constructive conveyance parcels (those who use raw water in the home for other than drinking water purposes) in the region
- Provide operational flexibility allowing the District to plan for major shutdowns to the Lake Wildwood Treatment Plant
- Allow the District to move water around the system more effectively
- Allow the District to phase-in an improvement plan for the Lake Wildwood Treatment Plant

Analyses performed in the development of the project include:

- The Lake Wildwood Options Analysis Report completed by HDR in 2017; and
- Further evaluation of the hydraulics of the pipeline performed by Sedaru in 2019

The HDR report was included with the Staff Report for the Committee's information.

The HDR Options Analysis Report concluded that the treatment plant would reach its capacity of 5 MGD in 10 years based on potential demands. The options considered were:

- Expansion of the existing treatment plant; or
- Construction of a new treatment plant; or
- A combination of upgrades to the treatment plant and construction of a new pipeline

Ms. Tabucchi Herrera discussed the Hydraulic Analysis performed by Sedaru that looked at the following:

- Potential fire flow for the region
- Waterline extensions along the route
- Impacts on the soft service areas and impacts to E. George and LWW systems

Based on the analyses performed, the recommended option was the construction of a new pipeline with modular treatment plant upgrades, phased as needed with increased demands.

Ms. Tabucchi Herrera discussed the phasing of the project. A spreadsheet included with the Staff Report identified the necessary improvements to the E. George System for the phasing of the project in order for it to work.

The spreadsheet included the route, the pipeline type and length, the goal of each phase, an estimated cost per phase, and comments specific to each phase.

Discussion ensued regarding the overall costs incurred to date and the estimation of costs to complete the project in phases as identified in the spreadsheet.

Ms. Tabucchi Herrera explained that Sedaru was contracted solely to look at the pipeline and the impacts on our systems.

Mr. Roderick explained that the cost estimates provided do not include upgrades to the treatment plant. He further explained that although the upgrades are part of this project, the upgrades to the treatment plant are needed regardless of whether it is included with the BEP project.

Director Peters asked if the structure of the phasing of the pipeline was based on priority of risk of failure and if a risk assessment had been performed.

Mr. Tabucchi Herrera explained that the phasing incorporated upgrades to existing facilities, as well as new construction, based on the logistics of the system.

Mr. Roderick explained that originally the District was moving forward with the pipeline from Ridge Road past Rough & Ready. The District then looked at possibly splitting this project up over a several-year process and spreading it over the capital budget in phases. This was not prioritized based on risk failures. It is new construction that also includes upgrades to our existing facilities that are necessary for this new system to work.

Director Wilcox asked if we were still scheduled to go to bid. Mr. Roderick replied that he has put that off to the side until we could come to the Committee to discuss the overall costs. It was prudent to not just focus on this one piece until looking at, and understanding, that there are other aspects to consider. The reason for today's discussion is not to question whether this is a valid project, rather, to show that all of these upgrades are part of the project, and this is what it is going to cost to get it done.

Director Wilcox asked how this is going to affect the timeline of the project.

Remleh Scherzinger, General Manager, replied that staff has come up with a pay-as-you-go plan. As money comes into the system, the project is being executed. In totality, the cost of the pipeline, not including upgrades to the plant, is estimated at \$19,000,000. If bonding is considered, which would put the project on a faster track, that is what needs to be discussed.

A member of the public asked if there were any other projects that could jeopardize progress on the Lake Wildwood Pipeline project.

Mr. Scherzinger replied that possibilities do exist that could take priority over this project. However, staff has come up with the phasing concept so that the project would be completed in smaller pieces. It is not the District's intent to slow this project down. The

District has an aging treatment plant, a community that is consuming water in the 80th percentile, which would drive any plant into an immediate planning phase. As well as increasing demand in the Penn Valley area.

Mr. Scherzinger also discussed the numerous benefits and needs that this project will resolve. The question is funding.

Further discussion of the benefit of bonding this project ensued. Mr. Scherzinger explained the need to get started on this project considering the age of the treatment plant and the limitation on the amount and quality of water going into it.

Director Peters commented that she likes the idea of the phasing of this project, but expressed concern over the District's financial position. She would like more information before making a decision on funding the project with bonds.

Director Peters asked how the pipeline is a greater priority than the upgrades to the treatment plant.

Mr. Scherzinger replied that it brings a secondary water source onto an isolated system. Improvements can be made to the treatment plant, it can still be cut off, leaving only a two day supply of water to 1000 homes in LWW and 400 homes in PV. By building this pipe out to them, we ensure the connectivity and regional support to that system. If the treatment plant goes down, this pipeline can deliver 2 MGD to the system, under pressure, and keep them up and running while we make the adjustments.

Public Comment:

Mikos Fabersunne, a resident of Nevada City, asked for clarification regarding the demand analyses performed by HDR.

Ms. Tabucchi Herrera explained that during drought conditions, demand was reduced by the conservation efforts of the community, which some continued their efforts after the threat of drought diminished. However, many of those who were conserving did not make a long term habit of doing so. Which is why the higher numbers were considered.

Further discussion ensued regarding the subject of water use and conservation efforts.

Director Wilcox asked for clarification on the status of the project that he can take to a town hall meeting. He specifically wanted to know when the project will go to construction.

Ms. Tabucchi Herrera replied that the project is still in design, and in the process of Right of Way acquisitions. An appraiser is under contract to perform appraisals for two of the three locations for PRV stations.

Mr. Roderick replied, with regards to the question of going into construction that will depend on whether or not the project is broken up into a seven-ten year process. There are pieces that can begin this year relatively quickly.

Director Wilcox summarized that the timing of the project is dependent entirely on how it is funded. If it is funded with cash on hand, it will be broken down into phases, over a longer period of time. If we decide to get bonding, we can combine phases and move the project along quicker.

Mr. Roderick stated we have funding now to begin the first couple of phases. We now need to look at the possibility of bonding to move the project at a faster pace.

Mr. Roderick closed item two and moved to item three.

Project Status Update

Doug Roderick, Engineering Manager, provided the Committee with an update of the status of projects currently in process.

JP