

**QCPOA WATER COMMITTEE REPORT AND RECOMMENDATION
ON
COLORADO WATER QUALITY COMPLIANCE PLAN FOR QCP SPRINGS**

INTRODUCTION

In September, 2016, the Quartz Creek Properties Owners Association (QCPOA or the Association) Board of Directors (the Board) appointed a Water Committee to study and make a recommendation for complying with Colorado Water Quality Control Division (CWQCD) regulations related to the QCP springs system as the primary domestic water supply for QC Properties. This report summarizes the Water Committee's findings and recommendation for compliance. Sources consulted or referred to in conducting this study include CWQCD regulations and staff, Colorado Attorney General's staff members, Williams Engineering in Gunnison, Colorado, various Colorado State and federal agencies, Upper Gunnison River Water Conservancy District (UGRWCD) and Jack Barker, Colorado Certified Operator for water and wastewater systems.

BACKGROUND

In 2015, the CWQCD issued an Immediate Response Required Letter and assigned Public Water System (PWS) number CO0226620 to the Association. In summary, that letter along, with subsequent correspondence and conversation with CWQCD, outlined steps required for compliance with state regulations and/or consequences for continued non-compliance including fines and legal action to prevent the use of the untreated spring water for domestic purposes. The Board hired Williams Engineering to conduct a physical study of the QCP springs system in relation to providing compliant water to QCP Owners. That study explored the alternatives for compliance (and non-compliance) and provided data sufficient for the Water Committee to formulate its recommendation. The Williams Preliminary Engineering Report for Quartz Creek Properties Public Water Systems (the "Williams Report") is referred to several times in this report and recommendation.

In the ensuing months since the Board adopted Resolution # 01.16 expressing its "desire to bring the QCP water supply into compliance with WQCD regulations within the earliest feasible time frame", and appointing a Water Committee to seek solutions and report to the Board from time to time, the Board commissioned a preliminary water system study by Williams Engineering, retained the services of Jack Barker as Certified Operator and complied with, or is in the process of complying with, all of the requests by Colorado Department of Public Health and Environment contained in a letter dated March 24, 2017, from the Water Quality Control Division. Additionally, the Board, thru its Water Committee, has maintained positive dialog with the WQCD, reporting and seeking answers concerning compliance options and requirements. WQCD responses have been positive, helpful and cooperative and QCPOA's efforts have resulted in WQCD allowing QCPOA to open and operate the springs system for the 2017 season without penalty, subject to continued efforts by QCPOA toward compliance. Without those efforts by QCPOA, severe penalties were set to be levied against QCPOA in June, 2017, by the Colorado Department of Public Health and Environment.

QCP OWNERS, WATER RIGHTS, WATER SOURCES AND WATER USE

Quartz Creek Properties consists of 393 separate property tracts (claims). Most owners own one claim but in some cases an owner may own multiple claims. All owners own certain defined water rights in the QC springs system. The majority of owners rely on the springs for their source of domestic water while a limited number of owners have private wells, rainwater collection systems or other sources for their domestic water supply. Some of those owners supplement that supply with QC spring water. In all cases, since all Owners are members of the Association and all own water rights in the springs, all Owners are subject to the regulations of CWQCD and share in the liability of non-compliance according to CWQCD and the Colorado Attorney General.

QCPOA SPRINGS AND THEIR USE

There are five springs in the QC springs system which supply most of the water for QC Owners. They are, along with their hourly and daily output as follows:

Armstrong: 600 gallons per minute (gpm) / 864,000 gallons per day (gpd)

Gilmore: 5 gpm / 7,200 gpd

Pitkin View: 2.1 gpm / 3,024 gpd

CP3: 1.5gpm / 2,160 gpd

Western Star (not in use)

Each of the Owners in QCP owns rights to 150 gpd (or more) from the springs and the Court Approved Water Augmentation Plan (Appendix F, Williams Report) allocated 225 gpd per QC claim. If all 393 claims were developed and utilized 225 gpd, the average daily use requirement would be 111,150 gpd. (Williams Report, PG. 7).

ARMSTRONG SPRING IS THE ONLY SPRING CAPABLE OF PRODUCING THAT DAILY QUANTITY OF WATER.

COMPLIANCE ALTERNATIVES

(Refer to Williams Report, Sec. VIII, Pg. 9)

- A. No Action Alternative – “Not a viable alternative” – (Consequences not acceptable).
 1. **See attachment “A”**. (Email Response from Colorado Attorney General’s Office)
 2. Owners would have to secure individual water supplies on their own such as individual wells, rainwater collection systems or alternate supply of treated water, with the closest available supply being the City of Gunnison Water System (would require purchase and transport of water from Gunnison on an individual basis).
- B. Obtain a Groundwater Classification – “Improvements would be extensive, costly and the probability is high that a groundwater classification could not be obtained from the Division” (CWQCD).
- C. Classify the Springs as Under the Direct Influence of Surface Water (requires chlorination treatment) – “most viable alternative” (Williams Report, Pg. 11). “The Supplier must provide filtration and disinfection of the surface water sources...” (chlorination treatment)
- D. Offsite Public Water System – “not economically feasible and would be very cumbersome for the property owners”.

CONCLUSIONS

- Alternative “C” is the best (and only) viable alternative – install a water treatment system.
- Only Armstrong spring produces enough water alone to meet the present and ultimate (build out) requirements of QCP.
- Building one treatment system is the most cost effective solution.
- Armstrong spring is the only spring which has electric power closely accessible.
- A treatment plant on Armstrong spring is the most cost effective alternative.

BENEFITS OF IMPLEMENTING ALTERNATIVE “C” AS OUTLINED ABOVE

- Compliance is achieved.
- If Armstrong spring water is treated, CWQCD will allow the other springs to remain open and operable for fire protection and non-domestic use so long as the those springs are so posted with permanent signage.
- QCPOA will have resolved its water issue with the State of Colorado and will no longer risk the loss of its domestic water supply due to current state and federal regulations.
- The solution is affordable and financially feasible for QCPOA.

- Future budget needs for springs can be accurately projected and budgeted.
- Cost per claim equals less than 2 percent of the average value of an individual undeveloped claim based on a \$30,000 value per claim.

COST

Initial One Time Cost

Williams Engineering 's **preliminary cost estimate** for constructing a small water treatment plant with capacity to serve QCPOA projected needs, including initial construction cost, initial reserve funding, engineering, legal and administrative fees, is projected to be **\$450.00 per claim or less.**

Annual Ongoing Operational Costs

The **projected cost of annual maintenance and operation of the plant and springs system is \$12,000 - \$15,000 per year** which would include cost of a (required) Certified Operator, chemicals and supplies, maintenance and operation of the plant and springs and a reserve for equipment replacement. That annual cost amounts to **\$30.50 - \$38.16 per claim** annually and factors in continued use of volunteer labor for semi and non-technical chores such as sample collection, minor repairs, etc.

RECOMMENDATIONS

The Water Committee recommends the following:

- QCPOA adopt Alternative "C" of the Williams Report and construct a water treatment facility;
- Armstrong Spring be selected for treatment facility and loading station (exact location downstream to be determined per engineering and site availability requirements);
- Williams Engineering proposal dated April 17, 2017, for design of the water treatment facility be approved with July, 2017 start date;
- Jack Barker be retained as Certified Operator per proposal from his company, Outbackjack, LLC, dated May 1, 2017, for a period of 12 months commencing May 1, 2017;
- Water Committee be directed to explore financing alternatives including grants, loans and special assessments and report to Board by August 1, 2017;
- Water Committee Chair be designated Contact Person for QCPOA with CWQCD;
- Project Schedule as listed in Section XIV (Page 20) of the Williams Preliminary Engineering Report be adopted with provision for delays which are not under the control of QCPOA;
- Board of Directors act on this recommendation no later than July 14, 2017, in order that, if adopted, the timetables set forth herein can be achieved.

Approved by QCPOA Water Committee on June 16, 2017

Submitted to QCPOA Board of Directors on June 19, 2017

Dave Denison
Co-chair
QCPOA Water Committee

Steve Frazier
Co-chair
QCPOA Water Committee

ATTACHMENT A

From: Meg Parish <Meg.Parish@coag.gov>
Date: June 18, 2017 at 10:36:41 PM MDT
To: 'Dave Denison' <dd43@verizon.net>
Cc: "Clark - CDPHE, Emily" <emily.clark@state.co.us>, Emily Wong - CDPHE <emily.wong@state.co.us>
Subject: RE: Proposed QCPOA WATER COMMITTEE REPORT AND RECOMMENDATION.docx

Dear Dave,

If QCPOA refuses to take the steps outlined in the May 2017 compliance advisory, particularly the Actions Needed to Return to Compliance, the possible consequences of noncompliance by CDPHE could include:

1. Issuance of an enforcement order for violations of the Colorado Primary Drinking Water Regulations, 5 CCR 1002-11 going back to May 2015. This enforcement order could include public notice requirements, penalties, and interim deadlines in order to come into compliance. Without work towards compliance, the order would be unlikely to delay the penalties or put them into abeyance.
2. If the enforcement order is not complied with, issuance of another enforcement order for violations of the first enforcement order, with significantly steeper penalties.
3. District court enforcement of the CDPHE enforcement order(s) under section 25-1-114.1, C.R.S. Such court action could be against QCPOA, its responsible officers, any successor organization, and/or QCPOA members. Section 25-1-114.1(2), C.R.S. states that “[u]pon finding that a final enforcement order of [CDPHE] has been violated and that the violation of the standard or regulation described in the order in fact occurred, the court shall:
 - a. Impose a civil penalty on the violator of not more than one thousand dollars per day for each day the violation of the standard or regulation occurred if the court determines the violation was willful; or
 - b. Enter such order as the public health may require, taking into consideration, where appropriate, the cost and time necessary to comply; or
 - c. Impose such civil penalty and enter such order.”

The up to \$1,000 a day penalties in the statute are in addition to those already assessed by CDPHE in the enforcement order(s). “Such order as the public health may require” could include a Court order removing the loading stations from certain springs, public notice of the noncompliance on every rental and sale advertisement in Quartz Creek, and/or other actions found to be needed to protect public health.

While not commonplace, CDPHE has brought a number of such actions in the past, including one in 2015/2016 that resulted in a restaurant being shut down and a lien being placed upon the property for the penalties assessed in the enforcement order.

4. If the district court order is not complied with, CDPHE could obtain liens for payment of the Court-ordered penalties on member properties within Quartz Creek. CDPHE could also sue the entities listed above for contempt of court.

Best,

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