State of Idaho
DEPARTMENT OF WATER RESOURCES
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June 27, 1996

Advisory Committee
Water District 13-T
Bancroft-Lund Water District

Re: Watermaster Job Description & Duties

Dear Gentlemen:

I wish to thank you for attending the meeting of June 4 in Bancroft to discuss the watermaster's job description and duties. The traditional watermaster duties found in most water districts of Idaho do not necessarily apply to your district since it addresses ground water use and diversions only. Since the district is somewhat unique and because this is the first active year of the water district and watermaster, we thought it might be useful to make a written outline of the watermaster's job description and duties.

The written description is attached to this cover letter. I believe the outline should apply to the 1996 season. Changes can be made on an annual basis based on need or the experiences and efforts of the preceding year. I hope the outline meets your satisfaction and reflects the discussion from our June 4 meeting. I apoplogize for the delay in getting this out to you. If you have comments or suggestions, please submit them to me at your earliest convenience.

Respectfully,

Tim Luke

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Committee Members: Bart Christensen
Terry Rindlisbaker
Monte Yost
Phil Yost
Don Rigby

cc: Wayne Waddoups, Watermaster
Dale Wistisen, District Secty/Treas.
Eastern Region

Water District 13-T, Bancroft-Lund
Watermaster Job Description & Duties

A) Inventory of Irrigation Wells

1) Collect well pump and motor data, power meter data, system description and schematic, photograph and site tag each irrigation well within district (including Bancroft municipal wells, but excluding irrigation wells less than or equal to 5 acres).

2) Maintain files of inventoried information and update information as needed using forms provided by IDWR.

3) Develop reporting or communication procedure to allow users to inform watermaster of irrigation or well system changes which may effect well discharge, power use etc.

The purpose for collecting and maintaining the data is to evaluate use of power records as method of estimating annual water use from wells, and to help derive Power Consumption Coefficients (PCC), or the coefficient that converts power use to volume of water used. Well information, site tag, and power meter data is needed to properly match utility's power records to each well. Inventory required in first year to acquire baseline information. System change information subsequent to initial inventory is needed to determine if PCC's would have to be re-derived.

4) Determine water rights associated with each well, and maintain database file with water right points of diversion, well name, well owner, water rights associated with each well, total cfs and total volume from each well.

Note: Watermaster and IDWR completed majority of inventory during weeks of June 3 and 10. IDWR is currently developing database file for watermaster's use.

B) Measure Well Discharge & Derive PCC's, and Calibrate Installed Flow Meters.

1) Obtain well discharge and kilowatt demand for each major operating condition of each well where power is being used to measure or estimate annual use. Some wells may require early and late season measurement due to operating conditions and/or system pressure changes. (IDWR will attempt to notify users that own wells which are not suitable for measurement by power method).

a) Data enter well discharge measurements, KW measurements, and PCC's and field notes to computer database file or spreadsheet developed or approved by IDWR.

2) Where meters are installed and intended to be used for reporting annual use in 1996 and subsequent years, measure well discharge and check against flow meter. Field calibrate meter if possible or develop and apply calibration multiplier if

necessary.

C) Water Level Measurements & Monitoring of Select Pumps for On/Off times

1) Monitor water levels and on/off times for several select wells throughout irrigation season in southwest area of District. Wells targeted for such measurement should at least include the Warren Lloyd well, Keith Lloyd well, and Gem Valley Farms deep well. Other wells in southwest area for consideration may be Paul Christensen well, Calvin Lloyd well, one of the two Phil Yost wells if access ports are provided, Gem Valley well northeast of deep well or any suitable monitoring well, including domestic wells located near the Lloyd wells and Gem Valley wells. Additionally, the watermaster should monitor seasonal static and pumping levels in the Monte Yost well near Ivans using the installed air line (coordinate with Don Rigby and his engineering consultant), and monitor on/off times of closest irrigation wells.

a) As part of this effort and after wells are selected, the watermaster should record when the wells are on and off. Both pumping water levels (well on) and static water levels (well off) should be measured at least once every two weeks during the irrigation season. When obtaining static water levels, attempt to measure within 48 hours of when pump is turned off.

b) If possible, IDWR and water district will try to find an unused well in the southwest area of the district that can be used as a monitoring well and in which a mechanical recorder can be installed. The watermaster would service the recorder upon installation.

2) Measure pre-season and post season water-levels in select wells to supplement existing monitoring effort under USGS/IDWR coop program. IDWR measured additional 5 wells on May 1, 1996 which had some prior measurements and/or historic data by USGS. Several additional wells were measured for static water levels on June 5 and 6.

D) Enforcement Duties

1) Make spot checks of water right irrigated place of use and points of diversion for each system at least once per season and additionally as time permits or in response to water user complaints.

2) Compare actual water use to decreed, licensed, permitted point of diversion, place of use, rate of diversion etc. and report any discrepancies to IDWR. Work with IDWR and users to obtain compliance.

F) Annual Reporting

1) Prepare annual report showing well discharge measurements and calculated annual volume use for each well measured by the watermaster. Report should also show all water level measurements and dates.