
MINUTES FROM MEETING – DRAFT VERSION ONLY

Public Meeting No. 1

South Fork Stanislaus River Water Supply Reliability Study / FILE 184000276

Date: November 19, 2008
Place/Time: Tuolumne Utilities District Board Room / 7:00 PM
Attendees: See attached

INTRODUCTION AND BACKGROUND

Introductions

Pete Kampa, General Manager of Tuolumne Utilities District (District) introduced the project and the team who has been working on it. The water delivery system used by the District includes a flume system that staff thinks is very vulnerable to long outages. The District saw an opportunity to get federal (Environmental Protection Agency – EPA) money for improvements to the water delivery system. Initially the project was seen as a pipeline project and the District received \$10 million from the state in 2000 for the construction of a bypass pipeline. At the time the money was awarded, the environmental review was not complete. As the project was brought forward to the Board, it became apparent that early 2000 construction costs were closer to \$19M than \$10M.

Therefore, the Board requested that the federal money be used to do a study project to look at possible alternative to a pipeline project so that the project that moves forward is the most cost effective project for the rate payers. The ~\$390,000 grant is matched 50:50 by the District. The District got approval from the EPA to do a study project and get public input. The first step of the project is to develop an Emergency Action Plan to look at how to respond to emergencies. PG&E does it all and TUD has no control. EAP was first work product so that the District knows what will happen in an emergency. Once we have identified what the hazards are, then the Board will decide whether or not we proceed to develop actual alternatives. This is the first meeting in a series.

Bob Ohlund with Stantec Consulting facilitated the meeting, which began with an overview of the project.

Project Purpose and Background

System Overview. The project is studying the Tuolumne Main Canal from Lyons Reservoir to Section 4 at Twain Harte. This is the main feed to the District's system. There are different types of construction in this section of reach – lined and unlined ditches, boxes, and flumes.

Water Supply Facts. The District is responsible for providing a safe, reliable water supply. The Main Canal delivers 95% of the District customers. The Main Canal is owned and operated by PG&E. PG&E and the Main Canal are regulated by the Federal Energy

Regulatory Commission (FERC).

Project Purpose. Analyze the water supply of the Main Canal between Lyons Reservoir and the Section 4 Ditch and to develop alternatives (including the No Project Alternative) to increase the reliability of the water supply system.

Public Meeting No. 1 Goals. The goal of this meeting is to provide background information about the project purpose, to help the project understand the potential risks of the existing water system, and to gather information and feedback from the public.

A water supply outage could result in negative impacts such as: the health and safety of residents and visitors, decreased fire protection for communities, loss of water service to homes and businesses, stores, hotels, businesses, tourism, agriculture.

System Benefits. There are several benefits to the existing water supply system including recreation, public access, a beautiful facility, biking, hiking, and fishing. The canals are used by the community and visitors and is a historic gold rush era facility.

Hazard and Risks. The hazards and risks have been categorized into three areas: catastrophic, isolated, and operations and maintenance, each are discussed further below.

Catastrophic. A catastrophic failure would result in the system being down for months. Examples of catastrophic risk are fire (e.g., Darby), earthquake (e.g., Reno), and vandalism and terrorism.

Isolated. An isolated failure could result in the system being down for weeks. Examples of isolated hazards are a tree falling across or into flume and a landslide or surface drainage creating a washout.

Operations and Maintenance. An operations and maintenance failure could result in the system being down for days. Examples of operations and maintenance risks include ice and snow buildup and potential water quality contamination from the open system. In addition, there is a public safety risk with kids climbing on the trusses.

Geotechnical Risk Assessment. Geotechnical risks include boulders falling into the facility, erosion or drainage causing a blowout, slope failure, footing instability, overhangs, and seismic events.

Fire Risk Assessment. The fire risk for the system primarily due to the wooden flume structures being located in a very wooded area with minimal setbacks. There are very steep slopes that could result in a fire moving very quickly up the canyon. The slopes also make fighting the fire very difficult.

Environmental Constraints. This is a gold rush era landmark. The community is very interested in protecting the facility. There could also be buried archaeological resources. Biological resources could potentially include the gray owl, wolverine, red-legged frog, and yellow-legged frog.

Other Limitations. Other limitations to the system include property ownership. PG&E owns and operates the facility and is responsible for supplying water to the District. To

date, PG&E has made timely repairs as possible. Sierra Pacific Industries owns most of land through the reach. The US Forest Service is a large land owner in the area. The lower reach has 13 private property owners. FERC regulates the system. To do anything to the system, PG&E would need to process the change through FERC.

Impacts of a supply outage. One of the objectives of this project is to complete an objective analysis of the water supply and to identify the potential weaknesses of the system. The potential outage durations and how they could impact the community are being identified. We want to look at potential mitigation measures to strengthen the system. However, at this phase of the project, alternatives are not being identified.

We are providing a balanced approach to the facility. We are approaching it through a triple bottom line analysis. We are balancing the environmental impacts, social impacts, and the costs. The solutions need to balance all three. Environment (forest, animals), Social (hiking, biking, fishing, cultural, aesthetics), Costs (tourism revenue, potential grant, PG&E operations).

Next Steps. The remainder of the time for this meeting will be to obtain feedback from the public. The District wants this to be a transparent process and wants to hear the public's comments. At the end of the system evaluation, we will consider proceeding to identify alternatives. Further comments can be given through tud@tuolumneutilities.com

QUESTIONS AND ANSWERS (public comments are in *italics*)

How much of this portion of the system is flume and ditch? This section is just over 5 miles long. The first section is over a mile of flume. There are two other long flume sections near the top, one is 800 ft and the other is 1,000 ft. Approximately half of the five miles is flume and half is ditch. The ditch is lined as conditions warrant due to leakage and losses.

Are we aware if PG&E is looking at replacing the ditch system with a pipe or lining the ditch to make it less subject to damage? We have had preliminary discussions with PG&E, but they have not mentioned wanting to permanently change or modify the system instead of continuing with their ongoing O&M.

PG&E is the owner and operator of the system. Even if TUD wants to increase the reliability, PG&E has the hydroelectric operations. Is TUD looking into taking ownership of the Main Canal? What sort of leverage does TUD have? The Main Canal is not part of PG&E's divestiture as part of the current bankruptcy proceedings. PG&E and the District have not had discussions about taking ownership of the system since the early 1980s. What the District is doing now is trying to identify what the risks are to determine what sort, if any, of a project moves forward. The contract between PG&E and the District says that PG&E has to repair and replace system and continue to provide water.

It was commented that Tuolumne County has low earthquake risk, particularly this section since it is granitic and there are no earthquake faults in Tuolumne County.

Comments were made about the biological resource concerns stated: The wolverine has been extricated from the central Sierras and has not been seen down to 4,000 ft. The foothill yellow legged has not been seen up to 4,000 feet. The mountain yellow legged frog has not been seen down to 4,000 feet. The red legged frog hasn't been seen at

4,000 feet.

It was commented that Shelly Davis King has done cultural studies on the District's portion of the ditch. One alternative that was identified was that high risk sections could have pipe put into ditch and keep historic characteristics. If there were high risk areas from decomposed granite or rock fall, we could put a pipe (10" or 12") in the ditch and it wouldn't change historic nature of ditch, but would mitigate the risk.

How much have you found risks have impacted the system in the past? A tree fell into J Flume in 1997 and caused the longest outage of about 6 weeks to repair 120 ft. A helipad was damaged by rock slide just below Lyons earlier this year. In general, there is about one outage a year.

Is there a water quality issue with the open ditch system? There is surface water running into the open ditch, which is a water quality issue. The District has filtration plants within the system to treat the water.

Are canals easier to diagnose than pipes? Pipes are a more controlled, engineered environment and there is sufficient procedures in place to maintain pipes.

How much water is lost in the system? This section of the system is estimated to have about 10% loss.

Is TUD considering a way to keep both the system and pipe? We haven't looked at alternatives yet. The risks are still being identified.

Is PG&E planning on doing anything differently? Will this be a source of water as long as we need it? The District hasn't heard anything other than PG&E continuing operating the system as it currently is.

What is the likelihood of getting any money in this economy? There are different types of bond funds or potential money that may be available in the future. The District needs to have a project ready on the shelf when funding becomes available.

Cultural resources should be looked at from a public perspective. What about in the canyon where there is little or difficult value/access? Would you have to replace these areas with wood? Could they be replaced with a different material? Calaveras replaced some of their wooden flume with metal.

One comment was made projecting forward in time and the nightmare vision of a headline in Union Democrat that a fire wiped out a mile of flume that will take a year to rebuild. They will look back to now and regret that they looked at fixing this then and chose not to? If we don't do something to start protecting the water supply now, we may be looked at as real failures.

It was commented that with the General Plan update a few years ago, there was lots of community feedback about how valuable the recreational aspects of the ditch system are. Any project removing ditch would bring people out of the woodwork.

Is the land available for a pipeline and to keep the ditch if that's the alternative? It would depend on the alignment. The railroad grade is a combination of SPI and USFS property.

PG&E can only access 25 ft either side of the canal centerline.

If there was a pipe bypass, would it still be PG&E operated and maintained and still subject to FERC or would it be TUD owned? If we change the operation of PG&E's facility, it will trigger the FERC license. The benefit of doing the pipeline bypass isn't to get out of PG&E and have TUD control, but rather the increased reliability of the system. PG&E will want to avoid doing anything that triggers a FERC relicensure because it's about a decade long process.

Is the canal actually going through private property or does it abut the private property? It goes both ways.

What percentage of the water goes to power generation? All of the water is used by the District, but some of the water is used by PG&E, too.

There were other comments about the possibility of the water supply system being able to supply power in addition to what PG&E obtains.

SUMMARY

The meeting notes will be available on the District's website by following the South Fork Stanislaus River Water Reliability project link:

www.tudwater.com/project_development/

Alternatively, the public is welcome to contact the District for a hard copy of the meeting notes.

The meeting adjourned at 8:30 pm.

The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

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