

Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1266
ph (503) 986-0900
fx (503) 986-0904

November 18, 2015

RECEIVED

NOV 20 2015

WATER RESOURCES DEPT
SALEM, OREGON

Reference: Water Rights Application: G-17990

Purpose: Protest of Proposed Final Order, and request contested case hearing

Protestor: Philip Hammack - HAMAK Corporation
1516 NW 5th Street, Bend, OR 97703
(541) 385-6728

Interest: Applicant

Damage: The Proposed Final Order is financially detrimental to our interest because it prevents us from using groundwater for agricultural irrigation. Without irrigation we are unable to develop our land for greater output of higher value agricultural products. Currently our land is utilized for open range cattle grazing by others yielding to us \$0 in income. This is because the cost of 5 miles of fencing to close our range is greater than the income we could realize from grazing rents or operations. With permission to beneficially use water we will engage in hay production on 539.96 of our 640 acres yielding approximately \$539,960 in gross annual income. **The loss is \$539,960 of gross income per year.**

Deficient: When producing their assessment of groundwater availability for this application the department was deficient by **failing to consider** and use our previously approved permit application G-14608 as a resource document.
Note: The use of prior approved permit application G-14608 is relevant because it is identical to current application G-17990.
Also the statutes and regulations applied to current application G-17990 are the same as those those that were in place when prior permit application G-14608 was assessed and approved. This also is true for the reference documentation and data utilized by the department. The same information was available and considered then as now with three minor exceptions. First, well LAKE 52262 was constructed after prior application G-14608. Second, the continuation of data points logged for well LAKE 284 and third, surface geology data from Boschmann (2012).

Error: E1 Considering that applications G-14608 and G-17990 are identical and that the department approved application G-14608 using the same judging criteria, the **department is in error** by not again finding the same result and recommending approval for application G-17990.

E2 **Section Findings of Fact, number 6 is in error** when stating "Groundwater is **over-appropriated** and will not likely be available within the capacity of the resource and/or without injury to existing groundwater rights".
The department bases this statement on their assessment of groundwater availability report prepared by department Hydrogeologist Gerald Grondin for this application G-17990.
In preparing this report **Mr. Grondin made a series of errors.**

E2.a Mr. Grondin used "Appraisal of Ground-water conditions in the Fort Rock Basin, by Miller, D.W., 1986" (Miller 1986) as a reference. Miller 1986 was a single purpose document and its utility has long passed. Miller 1986 was created to determine the magnitude of decline if any inside the Fort Rock-Christmas Valley Groundwater Limited Area. It was produced quickly from varied sources, many of which Miller cites as unreliable.
Application G-17990 is 14+ miles outside the nearest Fort Rock-Christmas Valley Groundwater Limited Area boundary therefore Mr. Grondin was **in error to use Miller 1986.**

- E2.b The potentiometric information contained in Miller 1986 was **misinterpreted** by Mr. Grondin. In his assessment of groundwater availability report Mr. Grondin states in B3 "Miller (1986) shows the proposed POA well locations as part of the northern down-gradient groundwater outflow to the Deschutes Basin from the Fort Rock Groundwater Limited Area". First, the application area is northeast of the Fort Rock-Christmas Valley Groundwater Limited Area, not north. Second, the groundwater gradient flow arrow nearest to the application area on Miller 1986 potentiometric map indicates a down-gradient flow northeast to the South Fork of the Crooked River, not the Deschutes.

The proper understanding of the Miller 1986 potentiometric requires it to be considered in context. Miller 1986 provides that context on page 30, paragraph 5 of section POTENTIOMETRIC SURFACE. This paragraph states:

Flow directions on the potentiometric surface indicate three areas of ground water discharge from the basin. Subsurface outflow occurs to the Deschutes Basin on the northwest across a width of more than 30 miles. Additional subsurface outflow moves south to the Summer Lake Basin where it discharges in dramatic fashion from large springs and flowing wells. Some of this flow may move from the uplands of the eastern Silver Lake Valley without passing through the lowlands of the basin. Finally, ground water discharges in eastern Christmas Valley, apparently through evapotranspiration. In that area, confined conditions with increasing head with depth are noted by wells at 27S/20E-9cc and a flowing well at 26S/20E-6bc.

Miller 1986 clearly identifies that the Fort Rock-Christmas Valley Groundwater Limited Area discharge outflow to the Deschutes Basin occurs from the northwest portion of the Limited Area across a 30 mile arc. With the radius point centered in the Limited Area, application G-17990's area is 75 degrees east of the nearest part of the discharge outflow path flowing to the Deschutes Basin with a respective 47 mile separation.

Therefore per Miller 1986, application G-17990 is **not** "part of ... down-gradient groundwater outflow to the Deschutes Basin from the Fort Rock Groundwater Limited Area".

- E2.c Selection of well LAKE 284 by Mr. Grondin was a vehicle to demonstrate Fort Rock-Christmas Valley Groundwater Limited Area decline risk and hydraulic connection to application G-17990 area is **improper** when considering the following.

LAKE 284 is central-north within Limited Area, in the Peters Creek Sink. LAKE 284 is separated from application G-17990 by significant distance, 21½ miles. The geologic features between LAKE 284 and application G-17990 is the basin rim formed of rising highlands consisting of tilted block faults cascading perpendicular (northwest-southeast trending) usually with a southwest dipping tilt. Nearer to the summit of the basin rim young basalt extrusions are common. LAKE 284 was included in Miller 1986, page 72 and 73. Miller made note of this wells atypically quick recharge characteristic, excerpt:

Remarks: Water levels can rise more quickly in this well due to heavy winter precipitation than do levels in most Fort Rock Basin observations wells. In

The type well action is consistent with a well in close proximity to an aquifer boundary. Reference Groundwater and Wells, Third Edition, by Robert Sterrett, ISBN-13: 978-0-9787793-0-6; see pages 222, 223 and Figure 6.22.

When considering the afore together with the non-interactivity between wells LAKE 284 and LAKE 76, 77 and 55262, the three wells nearest by application G-17990. It is then reasonable to presume that well LAKE 284 is **reacting to an aquitard** proximate north and northeast. And **not hydraulically connected** or discharging subsurface those directions.

RECEIVED

NOV 20 2015

WATER RESOURCES DEPT
SALEM, OREGON

E2.d The SWL elevations of the three wells closest to application G-17990 were miscalculated by Mr. Grondin. In his assessment of groundwater availability report Mr. Grondin states in B3 "Three existing wells closest to the proposed POA well sites appear to have driller reported static groundwater elevations of about 4268 to 4279 feet".

The three wells closest to application G-17990 are LAKE 76, 77 and 55262. Using reported SWL on Well Reports, USGS Quadrangle Tired Horse Butte topographical elevations and field observation; well SWL elevation was determined to be 4,275', 4,270' and 4,269' respectively.

E2.e Mr. Grondin stated in error that observation well LAKE 284 is closest to application G-17990 in his assessment of groundwater availability report, B3 "(well LAKE 284 = state obs. well 344) closest to the proposed POA well sites (about 21.5 miles away to the southwest)". Observation well Croo 2936 at 20½ miles north of application G-17990 is closer and likely better related to the application area characteristics.

E3 Dolan v. City of Tigard, 512 U.S. 374 (1994) prohibits government agencies from compelling property owners to make unrelated public improvements as condition of land-use regulations. Koontz v. St. Johns River Water Management District, 568 U.S. ____ (2013) prohibits monetary exactions as a development permit condition and compels land-use agencies to comply with the "nexus" and "rough proportionality" standards of Nollan v. California Coastal Commission and Dolan v. City of Tigard.

Therefore the Special Permit Condition (monitoring well) is prohibited. Reference, excerpt from assessment of groundwater availability report, section B3.

Special Permit Condition (monitoring well): The permittee shall construct one (1) minimum six-inch diameter observation well to penetrate the same aquifer as the production wells. The observation well shall be located at the northwest corner of section 27 of Township 24 South, Range 22 East. The well shall meet the Department's minimum well construction standards and shall be cased and sealed to the same depth as the production wells. The well shall be constructed for the purpose of instrumentation with continuous water-level monitoring equipment. The landowner or permittee shall provide access to Department staff to install and maintain the monitoring equipment. The well shall not be used for any other purpose while the Department is monitoring water levels. The well shall be completed prior to water use under the terms of any permit issued.

We are not averse to allowing the department to construct and maintain a monitoring well on our property provided its location does not interfere with our land use. Be advised, we are unable grant permission for placement of the monitoring well in the position commanded above. We do not own or control that property.

E4 Section Findings of Fact, number 1 is in error. The correct spelling of my name is Philip Hammack not Phillip Hammack, one l in first name not two.

Correction: Properly interpret that the Miller 1986 report and well LAKE 284 data is not a basis to presume a hydraulic connection between the Fort Rock-Christmas Valley Groundwater Limited Area and application G-17990. After this corrective action is applied, water will be presumed available in stead of not available. Therefore it is reasonable to expect the department to recommend application G-17990 approval.

Conclusion: Evidence in above sections; Deficient, Error E1, E2, E2.a, E2.b and E2.c satisfies the preponderance of evidence requirement, ORS 537.621 (2).

RECEIVED

NOV 20 2015

WATER RESOURCES DEPT
SALEM, OREGON

STATE OF OREGON WATER RESOURCES DEPARTMENT (1986)

GROUND WATER REPORT 31

PLATE 1

MAP SHOWING THE FORT ROCK BASIN, AREA OF GROUND WATER CONTROL, AND GAGING STATION LOCATIONS

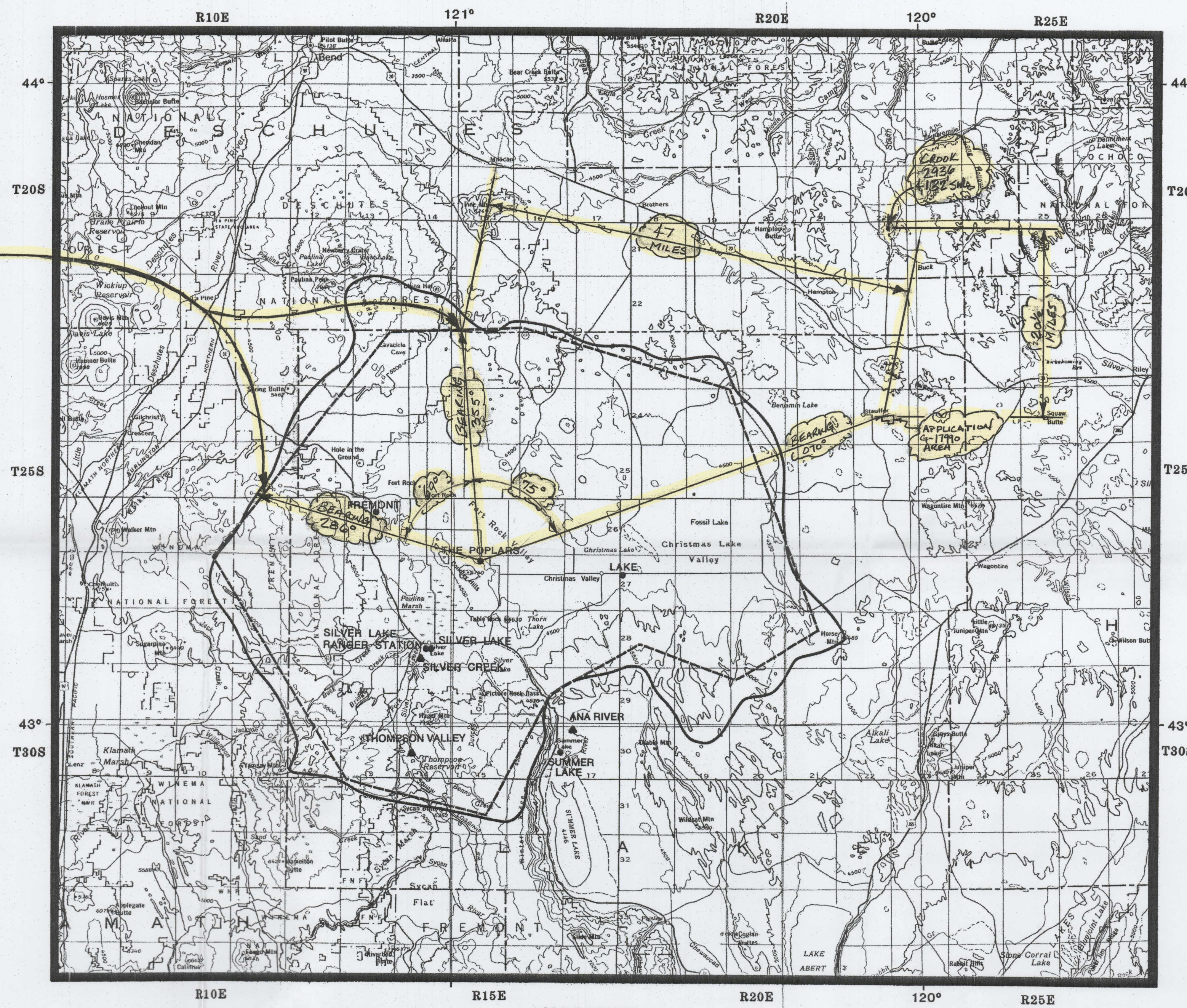
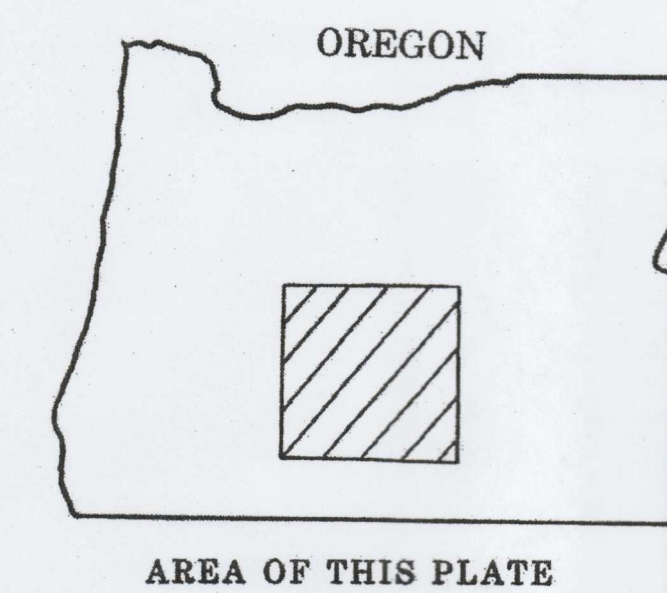
LEGEND

BASIN BOUNDARY. Solid line shows approximate location of the Fort Rock Basin topographic boundary.

GROUND WATER CONTROL AREA BOUNDARY. Dashed line shows boundary of area controlled by the Proclamation of the Water Resources Director of March 26, 1984.

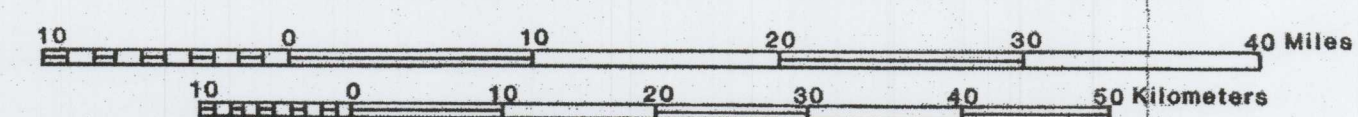
PRECIPITATION GAGING STATION. Circle shows location of precipitation gaging station with station name.

SURFACE WATER GAGING STATION. Triangle shows location of surface water gaging station with station name.



SCALE 1:500,000

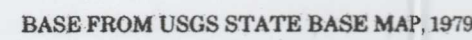
1 inch equals approximately 8 miles



BASE FROM USGS STATE BASE MAP, 1979

30 MILE WIDE
SUBSURFACE
GROUNDWATER
DISCHARGE TO
THE DESCHUTES
BASIN





OREGON

AREA OF THIS PLATE