

# FIELD INSPECTION REPORT FOR PRICE RIVER DISTRIBUTION SYSTEM

Prepared by Gertrudys Adkins  
Field Inspection date: July 6, 2004.

large  
concrete

update POD  
based on  
N. Carbon Group  
D app.

## 1. NORTH CARBON GROUP MAIN PIPELINE

There is a pipeline at this diversion that was recently built and diverts water for the following water users: Spring Glen Canal Company, Bryner Hansen Canal Co., Stowell Ditch, and Oberto Ditch. Bryner Ploutz Canal Company has a separate pipeline that originates at this point. The North Carbon Group has direct flow rights as well as reservoir rights. The pipeline capacity is about half of the combined water rights flows. The pipeline has a 40-inch diameter, which later is reduced to 36 inches. There is a sedimentation pond at this diversion. Water is measured downstream with an Ultrasonic meter. The meter sometimes stops working and thus the totalizer does not indicate all of the usage. Picture #1: Diversion structure and pond. Picture #2: Diversion headgate. Picture #3: Meter.

**Recommendation:** The meter should be maintained regularly to assure proper operation and accuracy.

## 2. BRYNER-HANSEN SPLITTER

This diversion splits out of the main pipeline. A few feet downstream there is a meter on the pipeline that records the flows at this diversion. The meter reading is constantly fluctuating, indicating that the flows maybe surging and not stable. At the time of the visit the meter reading was showing a flow varying from 750 to 900 gallons per minutes. The meter appears to be not working properly. Picture #4: Meter. Picture #5: Pipeline split structure.

**Recommendation:** It is recommended that this meter be inspected regularly for accuracy.

## 3. BRYNER-~~PL~~OUTZ DIVERSION

There is an 18-inch Parshall Flume at this diversion that is tilted about 0.10 inch from side to side. The flume is also silted in. Some rust was observed on the side of the flume and on the staff gage. The channel has a lot of vegetation. Picture #6: Parshall flume.

**Recommendation:** The flume needs to be reset and the channel cleaned up to accurately measure the flows.

4. **OBERTO DITCH**

This diversion consists of a pipeline originating from the main North Carbon Group's pipeline and a meter. The meter is Hydro-flow Series by EMCO Flow System (Picture #7). There was no water diverted at the time of the visit.

**Recommendation:** None.

5. **GAY DITCH DIVERSION**

There is a small headgate at this diversion and it is in good condition. A 1-ft parshall flume located downstream on the ditch was inspected and found to be level in both directions and is operating well. Discharge measurements were taken upstream from the flume. The flow registered by the flume was 1.96 cfs while the amount measured was computed to be 2.2 cfs. The water entering the flume a little too fast may have caused lower flow reading at the flume. Also, immediately before the flume there is a headgate and cement box that causes the water transitioning into the flume to be a little turbulent. The flume staff gage reads directly in cfs. Picture #8: Diversion headgate. Picture #9: Parshall flume.

**Recommendation:** It is recommended that the water commissioner use his staff gage with level readings and the standard tables to read the flows. Thus reducing the possibility of introducing errors when reading direct flows from the flume staff gage.

6. **PRICE WELLINGTON DIVERSION**

No significant changes have occurred with this diversion since our last visit in the year 2000. Downstream from the main diversion structure there is 10 ft concrete Parshall flume that is in good condition. A good hydraulic jump is formed at the flume's exit. The canal is clean and well maintained. No current meter measurements were taken at this flume. The staff gage showed a reading of 0.95 ft at the time of the inspection. Picture #11: Diversion structure. Picture #15: Concrete flume.

**Recommendation:** None.

7. **GOLF COURSE DIVERSION**

There is a small head gate a few yards below the Price Wellington Diversion structure that diverts water to one of the Golf Course ponds. Picture # 10: Diversion headgate.

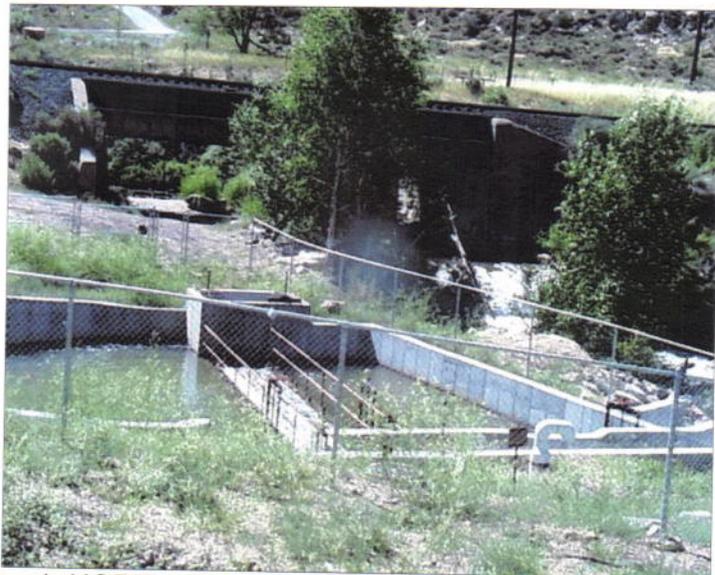
**Recommendation:** None.

8. **CARBON CANAL DIVERSION**

No significant changes have occurred with this diversion since our last visit in the year 2000. The 10 ft concrete Parshall flume was level and operating properly. The channel is clean and well maintained. The flows were measured at 47.45 cfs while the discharge table indicated a flow of 47.25 cfs. This diversion is the last diversion in the system. In regulating the flows in the river, the water commissioner checks all the diversions upstream from this diversion, then he checks the Carbon canal and decides if more water should be released from the reservoir to supplement flows in the river. Pictures #12 & 13: Diversion structure. Picture #14: Concrete flume.

**Recommendation:** None.

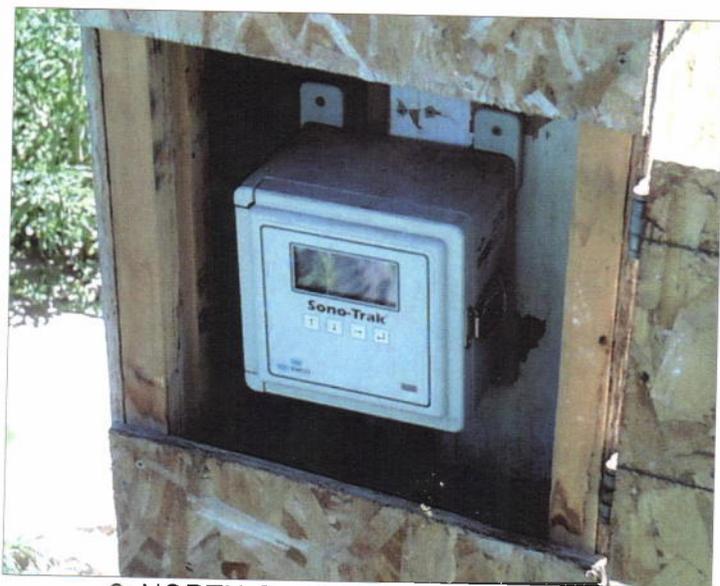
PRICE RIVER DISTRIBUTION SYSTEM TOUR OF DIVERSIONS ( 7/6/2004)



1: NORTH CARBON GROUP DIV. STRUCTURE



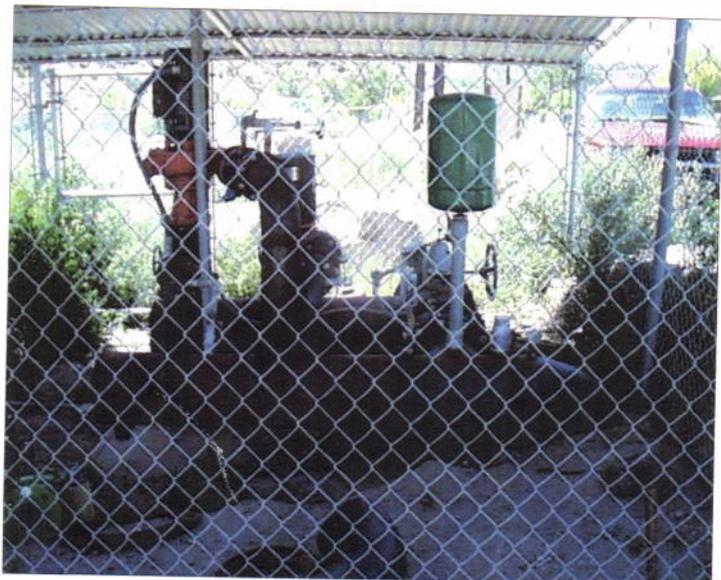
2: NORTH CARBON GROUP DIV. HEADGATE



3: NORTH CARBON GROUP METER



4: BRYNER-HANSON METER



5: BRYNER-HANSON SPLIT



6: BRYNER-PLOUTZ DITCH 18" FLUME

PRICE RIVER DISTRIBUTION SYSTEM TOUR OF DIVERSIONS ( 7/6/2004)



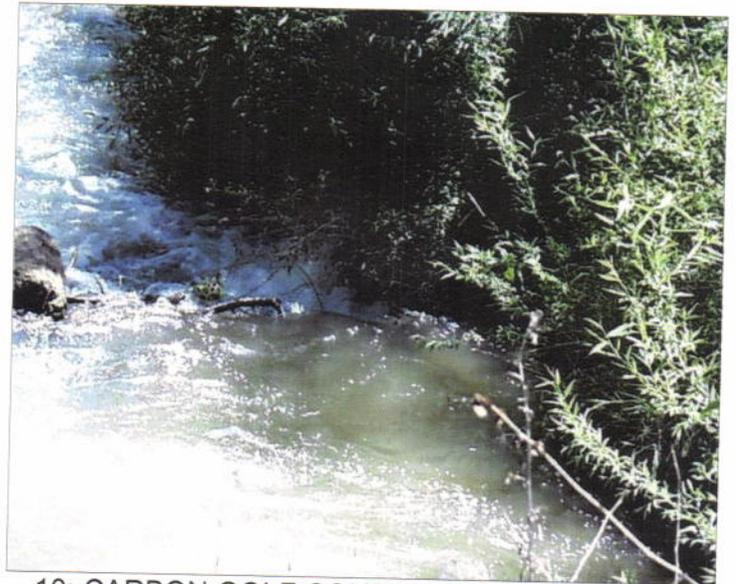
7: OBERTO DITCH METER



8: GUY DITCH DIVERSION



9: GUY DITCH FLUME



10: CARBON GOLF COURSE DIVERSION GATE



11: PRICE WELLINGTON DIVERSION STRUCTURE

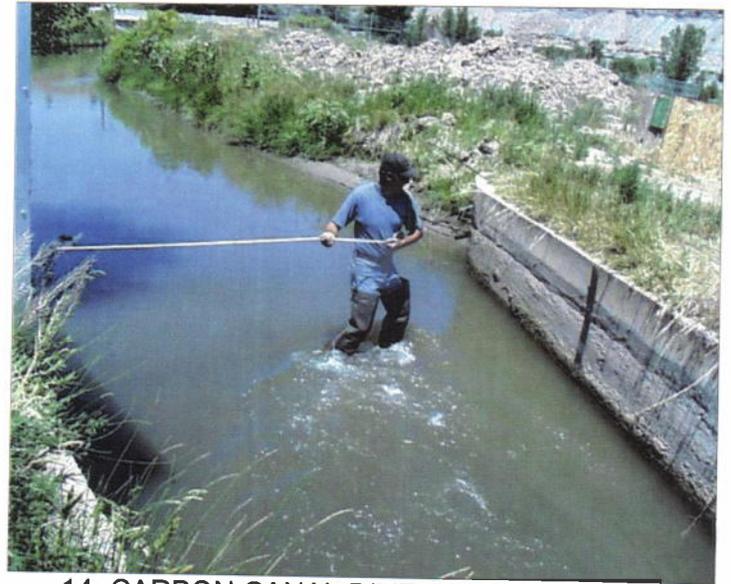


12: CARBON CANAL DIVERSION STRUCTURE

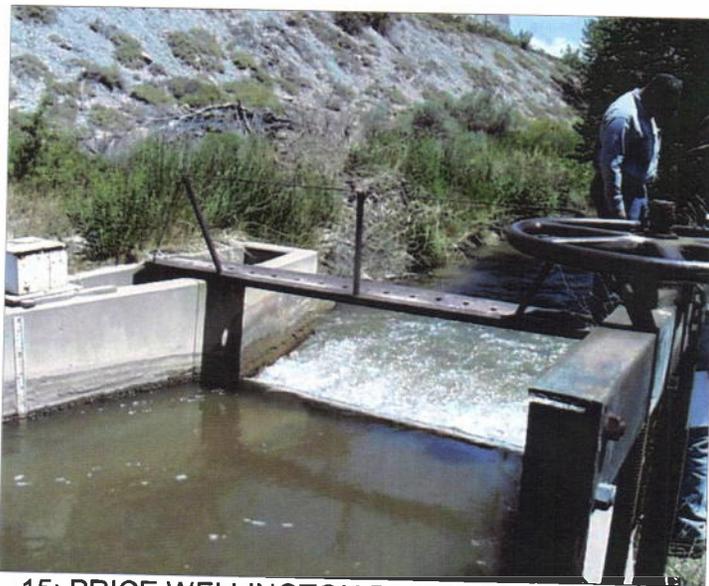
PRICE RIVER DISTRIBUTION SYSTEM TOUR OF DIVERSIONS ( 7/6/2004)



13: CARBON CANAL DIVERSION STRUCTURE



14: CARBON CANAL DIVERSION 10' FLUME



15: PRICE WELLINGTON DIVERSION 10' FLUME

7/6/04  
Lee, Rice, Bob  
26.

## Price River Inspection Tour

~~Pipeline~~  
works

Spring stem - Byrner-Hanson, Stowed ditch, overdo ditch, Byrner party tower water here out of separate

→ North Carbon Ditch - Pict 2 Div. Headgate  
Pict. 1 Div. structure to pipeline

In the past the main meter has stopped working so the totalizer does not indicate all usage.

They have direct flow & reservoir rights. The pipeline capacity is about half of the combined rights  
pipeline = 40" to 36" in diameter

North Carbon Group Meter by Gigliatti Pond  
Som-trax by EMCO ultrasonic meter Pict 3.

Byrner-Hanson split & meter

Pict 4 meter shows in gpm (range 700-900+)  
it seems that the flows are surging - not stable  
Pict 5 split pipe structure

Byrner - Party flume 18" Pict 6

The flume is tilted as 0.10" from side to side & silted in. The channel needs to be clean up & the flume re-set.

The flume is rusted in the side & the stop gage is also rusted.

Oberto ditch Meter Pict 7

Hydro-flow series by EMCO Flow systems  
It shows no flows at time of visit.

Guy Litch Diversion  
pic 8 good condition.

Guy Litch Flume pic 9.

The flume is working good

The staff gage is showing a flow of 2.25 cfs  
The measurement taken upstream in the  
ditch computed as 1.96 cfs. The flume was  
reading a little high may be due to the  
setting at the entrance in which a drainage  
& headgate are located.

The flume was level in both direction.

Rec: The Commis. should also use his staff gage  
to check level & cross reference the readings in  
the direct staff gage w/ tables.

Price Wellington <sup>Div Headgate</sup> pic 11

Golf course slide gate pic 10 below the price-well  
the golf course pump water lead to a <sup>Div</sup> tank  
small pond & water return back to creek.

Carbon Canal Div. Structure pic 12 & 13

This Div. has not changed any in the last  
A years since our last visit. The Comm. after  
he checks all his diversion & come check this one  
it tells him if he needs to open up gates

at the reservoir and send more water down.  
there is station with w/ recorder but Bob does not use because he  
said is plug.

The carbon  
canal flows could  
never stop from  
in 1944 from  
in 1944 from

Carbon Canal flume pict

10' flume - concrete - good shape & <sup>worn</sup> <sub>good</sub>  
Current meter <sup>parshall</sup> measurements for this flume  
was 47.45 cfs. & staff gage 1.12 = 47.2 cfs

Price - Wellington flume - <sup>10 ft</sup> parshall  
the flume is in good shape & good exit & entrance  
conditions & hydraulic jump.  
staff = 0.95'

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