

# Buena Vista Water Advisory Board

## Minutes of October 21, 2021

### **Call to Order**

Meeting called to order by Chairman Hamilton at 6:35 pm at Public Works & on a Zoom format

### **Attendance and Introductions**

In attendance were: Harley Hamilton, Jerry Steinauer, Roy Gertson, Kelly Collins , Andrew Rice, Rick Bieterman, ( alternate member )

Shawn Williams, Cindi Swisher (Zoom) ( Town Council) & Phillip Puckett, Paul & Jolene ( Zoom , BV citizens) . JVA Engineers Josh & Rick

**Agenda Adoption** Chairman Harley asked for any changes, seeing none, accepted agenda

### **Approval of Minutes**

Minutes from September 16, 2021 Motion by Kelly , 2nd by Andrew to approve the minutes. Vote by members approved.

**Public Comment;** Paul Ahrens wanted to comment the JV Engineering report

### **Business :**

#### **Water Treatment Design Report:**

JVA Engineers presented their design report involving the Treatment plant expansion options. Several slides were presented including Project goals, Pilot Testing, Treatment techniques and improvements, Alternatives, Non- Monetary considerations, Costs, Recommendations, Implementation. JVA also mentioned how very professional the BV staff has helped with the pilot studies and enjoyed working with them.

JVA has recommended expanding the Infiltration Gallery ( IG) and retrofitting the surface plant source with treatment processes of Pre-sedimentation, Coagulation, Flocculation, Gravity Flow filtration, & disinfection using on site generation sodium hypochlorous acid. Target expansion is to enable treatment of 2.5 MG per day which equates to existing BV Cottonwood Creek water rights.

Discussion included the possibility of the IG being re-classified by CDPHE to a Groundwater Under Direct Influence of Surface Water ( GWUDI). This would require filtering the IG water.

Chairman Harley asked for comments from the Advisory Board;

1. Roy stated the existing IG is a source not requiring power with a gravity flow design and has excellent quality and has been very reliable since 1980. Roy liked the idea to leave this system alone, and expand the IG with another series of piping, pumping, and another Creek crossing and also utilize the gravity flow filtration process. Roy

asked if phasing the expansion to fit with required funding is possible. The IG could be filtered with the Gravity Filters , then at a future time the surface plant could be constructed to use the same filters.

Roy asked if the River Bank filtration process would be considered with IG GWUDI classification.

JVA engineers said phasing is certainly possible.

2. Jerry stated the IG is definitely the cleanest source and reworking the Surface plant is not viable at this time. Recommended to expand the IG, check the output flow production, then look at the surface water expansion if needed. Jerry wants to use as much of the existing structures with this expansion.

Jerry mentioned to continue efforts to expand the upstream lakes sources , including an old lake site named Fox Lake, which is now a alluvial meadow.

JVA engineer Josh stated the existing surface plant could be revived using the 4 concert basins for the gravity filters, and other options to use the existing infrastructures.

3. Andrew liked the idea of River Bank credits for the IG classification. It could also reduce the disinfection requirements. The deeper new IG could remain a groundwater source and not GWUDI. New analysis is needed when the expansion is constructed. Andrew agrees with the IG as the best source. The surface water source is subject to future contamination by wildfire soil erosion and mudslides for example. The flexibility to utilize both sources is good , but very expensive.

Andrew stated it's best to proceed with a 1st phase of expanding the IG, and to keep in mind of redundancy importance.

4. Rick is concerned with the requirement of higher levels of operator certification.

5. Kelly thought blending of IG and Surface water needs to reviewed. This was not performed. JVA respond that the surface water contains extensive algae especially diatoms that clogs cartridges quickly, which were used in the pilot study.

6. Harley is in favor of the option to construct both the IG and surface water infrastructures, especially with the areas continued growth. He is concerned with the creek crossings and their vulnerability to fail. JVA engineer responded that the design has two creek crossings from the IG.

7. Shawn discussed the viewpoint from the operators having to operate a complex system compared to a easier system Some options require a “ A” certification which requires higher salary and are hard to find. Also, Production reliability is very important.

8. Phil commented on the Town's funding and revenue sources. The Town's funding sources could not provide for the entire project of a cost \$13.5 M. Phil is concerned that the IG could provide the goal of 2.5 MG per day. JVA engineer mentioned the engineering would design to 2.5 MGD., and the existing IG would be left as is and functional.

9. Paul Ahrens is concerned with funding issues and if new CDPHE standards are implemented , will this design adhere to them? JVA engineer said that the gravity membrane system could handle any new standards.

10. Cyndi said this information and process is complex and a lot to comprehend and has no questions at this time.

Continued discussion with Andrew asking if the design could provide for further expansion beyond the 2.5 MGD. JVA engineers responded that they could provide design for future enlargements.

Andrew also asked if the River Bank credits could be pursued, enabling the CDPHE classification process. Hydraulics should also be reviewed. Andrew said if the IG is classified as true groundwater, the filtration process is not needed.

Shawn said the recent groundwater study of the IG results concurred the IG source is not GWUDI, if surface water is not applied to irrigate the meadow. Another analysis should be conducted on the IG source

Roy did mention of the existing wells and possible new well that provides for production redundancy.

**A motion was made by Jerry, 2nd by Andrew to advise Town Council to proceed with the IG design and construction. Also, proceed with filtration design, but finalize after new IG production is established. Motion voted on & passed.**

JVA engineers feel good about the motion and the IG is the best source to develop. They mentioned the new Wright Water Master plan recommendation to develop the surface source and the IG to provide for real redundancy.

**Next meeting: not set**

Seeing that there was no further business, a motion to adjourn was requested

**Motion** by Jerry, second by Harley to adjourn the meeting at 8:45 PM.

Motion carried.

Respectfully submitted,

Roy Gertson, Board member