

Memo

From: Allen Merritt

Date: May 31, 2000

To: Norm Young
Tim Luke
Water District 45F File

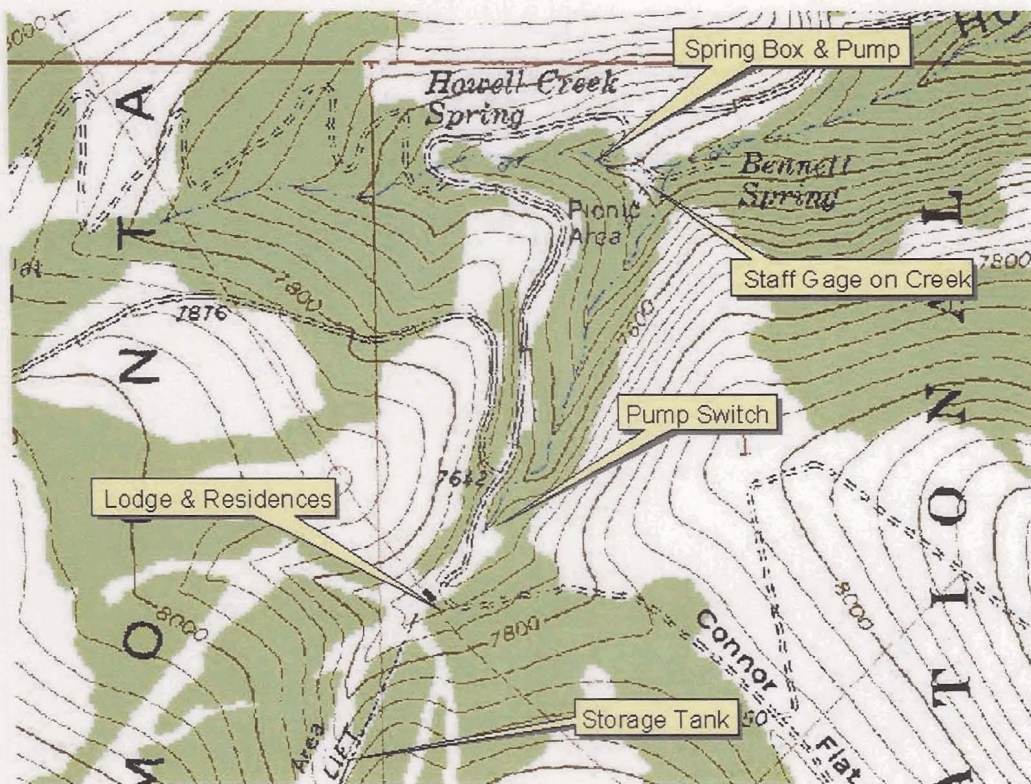
Subject: Field Visit to Pomerelle Ski Area diversion for 45-04114

On 5/22/00 John Frietag and I met with the watermaster of water district 45F (Don Gunderson), advisory board member (Ron Sorenson), Forest Service Representative (Zeke Zimmerman), Pomerelle Ski Area Operator/Permit Holder/owner dba Andrwood Inc. (Woody Anderson) and his manager (John Burrows) and protestant to pending matters (Earl Warthen). The purpose of the meeting was to review the diversion works and see what types of measuring devices or control works may be needed for the watermaster to regulate the Forest Service/Pomerelle diversion.

The meeting was prompted by Norm Semanko's 5/3 letter to the watermaster requesting that right 45-04114 be regulated so as to potentially benefit the downstream irrigation decree holders including his client, Earl Warthen. After Semanko's letter the watermaster called me and requested some direction. I reminded him of my 1/21 letter and suggested that he coordinate with the Forest Service and determine what type of measuring device or control works he needs to control or monitor the delivery for 45-04114. Note that in the meeting on 3/15 called by the water district the Forest Service indicated they would put in whatever would be necessary for the watermaster. After Don's call I called Steve Spencer with the Forest Service and suggested they work with the watermaster to get something done and suggested that we schedule a pre-hearing conference on the protested matters. He indicated that they were getting a new attorney and would probably not want a conference until July or after. I suggested that they move on their applications so things could get resolved before the winter. Last week Zeke called asking about measuring devices. While I had him on the line we called Don and arranged the 5/22 meeting. I told them I would contact Semanko and inform him of the meeting which I did.

On 5/22 we met at the pump diversion at 10:00 am. The following photos were taken at the site visit. The attached map shows the location of many of the features discussed in this memo.

Pomerelle Ski Area



Prepared by ADM 5/24/00



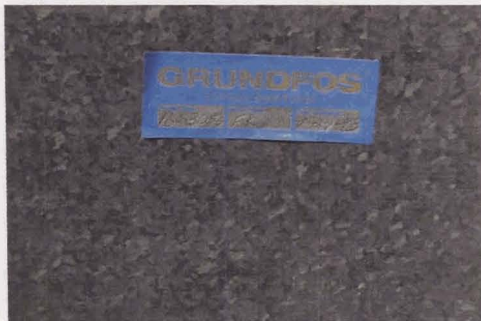
This is the spring box with overflow back into Howell Canyon Creek. Inside the metal box is a submersible pump that conveys water up the canyon to Pomerelle ski facility.



This area west of the spring box is where a tile drain is reported to be located that collects the water that flows into the spring box.



View inside the box. Note the valve was open and the pump was running. The pressure gage was not operating (broken). The top of the spring box is locked with keys possessed by Andrwood Inc.



Tag inside spring box.

There were noted two other discharge pipes in the area of the spring box. One just upstream of the box was described as draining water off of the top of the drain field described above. It discharges to the creek to dry up the area around the drain field. The other discharge pipe

is downstream of the spring box and drains the surrounding area to allow dry access to the spring box.

The pump size was not obtained during the site visit by me; although, it was indicated that documents describing the system were included with the water right files or on record at the Forest Service. Review of the records finds that the pump is a 3.0 HP. This is consistent with the tag shown above. The records indicate originally there was an intermediate 2.0 HP pump and 1000 gallon storage tank at the parking lot but I understand that part of the system is plumbed around and not currently used. Instead the spring pump now pumps against the entire head on the system.

It was noted that the source of water was not what was called Bennett Spring but in a springy area between Bennett Spring and Howell Canyon Spring.

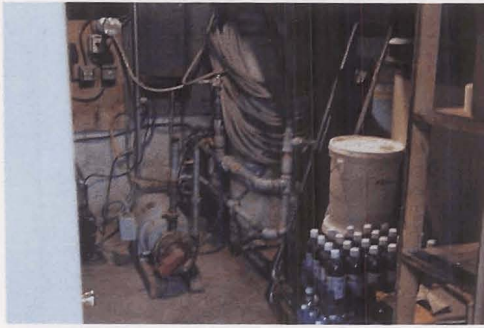
It was pointed out that there was a gage on Howell Canyon Creek used by Brockway in some of their studies. It was approximately 100 yards downstream from the spring box above the road crossing into Bennett Spring Campground. There is another similar gauge further down the valley.



The gage near the spring box read between 0.49 and 0.54 feet. John went up and shut off the pump and we stood around for approximately 15 minutes and nothing appeared to change. We decided due to timing and fluctuation in the gauge that we probably would not note any appreciable change. *Note that Brockway report of measurements is included in the protested application file 45-07745.

We decided to go view the other water works at the ski facility. At this point Mr. Anderson indicated that Mr. Warthen was not welcome on the ski property due to personal conflicts. He indicated that there was a "restraining order" in force; if Warthen was to go on to the property we would need to call the sheriff. There was a discussion between Mr. Warthen and Mr. Zimmerman. I indicated that I would prepare a report with pictures and provide it to all parties including Mr. Warthen and include in the report a description of the refusal of access to the ski lodge to Mr. Warthen.

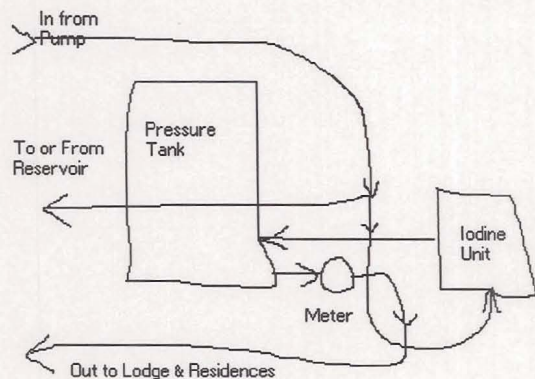
We proceeded to lodge where we entered into the lower level where there was a pump room. John turned the pump back on.



Pump Room. Note that the black plastic line is where the water enters from the spring box pump. The black plastic line was installed after the line froze in February of this year. The line teeing off to the left below the plastic exits to the storage tank above the lodge. The pump to the left not currently connected was the snow making booster pump.



After the tee to the reservoir, water continues down the pipe and over to an iodine injection site then to a pressure tank then back out through the meter and then to the distribution line for uses at the lodge and residences. All water currently used in these facilities is metered. Mr. Anderson has provided copies of the records since 1997. The attached spreadsheet is based on his records. Note that the meter totalizes water use and reads out in hundreds of gallons. We took a reading of 08443. The previously recorded reading was 08442 on 5/5 indicating a use of 100 gallons in 11 days. During this inspection John flushed toilets and turned on water and the meter moved and appeared to be in good operating condition.





The lodge is to the left. The shop in the center has a small living quarters. The manager's residence is at the right. Some grassed area surrounding buildings is reported to be irrigated on occasion and as noted in the AJ claim there may be up to 2.0 acres irrigated.



This is the buried storage reservoir above the lodge.



This is a view from the west of the storage tank reported to be 60,000 gallons. The overflow discharges back into the drainage. This was disconnected and the overflow was measured using a bucket and stopwatch while the spring box pump was reported to be running. The measurement found 1.9 gpm being discharged. Assuming all uses were off and the pipeline was not leaking this would be the discharge rate of the spring pump plus water from what is known as Ski Run Spring. This rate seems low when comparing the other records in the water right files and what would expected to have been pumped. I believe this system may continue to have some hydraulic problems. It is noted that the lower pipeline was replaced last winter due to problems.

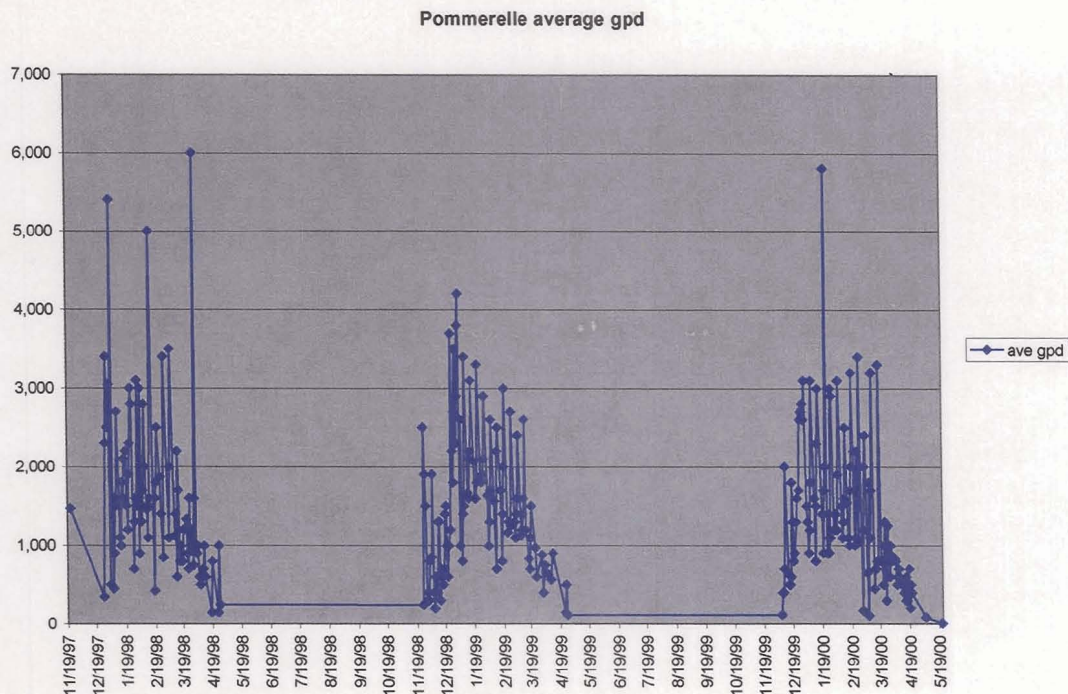


This is the site where the discharge from the tank flows into a stock trough then into the small drainage that flows back to Howell Canyon Creek. It was still covered with snow and could not be totally observed. This stockwater use is covered under decree 45-11985.



This is the switch box at the lower end of the parking lot at the lodge that controls the spring box pump.

The reason given why the pump runs all the time was to prevent freezing. Past problems with freezing is reported to have caused pipeline failure so it has been determined to keep the pump running instead of having the pipeline freeze.



This is the metered water use based on the records provided by Mr. Anderson for the lodge and residences. As can be seen the use in the summer is minimal. It is understood that much of the water used is discharged into a septic system within the hydrologic basin of Howell Canyon Creek.

Conclusions

Based on the field visit I conclude that the water use at Pommerelle is adequately monitored with the existing meter at the lodge as long as the use log is available to the watermaster. There appears to be adequate control of the spring box pump since the watermaster can lock the power box for the pump. The ability to monitor any water use at the facility using measuring devices in Howell Canyon Creek itself is impractical.

It appears the facility has sufficient storage in the 60,000 gallon tank to supply the domestic needs of the lodge and residences through the summer months. The use appears to be de minimus and essentially non-consumptive. Although the use at the lodge is non-consumptive I question the need to run the pump during the summer. I hesitate to have the watermaster lock the pump off due to potential need for fire protection. I do not believe it equitable to irrigate any area at the facility without mitigation provided.

RECOMMENDATION

-I recommend that the watermaster be instructed to monitor the use using the existing meter and require Andwood &/or the USFS to make the records available. The meter record

should be logged by Andrwood &/or the USFS at least weekly through the summer months.

-I recommend that the pump be shut off during the summer months during the irrigation season and only turned on as required to fill the tank or to protect the line due to a freezing period as needed after consulting with the watermaster. If the watermaster needs to regulate the pump he should seal the power box but not lock it due to potential fire protection needs.

-I recommend that irrigation at the facility not be allowed unless the use is mitigated.

-I recommend that the system be analyzed further by the USFS &/or Andrwood for suspected hydraulic problems and any analysis be made available to the department.