

**ICR Water Users Association  
Board Meeting Minutes  
August 16, 2007**

**Minutes Approved: September 12, 2007**

Those Present:

Board Members

Earl Cummings, President  
Bill Meyer, Secretary/Treasurer  
Shirley Lilien, Director  
R J Howard, Director

Contract Staff

Bob Busch, Manager

- 
1. **CALL TO ORDER** - The meeting of the ICRWUA was called to order at 9:20a.m. by Earl Cummings. Board member Hal Lobaugh and Meg Kleinman, Recording Secretary were absent. Bob Busch recorded the minutes of the meeting.
  2. **MINUTES OF LAST MEETING**- Several corrections were made to the draft Minutes of the July 24th during a review.

**Motion: R J moved to approve the Minutes of the July 24, 2007 Board Meeting with the corrections as noted during the meeting; Seconded by Bill; motion passed unanimously.**

### **3. REPORTS**

#### **a. Financial Reports**

Bill discussed the financial report, noting that July revenues were \$31,646.85 and YTD revenues were \$182,439.26. Expenses for July were \$24,056.10 and YTD were \$187,334.81. Net income for July was \$7,590.75, with YTD income at (\$4,895.55). He questioned allocation of the amounts for the monthly and YTD expenses for A Quality Water, stating that he understood they should be approximately 60% allocated to TRR and 40% to ICR. The financial reports show almost the reverse.

*Action Item: Bob will check the allocation of the A Quality expense and report findings to the board.*

**Motion: Bill moved to accept the July 2007 financial report, as the allocation does not affect total amounts, Seconded by RJ: Motion passed.**

#### **b. Manager's Report –Bob Busch**

1. **Water Audit** – Bob presented a revised format for the monthly water usage summary, that included usage by customer category. The board generally approved of the new format, with the understanding continued refinements will be made to the report.
2. **Bills of Sale** – Bills of Sale for ICR and phases 2A, 2B and 2C of Talking Rock have been recorded. Bob has reviewed some of the Bills of Sale recently forwarded to ICRWUA from Harvard, and found several items that need to be investigated by Harvard and resolved. Harvard is looking in to those items.
3. **Williamson Valley Fire District Agreement** – Bob discussed the letter received from Steve Pierce regarding the agreement and his request that WVFD fees for his property outside the

district be eliminated as a condition of his approval. The letter has been forwarded via our attorney to WVFD. The district is attempting to contact Mr. Pierce to negotiate.

4. **System Water Plan** – ICRWUA does not qualify for the exemption from the requirement to include the Water Supply section of the System Water Plan. Bob is proceed with preparing the draft System Water Plan to include that section.
5. **Rate Case** – Sufficiency letter has been received from The Commission. It has issued a procedural order specifying the schedule dates and deadlines for the rate case.
6. **Line of Credit** – Our attorney reports that the ACC Staff is nearly finished with the loan approval application, and will make a recommendation to the Adm Law Judge within a week or two. The attorney suggests that it will be at least another 60 days before a commission order is issued. The loan commitment from National Bank expired on August 15<sup>th</sup>, but the bank has unofficially indicated the commitment will be extended for 90 days.
7. **Newsletter** – The draft newsletter was discussed, with the board suggesting changes to some articles.

The board directed Bob to send the Newsletter, notice of meeting and both the old and proposed new Articles of Incorporation to all members in a single packet. The date of the member/board meeting will be September 12<sup>th</sup>.

#### 4. OLD BUSINESS

##### a. Review of Action Items

As a result of the review, all action items except the following have been completed or otherwise closed:

*Action Item: Earl and Shirley will meet with a county representative to discuss options for the maintenance of the flagpole parcel and the entrance.*

*Action Item: Bill and Bob will;*

- a. *Research data at ADWR in Phoenix to establish the existence of Water Adequacy Reports for the TRR subdivision.*
- b. *Research Yavapai County records for plat approval/water adequacy data.*

As a result of discussions revolving around other completed action items, the following new action items were established:

*Action Item: Bob will check with our rate case attorney and accountant regarding the difficulty (time and expense) involved in adding a fine of \$2,500 for water theft to the rate case.*

*Action Item: Bob will check with our rate case attorney and accountant regarding the difficulty (time and expense) involved in adding a \$300 fee for “estimated water use” to new customer connections. The fee is intended to be classified as a revenue fee.*

*Action Item: Bob will arrange to have the meter at the TRR pump station repaired.*

**b. Non Profit Status** No action required or taken at this time.

##### c. Engineering Consultant

The revised proposal received from Civiltec was discussed. It was suggested that with the actions being taken to test the well field, that it might not be necessary to have Civiltec involved at this time. It

was also suggested that water pressure problem might be identified with a Fire Department test of the system with the golf course lake valve open. There was considerable discussion on both points.

**Motion: Shirley moved to authorize Bob to arrange a fire flow test of the Talking Rock system with the golf course lake valve open to determine water line pressure. Bob is to coordinate with Chris Williamson, CYFD and Talking Rock as needed. Seconded by Bill; motion carried.**

*Action Item: Bob will check regulations to determine minimum water pressure requirements and related remedies.*

**Motion: Bill moved to engage Civiltec to perform task 6 of their proposal (observations of construction of TRR units 10-13) and direct them to coordinate with Bob/Chris as needed. Seconded by RJ; motion passed.**

#### **d. Financial Audit**

The board reviewed and discussed the revised proposal received from Constance Pinney to perform a procedural audit for 2006 and an audit of 2007 financials in 2008. Some of the points in the proposal seemed unclear as to dates and the start date of August 10<sup>th</sup> needs to be changed. It was generally agreed that the intent of the proposal met board expectations.

**Motion: Bill moved to engage Constance Pinney for services described in her proposal of August 3, 2007. Shirley seconded the motion; motion carried.**

#### **e. Well Testing**

Bill reported on meetings held with Southwest Groundwater, Earl, Chris and Craig Krumweide to develop a testing procedure for the well field. He reported that two tests would be conducted, one involving restricting flow from the wells in an effort to eliminate air entrapment as much as possible, the other, a 24 hour/day pump test for 3 days with all wells running. The purposes of the tests seem to be for different purposes, with TRR attempting to find the pumping rates on the wells that produces the least amount of air, and ICRWUA's attempt to determine the pumping capacity of the well field. Bill reported that SWG had objected to a portion of a draft of the testing procedure that was a statement of the problem the tests were designed to help solve. He subsequently removed the problem statement from the proposed testing procedure. The draft procedure with the problem statement is attached to these minutes. The testing procedure has not yet been finalized, one of the questions remaining is how to determine when/if air entrapment levels have been reduced. Bill will continue working with SWG to finalize the procedure.

#### **4f. Letters to Developers**

Bob reported that in response to Earl's concern about charging a fee for estimated water use, he received an opinion from our rate case attorney that such a fee would not be considered revenue neutral by the ACC, and if such a fee were desired, it could/should be added to the rate case. (see above)

The board discussed the advisability of sending the letters to developers without reference to a fee.

*Action Item: Earl will review the letters with Bob to see if suitable language can be drafted.*

### **5. NEW BUSINESS**

**a. Construction water Tariff/Connection Surcharge** (see item 4a under Review of Action Items)

**b. Architectural Committee**

The board discussed its desire to separate the Architectural Committee from the water company. The Architectural Committee's activities have nothing to do with water company business, and such activity is outside the Articles of Incorporation.

*Action Item: Bob will obtain an opinion from our attorney regarding divesting the architectural committee and report to the board.*

**Motion: Bill moved to adjourn the meeting at 12:50 p.m.; RJ seconded; Motion passed. Meeting adjourned at 12:50 p.m.**

**September Meeting will be Wednesday, September 12<sup>th</sup>, and will include a member vote on proposed changes to the Articles of Incorporation**

**Attachment to Minutes: PROCEDURE FOR TESTING AND EVALUATING AIR ENTRAPMENT AND WELL FIELD YIELD AT THE TRR WELL FIELD**

## PROCEDURE FOR TESTING AND EVALUATING AIR ENTRAPMENT AND WELL FIELD YIELD AT THE TRR WELL FIELD.

### PROBLEM STATEMENT

The Board of Directors of the Inscription Canyon Water Users Association, referred to herein as the Board, has received complaints from homeowners within the TRR subdivision concerning an unacceptable concentration of air in residential water. In pursuit of this problem the Board has identified the fact that water pumped at the TRR well field is highly aerated.

A check of well construction reports for the three wells at the well field shows that the well screens start at 41 ft, 64 ft, and 32 ft below land surface in wells 1, 2, and 3 respectively. Casing slotting in the three wells begins at 200 ft, 75 ft, and 52 ft respectively. These combined settings are apparently allowing cascading water to enter the well during pumping thereby entrapping air. This results in aerated water being pumped and cavitation to the pump bowls. This in turn reduces the life of the pump and therefore increases the cost of operating the wells. Simultaneous pumping from all of the wells is believed to increase air production due to increased drawdown in the wells.

Productive capacity of the well field has proven to be only about two-thirds of the initial estimate, with that from well 3 being only about 46 percent of the original estimate for that well alone when all three wells have been pumped at the same time. The initial estimate was for pumpage from each well independent of the other two, while, in fact, pumpage from each well reduces the capacity of the other two by some unknown amount.

The reduced capacity has resulted in the need to pump the well field at 80 to 90 percent of its total capacity during the warmer pre-monsoon season with the water demand mainly associated with the need to irrigate the golf course. During this time, two wells were required to pump virtually 24 hours per day while simultaneous pumpage from the third well was as high as 15 hours per day. This need is expected to remain relatively constant during the pre-monsoon seasons and water demand can only increase as more homes are added to the infrastructure. Given the fact that pumpage from each well reduces the capacity of the other two wells and that the well field demand requires simultaneous pumpage from all three wells that is approaching each well pumping 24 hours per day, there is a need to identify the maximum capacity of the well field with all wells pumping simultaneously.

## OBJECTIVE

The purpose of the Board's testing procedure is to: 1) identify the current yield of the TRR well field as a whole with all wells pumping simultaneously and 2) verify the cause of air entrapment in all of the wells, thereby identifying the solution to the problem.

## TESTING PROCEDURE

The testing procedure agreed upon incorporates the procedure suggested by SWGC to meet their objective and that proposed by the Board to meet its objectives.

The test will begin with all wells having been off for at least --- hours. Following this:

- 1) Prior to initiation of pumpage all wells will be turned off for a period of at least 5 hours.
- 2) Water levels will be measured upon cessation of pumpage and prior to initiation of simultaneous pumpage from all three wells.
- 3) All three wells will be turned on simultaneous and pumpage from all three wells will continue for a maximum of three days.

There is a concern by Harvard Investments that the test will cause the water level in one or more of the wells to fall to or below the pump bowls. Although the past history of pumpage from the well field does not indicate that this will occur, the test procedure will involve continued monitoring of pumpage, water levels and amperage for each well to assure that they are not being over-pumped. Should the possibility of over-pumpage become evident, step 4 will be immediately terminated.

It will be necessary to discharge water pumped during the test into the lake used to irrigate the golf course. Confirmation of the ability of the lake to receive this water is has been made by Chris Williamson in discussion with Harvard employees.

## DATA COLLECTION AND SHARING

The main data to be collected during the test are water levels in the three wells, their individual pumping rates, and amperage. Water levels in the recently constructed fourth well in the well field will also be measured. The above information needs to be collected on a continuous schedule during the test at time periods to be decided upon prior to testing.

The requirement to measure water levels means that a sounding tube will need to be installed in each of the three pumping wells prior to testing. Southwest Groundwater Consultants (SWGC), the consulting firm employed by Harvard to conduct their own test in order to determine the feasibility of eliminating or reducing the concentration of air in the water delivered to residences and establish a maximum pumping rate for the well field in conjunction with this goal will investigate and report on the options available to meet this requirement. SWGW will also rent and cause instrumentation to be installed in each well that will allow electronic collection of water level data during and immediately preceding the test.

Harvard and the Board have agreed to conduct the two test simultaneously.

Pumping rates and amperage of each well will be manually recorded from flow meters and amperage gages already present on each well.

All data collected during the test will be shared between Harvard and the Board. SWGW will collect and collate, all of the data collected during the test. Copies of manually collected data will be provided to the Board and electronically data will be transmitted to the Board via computer.

#### ANALYSIS AND REPORTING OF TEST RESULTS

SWGW will prepare a report for Harvard on test results. It is agreed that Harvard will provide the Board with a copy of the report.

The Board will also analyze and report on the test independent of SWGW. A copy of this analysis will be made available to Harvard.

It is agreed that all parties will meet prior to report preparation to discuss interpretation of test results and attempt to resolve any difference in interpretation should they exist.