

BEFORE THE WATER RESOURCES DEPARTMENT OF OREGON

IN THE MATTER OF WATER USE)
APPLICATIONS 69976, G12550 AND)
R71657 IN THE NAME OF MEADOWS) FINAL ORDER
WATER COMPANY, HOOD RIVER)
COUNTY, OREGON)

INTRODUCTION AND HISTORY OF PROCEEDINGS

The applicant, Meadows Water Company (MWC), filed three water use applications with the Water Resources Department (Department). MWC is a private corporation formed primarily to submit the water use applications in question as a part of a proposed expansion of the Mt. Hood Meadows ski facilities.

MWC filed application 69976 on June 29, 1989, and an amended application on May 24, 1991, for use of 0.48 cubic feet per second (cfs) of water from two unnamed springs, tributary to the East Fork Hood River. Spring "A" is located 2,730 feet north and 1,000 feet west of the southeast corner of Section 4, Township 3 South, Range 9 East, in Hood River County. Spring "B" is located 2,790 feet north and 990 feet west of the southeast corner of Section 4, T3S, R9E. The place of use will be in Sections 28, 34 and 35 of T2S, R9E, and Sections 2, 3, 4, 5, 8, 9, 10, 11, 14, 15 and 16 of T3S, R9E, WM.

MWC requested the water right for quasi-municipal use for year-round operation of a water supply system at the Mt. Hood Meadows resort facility and proposed expansion. The application contemplates use of water for domestic, commercial, and industrial uses, as well as irrigation, park and recreation facility uses, street washing, lawn and garden irrigation, resort facility uses and fire suppression.

MWC filed application G12250 on May 23, 1991, for use of up to 0.48 cfs (215 gallons per minute, or gpm) from a well for the same uses and place of use requested under Application 69976. The proposed well, which is not yet constructed would be located in the SW1/4 SE1/4 of Section 3, T3S, R9E, 850 feet north and 1,150 feet west of the southwest corner of Section 3.

MWC also filed application R71657 on June 5, 1991, for storage of 2.48 acre feet (af) in two concrete reservoirs for quasi-municipal use. The source of water would be either the unnamed springs, the proposed well or both.

Oregon Department of Fish and Wildlife (ODFW), Friends of Mt. Hood (FOMH) and Crystal Springs Water District (CSWD) filed protests against one or more of these applications. ODFW and FOMH asserted potential harm to the public interest, and CSWD asserted potential harm to its senior water rights.

Staff reviewed these applications and the objections. Staff concluded that water was available in the East Fork Hood River above the amount needed to satisfy existing rights and expected demands 95 percent of the time, and that water was available to allocate to the surface water application November 1 through May 30 of each year. Staff determined that the proposed groundwater appropriation would likely be from a confined aquifer that was most likely not in hydraulic connection with the East Fork Hood River. Consequently, use of the well would have minimal potential for impacts on the East Fork Hood River. Staff also concluded that quasi-municipal use was an allowable use in the Hood Basin. In addition, staff concluded that no

substantial public interest issue had been raised by the protestants and that CSWD's senior rights would not be adversely affected by the proposed surface water appropriation. Finally, staff recommended that the Commission approve the applications with proposed conditions. However, staff noted that a Memorandum of Understanding between the Department and ODFW required the Department to recommend that the Water Resources Commission (Commission) refer the matter to contested case hearing because ODFW and the applicant could not agree on permit conditions.

The Department forwarded the applications, protests and recommendation to the Commission. On April 24, 1992, the Commission considered these applications and protests and referred the matter to contested case hearing.

The Department announced the contested case hearing and the opportunity and manner for petitioning for party status May 6, 1992. ODFW was admitted as an interested agency. FOMH and CSWD were admitted as parties. WaterWatch of Oregon, Inc. (WWO), Hood River Valley Residents' Committee (HRVRC) and the Confederated Tribes of the Warm Springs Indian Reservation (Warm Springs Tribes) petitioned for party status and were admitted as parties. The matter was set for hearing for December 8, 1992, before Weisha Mize, Administrative Law Judge (ALJ).

Richard Whitman, legal counsel, and Mark Cushing, co-counsel, of the Portland law firm of Ball, Janik and Novack, appeared on behalf of applicant MWC.

Mike McCarthy, district president, appeared on behalf of protestant CSWD.

Karl Anuta, attorney at law, formerly of the Portland firm Jolles, Sokol and Bernstein, and now of the law firm Sokol and Associates, appeared on behalf of FOMH and HRVRC.

Karen Russell, attorney at law, appeared on behalf of WWO.

Penny Harrison, from the Oregon Department of Justice, appeared on behalf of ODFW.

Chris Eck, of the Bend law firm Karnopp, Petersen, Noteboom, Hubel, Hansen & Arnett, represented protestant Warm Springs Tribes but did not appear at the hearing.

The contested case hearing concluded January 5, 1993. The record was closed at that time except to receive rebuttal testimony from Jon Rhodes and James Lenhart and the parties' post-hearing briefs.

The ALJ issued a Proposed Order on October 6, 1993. MWC, ODFW, and WWO, FOMH and HRVRC together (FOMH *et al.*), filed timely exceptions.

The ALJ evaluated the exceptions and recommended actions on the exceptions. A Commission subcommittee considered the exceptions and directed preparation of a final order consistent with their deliberations to be presented to the entire Commission for adoption.

On recommendation of counsel and prior to final Commission action, Department technical staff prepared supplemental analyses of the hydraulic interference between groundwater and surface water and on water availability for the proposed use. Concurrently, FOMH *et al.* moved to reopen the hearing record to address an amendment of MWC's special use permit application to the Mt. Hood National Forest regarding the expansion of the Mt. Hood Meadow's lodge facilities.

On January 25, 1995, the Commission subcommittee remanded the proposed order and directed the hearing record be reopened for the limited purpose of admitting the new staff work, evidence on changes in water use needs resulting from the amendment to the special use permit, and argument on certain limited questions raised by the materials admitted after reopening the record. The subcommittee further directed that a new proposed order be issued which reflected the subcommittee's earlier deliberations on the exceptions, as well as any necessary modifications resulting from the additional evidence in the record. The parties were to be given an opportunity to file exceptions to those factual findings, legal conclusions or elements of the revised proposed order which had substantially changed.

After reviewing the new evidence and argument submitted, the ALJ issued a revised proposed final order on March 10, 1997. ODFW, FOMH *et al.*, MWC and the Warm Springs Tribes filed timely exceptions.

A Commission subcommittee met on May 19, 1997, to review a draft of the staff report discussing these exceptions and consider argument presented by the parties. The subcommittee issued a memorandum to the full Commission on May 21, 1997, outlining its recommendations on the exceptions.

During the May 30, 1997, Water Resources Commission meeting, the Commission requested argument by the parties related to the public interest considerations posed by sensitive fish stocks. The Commission then directed the Department to issue a final order which reflected the findings of the Commission subcommittee, staff recommendations contained in the staff report, modifications agreed to by all parties and alternative conditions proposed by the applicant.

Having incorporated the changes required by the Commission, this final order is now issued.

RULING ON MOTION TO DISMISS

In its post-hearing brief, FOMH *et al.* moved to dismiss the pending applications on the basis that permits may not be issued for unclassified uses. For the reasons set out below in the body of this Order, the Motion is DENIED.

RULING ON BURDEN OF PROOF

A determination of which party has the burden of proof is necessary only when insufficient evidence exists to make a determination on an issue. Here, sufficient evidence was presented to make each necessary factual and legal finding based on the preponderance of the evidence. Accordingly, a determination of who had the burden of proof is unwarranted.

MOTIONS TO SUPPLEMENT RECORD

ODFW filed a Motion to Supplement the Record concurrently with filing its exceptions, on November 5, 1993. ODFW attached an affidavit and additional data including direct flow measurements and gage readings.

On November 24, 1993, MWC filed a memorandum in opposition to ODFW's motion and attached supporting data and affidavits.

On December 6, 1993, ODFW filed a Motion to Supplement the Motion to Supplement the Record with a supporting affidavit and data.

The ALJ determined that while the record supported the findings, conclusions and determinations in the Proposed Order, it would be in the best interests of the parties and the process to admit the proffered data rather than to further delay the proceedings pending a probable motion for reconsideration. The motions were granted and the affidavits and data were admitted into the record. The parties were directed to file argument addressing what effect, if any, the additional data submitted would have on the water availability analysis for Application 69976, calculated at a 50% exceedence level.

ODFW, FOMH *et al.* and MWC submitted arguments pursuant to the above ruling during January 1994. ODFW misunderstood the meaning and extent of the prior ruling admitting the data submitted with its motions to supplement the record, and submitted further measurements and data, and discussion of that new information, with its argument. The "new" data and related argument filed by ODFW on January 11, 1994, are not admitted into the record.

Staff reviewed the data and arguments accepted, and determined that there was no foundation for revision of the water availability analysis or for denial of the applications based on the additional data presented. The Commission subcommittee agreed.

The protestants' arguments were not persuasive for several reasons. ODFW argued that the record contained insufficient evidence to determine whether the instream water right was being met from November to July. The Department's revised water availability analysis, using 50% exceedence, showed that water was available from November 1 through July 31 for the proposed uses. The lack of available water from August through October does not affect water availability the remainder of the year and does not involve the period of use allowed in the permit.

ODFW argued that not enough actual flow data was available to verify the results of theoretical models in predicting periods of available flows. However, staff believe the three years of flow data used to create the model are sufficient to reliably predict available flows. The 50% percent exceedence standard, as applied here, means that there is sufficient water to satisfy existing rights and the proposed use at least 50% of the time.

The water availability model established that the instream right and all other senior rights, are met or exceeded at least 50% of the time between November 1 and July 31. The water allocation policy and the 50% exceedence standard do not guarantee that water will be available for all uses all of the time, or that the instream right will be met 100% of the time. Department staff determined that water is available 50% of the time, even though there will be times when the watermaster will be regulating water use to satisfy senior instream and out-of-stream rights.

ODFW also asserted that information from the Oregon Climate Service demonstrated that 1993 was not a "drought" year. Therefore, ODFW argued, if the streamflow measurements in 1993 demonstrated that the instream right was not being met, then that right was routinely not being met. However, the 1993 precipitation year was below normal, and more importantly, the specific monthly precipitation pattern was unusual. For this reason, conclusions about monthly conditions should not be drawn from annual averages.

ODFW's relatively limited number of measurements were taken during months with very low precipitation. Consequently, the streamflows were not representative of long-term flow conditions. Miscellaneous streamflow measurements represent the flow only at the moment they are taken. It is extremely difficult to accurately extrapolate long-term flow conditions from these

snapshots in time. Additionally, such miscellaneous measurements must be viewed in the context of immediate and past precipitation conditions. ODFW's measurements were taken during years with below-average rain and snowfall. Accordingly, below normal streamflow would be expected and the established instream right would not be expected to be met.

In summary, the data and analysis submitted by ODFW do not require a change in the factual determination on water availability.

NEW DATA ON WATER AVAILABILITY

It was previously determined that surface water was available for appropriation from November 1 through May 30. Recalculation using the most current methodology shows that surface water is available at the 50% exceedence rate between November 1 through July 31. This new analysis was admitted into the record at the direction of the Commission subcommittee.

In calculating water availability, the Department hydrologist used the full face value of all water rights with the exception of those for municipal and irrigation uses. Where municipal rights had no diversion structure in place, and thus no way to exercise the right, the right was not considered at all. For irrigation rights, the 1990 USGS consumptive use calculations for irrigation use in the Hood Basin were used. The USGS consumptive use calculations are revised every five years.

There is no reason to discount the validity of the current Department staff analysis, which was done in a manner consistent with all water availability analyses done by staff and relied on in all application reviews for both out-of-stream and instream uses. No new arguments or facts were presented in the parties' response to the new staff analysis which would require or justify disregarding the water availability analysis or which show by a preponderance of the evidence that it is in error.

JUDICIAL NOTICE TAKEN

Notice is taken of two tables compiled by Department staff in providing technical assistance to the ALJ. Table 1 is a comparison of watershed characteristics for the East Fork Hood River to watershed characteristics for gaged watersheds in the Hood Basin. Table 2 is a comparison of 50% exceedence streamflows estimated for the East Fork Hood River, the Hood River and the Dog River. The parties were notified of the taking of judicial notice of the tables, and a copy of the tables was provided to the parties on June 8, 1994.

Notice is taken of the July 27, 1993, Commission adoption of amendments to OAR Ch. 690 Div. 400. The rule modifications direct that the 80% exceedence standard in OAR Ch. 690 Div. 400 applies only to applications filed after July 17, 1992. Water availability determinations for all applications filed prior to that time are to be calculated on a 50% exceedence standard.

Notice is taken of House Bill 3234, signed into law on August 4, 1993, and effective on passage. This bill amended ORS 536.295 to provide that an application pending before the Commission for a quasi-municipal use of water before January 1, 1993, shall be considered an application for a classified use under ORS 536.340 if two requirements were met. At the time the application was submitted, the basin program must have identified municipal use as a classified use and the Commission must determine that the proposed use would qualify as a quasi-municipal use. The Commission is authorized to determine by rule the specific uses permitted within a classified use.

Notice is taken of OAR Ch. 690, Div. 500, relating to Basin Program definitions, and of the Commission's January 31, 1996, adoption of definitions in OAR Ch. 690 Div. 300. In pertinent part, OAR 690-300-010(40) defines "quasi-municipal uses" as those uses usual and ordinary to municipal water use and provides that quasi-municipal rights shall not be granted the statutory municipal preferences of ORS 537.190(2), 537.352, 537.410(2), 540.510(3), 540.610(2-3), or those preferences over minimum streamflows designated in a basin program.

FINDINGS OF FACT

GENERAL

1. The headwaters of the East Fork Hood River originate high on the southeast side of Mt. Hood. The East Fork Hood River flows in a northerly direction, joining the mainstem of the Hood River at Dee. The mainstem Hood River ultimately flows into the Columbia River at the town of Hood River.
2. The East Fork Hood River is fed in its upper reaches by small tributary streams, springs, glacial and snow melt, and discharge of groundwater. Groundwater contributes a base flow of approximately 3.83 cfs in the area above Sahalie Falls.
3. The Mt. Hood Meadows ski facility operates under a revocable permit issued by the United States Forest Service. A proposed expansion has been approved by the Forest Supervisor and is currently under appeal.
4. The Mt. Hood Meadows ski facility holds water right certificate 48445, priority date February 2, 1973, for 0.21 cfs for ski facility use and 0.01 cfs for fire suppression use. The source of water for this right is a spring located 2,370 feet north and 1,000 feet west from the southeast corner of Section 4, T3S, R9E. Measured monthly output of the spring averages between 190 and 225 gpm (0.42 and 0.5 cfs). The spring is a source of water for the headwaters of the East Fork Hood River.
5. The entirety of the spring output is diverted at the spring via an infiltration gallery at elevation 5,680 feet above sea level. Some of the diverted water flows through a meter to the water treatment facility and from there to the ski lodge facilities. The remainder of the water flows into a 50,000 gallon fire reservoir. Overflow from the reservoir flows back into the East Fork Hood River at elevation 5,560 feet.
6. The average amount of water going daily to the treatment facility and lodge between September and December, 1992 was 9,422 gallons per day (gpd) (0.01 cfs). During that same period, the water which returned to the East Fork Hood River as reservoir overflow averaged between 273,600 and 316,673 gpd (0.41 and 0.49 cfs).
7. Use of water at the lodge facilities is currently highest during the winter ski season. This pattern is expected to continue even with the proposed expansion.
8. A small portion of the water diverted to the lodge facilities is used between May and October for erosion control, also referred to as slope stabilization or irrigation. Additional unauthorized erosion control withdrawals are made from a number of other small streams in the ski facility area. Current total water usage for erosion control is approximately 18,000 gallons per day (0.03 cfs). This amount is expected to double with the proposed expansion. Use of water for erosion control represents between 25-35% of total summer water usage.

9. Water for uses other than erosion control is treated at the sewage treatment plant and returned to the East Fork Hood River under a permit from the Oregon Department of Environmental Quality (DEQ). The average outflow from the sewage treatment plant is 9,480 gpd, calculated on an annual basis.

10. At present, approximately 100 gpd is diverted from the East Fork Hood River for use in the chlorine contact chamber at the sewage treatment plant. Assuming approval of application 69976 and issuance of a permit, water for the chlorine contact tank would be diverted from the springs.

11. Dehumidifier units in the Mt. Hood Meadow's North Lodge remove approximately 1,200 gallons of water (0.004 cfs) from the air daily during the ski season. This water currently goes to the treatment plant. This water could, instead, be used for the chlorine contact tank in the sewage treatment plant, for dilution flows or for irrigation.

12. After undergoing the requisite amount of processing, the sewage treatment plant discharges treated effluent into the East Fork Hood River twice daily in the winter and once daily in the summer for two to three hours at a time. This form of treatment process and discharge is referred to as batching. The rate of discharge at the time of the contested case hearing was set at 30 gpm.

13. Effluent discharges made in this manner cause slightly greater fluctuations in flow levels in the East Fork Hood River than the normal diurnal fluctuations and do not mirror the timing of those natural diurnal fluctuations.

14. Releases up to 30 gpm for 2 to 3 hours twice daily in winter and once daily in summer have not impacted the fisheries below Sahalie Falls due to flows from tributaries and groundwater base flows between the sewage treatment plant and Sahalie.

15. The DEQ permit requires the effluent discharge to be made at a ratio of 1 part effluent to 20 parts dilution flow in the East Fork Hood River, computed on total daily flows.

16. The sewage treatment plant operations and releases can be regulated to meet the necessary dilution flow ratio and substantially reduce the effects of batching, and can be done at times when little or no diversion is occurring upstream which would further reduce available dilution flows in the East Fork Hood River. Discharges can also be adjusted to mitigate for impacts of groundwater pumping on flows in the East Fork Hood River. A condition has been added to the proposed groundwater permit to require operation of the sewage treatment plant in this manner.

DEMAND

17. Testimony and evidence presented by MWC at the hearing, as well as figures submitted in April 1996, demonstrated a reduction in the peak demand requirements from the original expansion proposal. However the change does not warrant alteration of water use proposed to be allowed in these permits.

18. Average peak winter demand after completion of the proposed expansion is projected at 309,600 gpd (0.48 cfs). Of this 0.48 cfs peak demand, 0.21 cfs will be satisfied by MWC's existing right, leaving 0.27 cfs actually needed to meet peak winter demand.

19. The projected peak demand between April and October is 0.32 cfs. Surface water is available for MWC's use in April through July. Groundwater is available August through October. MWC's existing water right will satisfy 0.21 cfs of the 0.32 peak summer demand. Therefore, the total amount of additional water needed to meet peak summer demand is 0.11 cfs.

UNPERMITTED USE

20. The U.S. Forest Service (USFS) stated in a June 28, 1991, letter to MWC's general manager that until Mt. Hood Meadows Ski Area was able to obtain a water right for irrigation, the provisions of the USFS's 1897 Organic Act and the 1960 Multiple-Use Sustained Yield Act allowed water use for irrigation or erosion control work at the ski facility.

21. The Water Resources Department's policy is not to take any enforcement action against unpermitted uses if a reserved right claim is made, pending resolution of the claim.

22. A copy of the June 28, 1991, USFS letter was sent to the watermaster but neither the USFS nor MWC submitted a formal claim of a reserved right for irrigation or erosion control use at the Meadows Ski facility.

WATER AVAILABILITY

23. Flow levels in the East Fork Hood River and its tributaries are impacted primarily during the irrigation season by exercise of existing irrigation rights, the majority of which were issued prior to 1917.

24. The rules in effect when MWC's application was filed required water availability determinations to be based on a 50% exceedence standard.

25. Water availability was calculated in 1995 by the Department hydrologist. The new analysis showed surface water is available for this use at the applicable 50% exceedence standard in all months except August, September and October. Additionally, groundwater is available and may be used from August through October under the permit issued on application G12550.

26. The water availability analysis done by Department staff for this application is consistent with the requirements of the Commission's allocation policies and principles in OAR Ch. 690 Divisions 400 and 410.

27. FOMH submitted a contradictory water availability analysis developed using the Dog River as a model for projecting available flows. However, use of the Dog River as a model is inappropriate due to differences in elevation, precipitation, and subbasin area between the Dog River and the East Fork Hood River.

28. Over the seven or more years prior to 1994, Oregon experienced lower than historic average precipitation and increasingly low flows. The Governor approved a drought declaration in Hood River County on October 3, 1992.

29. Sufficient quantities of water are available in the East Fork Hood River, considering the needs of all existing uses, to allocate up to 0.48 cfs for use under a permit issued on Application 69976 between November 1 and July 31 of each year.

30. A permit issued on Application 69976 will be limited to the amount of water actually shown to be necessary to satisfy peak demand, or for up to but no more than 0.27 cfs.

INSTREAM WATER RIGHT

31. The Commission established a minimum streamflow for the East Fork Hood River by administrative rule on November 3, 1983, for support of aquatic life and pollution abatement.

32. The minimum streamflow was subsequently converted to an instream water right, evidenced by Certificate 59677, pursuant to ORS 537.346 and OAR Ch. 690 Div. 77.

33. The instream right is for the following flows (in cfs) measured at the confluence of the East Fork Hood River with the Middle Fork Hood River:

Jan.-March: 100 April-June: 150 July-Sept.: 100 Oct.-Dec.: 150

34. ODFW took flow measurements and staff gage readings near the mouth of the East Fork Hood River on eight days between August 4 and November 9, 1992. As measured, the actual flows in the East Fork Hood River were insufficient to satisfy the instream water right on each of those eight days. Flows measured on November 9, 1992, were 142.6 cfs, which most closely approached the instream right flow level for that month.

35. ODFW also took staff gage readings without corresponding flow measurements five days a week for the weeks from August 5 through November 15, 1992. A rating curve was developed from the eight staff gage and flow measurements and used to develop predicted flows for days on which gage readings only were made. Predicted flows for the East Fork Hood River were not sufficient to satisfy the instream water right for any day in August on which gage readings were taken, for all but the last few days of September, or for days in October through November 15 on which readings were taken.

36. The flows measured by ODFW during the summer and early fall of 1992 represented drought conditions and should not be considered reliable predictors of longer-term flows in average water years.

37. In an average water year, the flows in the East Fork Hood River are sufficient between November 1 and July 31 to satisfy the instream water right.

38. If the instream water right is not being met, as confirmed by readings from a measuring device at or near the mouth of the East Fork Hood River, all junior users, including MWC, are subject to being regulated. Regulation can be a directive to reduce the amount of water appropriated or to cease diversion altogether.

AQUATIC LIFE IN EAST FORK HOOD RIVER

39. Coho salmon, resident and searun cutthroat trout, fall chinook and winter steelhead are known to be present in or utilize the East Fork Hood River. No fish are reported in the portion of the East Fork Hood River above Sahalie Falls, which is located at river mile 26.

40. The Columbia Basin System Planning Salmon and Steelhead Production Plan, Hood River Subbasin, (September 1, 1990), lists a number of physical and environmental constraints limiting salmonid production. The list of major constraints does not include existing permitted or proposed uses by MWC. The plan does not refer to MWC's authorized uses.

41. The East Fork Irrigation District, diverting upstream from the mouth of the East Fork Hood River, is the largest diverter of water for irrigation use on the East Fork Hood River. Its rights all precede the instream right in priority. Until 1996, the East Fork Irrigation District's diversion was unscreened since its creation in 1892, with the exception of the 1964 irrigation season. Both the size of the diversion and the fact that it was unscreened made it one of the primary human-induced constraints on fish production in the East Fork Hood River.

42. A number of tributary streams contribute additional inflow to the East Fork Hood River between the MWC's existing and proposed points of diversion and the East Fork Irrigation District diversion.

43. The use of water by MWC as proposed and as further conditioned would neither significantly impair the fisheries management and production goals and activities presented in the Subbasin Plan, nor impact or adversely affect the instream water right or the fisheries habitat in the East Fork Hood River.

44. Conditions placed on the groundwater right will result in additional flow returning to the East Fork Hood River. This increased flow is expected to improve conditions for downstream fish resources. Thus, these rights will lead to a net benefit to both the applicant and to important public values.

CONSUMPTIVE USE BY MWC

45. The Department calculates the average rate of consumption for municipal use (the amount diverted and not returned to the stream) at 50% to 70% of waters diverted. The Department calculates the average rate of consumption for irrigation use at 50%.

46. Excluding water diverted for irrigation use, MWC's present average consumption ranges between 3% and 10%.

47. Assuming a consumptive rate of 50%, use of 36,000 gpd (0.055 cfs) of groundwater for erosion control would result in consumption of 18,000 gallons (0.0278 cfs) per day. The remaining 36,000 gpd of groundwater would be used within the lodge water treatment and delivery system and processed through the sewage treatment plant. 90 to 97% of this water would be returned to the East Fork Hood River. Cumulatively, approximately 70% of the groundwater pumped would return to the stream, resulting in a net increase in flows in the reach below the sewage treatment plant during summer low flow periods.

48. If MWC diverts the full 0.27 cfs from the East Fork, 10% consumption reduces the flows in the East Fork Hood River by 0.03 cfs, with 0.24 cfs being returned to the stream at the sewage treatment plant.

49. If MWC diverts the maximum 0.48 cfs from the East Fork under existing and proposed rights, 10% consumption reduces flows in the East Fork Hood River by 0.048 cfs (31,021 gpd) and returns 0.43 cfs at the sewage treatment plant.

50. If MWC diverts 0.48 cfs under existing and proposed surface rights and uses up to 0.055 cfs of surface water for erosion control, 0.3825 cfs would be returned to the river at the sewage treatment plant.

GROUNDWATER

51. Application G12250 proposes use of groundwater from a well yet to be constructed. The well is proposed to be drilled at the location of the Meadows geothermal well 840 feet horizontal distance from the East Fork Hood River, as measured at ground surface, and drilled at least to the depth of 1,972 feet.

52. The Meadows Geothermal well was drilled to a depth of 1,972 feet, and cased and sealed to a depth of 164 feet below ground surface. There is an uncased interval below the casing of between 1,001 and 1808 feet which is open to one and likely more aquifers.

53. The geologic/lithologic makeup of Mt. Hood is a series of relatively impermeable volcanic layers interspersed with materials which can be aquifers of varying transmissivities and yields. The vertical permeability of and between these layers is minimal to nonexistent.
54. The Dames and Moore study prepared for ODFW posited three general aquifer zones in Mt. Hood. The upper zone was felt to be an unconfined, water table-type aquifer. The aquifers in the middle and lower zones are expected to be confined to varying degrees with slow recharge and discharge rates.
55. Based on information from the geothermal well log, a map showing surface features, a map showing geologic features and composition of the Mt. Hood area, and correlation of that data with lava flows appearing as surface outcroppings, uncontradicted evidence demonstrated a number of different aquifers separated by relatively impermeable layers termed marker beds or marker units.
56. Moving vertically from ground surface downward, the first aquifer encountered is the water table aquifer, which is underlain by marker unit 2. Marker unit 2 is approximately 50 feet thick, extending from 98 to 148 feet below land surface at the geothermal well, and outcrops, or emerges from the ground, in the area of Umbrella Falls, approximately 1,600 feet from the geothermal well. Some of the water in the aquifer above marker unit 2 contributes to the flow of the East Fork Hood River at Umbrella Falls.
57. Between marker units 2 and 3 are one or more lower confined aquifers. Marker unit 3 is approximately 53 feet thick, extending from 167 to 210 feet below land surface at the geothermal well, and outcrops in the area of the sewage treatment plant about 4,800 feet from the geothermal well.
58. Marker unit 4 is approximately 53 feet thick, extending from 236 to 289 feet below land surface at the geothermal well, and outcrops at Sahalie Falls, 1 1/2 miles from the geothermal well. Basalt in marker unit 4 was first encountered in the geothermal well at 269 feet below land surface. Some of the water in the aquifer or aquifers between units 3 and 4 discharges as flows in Sahalie Falls. In the area of the main lodge at the Mt. Hood Meadows Ski Facility, these units may extend to the west as much as two miles and be as wide as one mile.
59. The relative impermeability of these volcanic layers, in conjunction with the area over which these units extend, indicates that at least for the area described, the units act as confining layers, which is consistent with a determination of the existence of confined aquifers in the lower zones.

OAR CHAPTER 690 DIVISION 9 REVIEW

60. For the purposes of permitting and distributing groundwater, OAR 690-09-040 requires the Department to determine the potential for substantial interference with surface water supplies.
61. OAR 690-09-040(1) requires the Department to first determine, based on the best available information, whether a well produces water from a confined or unconfined aquifer. If the aquifer is confined, the Department must determine whether the aquifer is hydraulically connected with the surface water source.
62. A confined aquifer is one in which the water is under sufficient hydrostatic head to rise above the bottom of the overlying confining bed. If water rises above the bottom of the casing of a

well which is cased and sealed only to the confining layer, it indicates the well is drawing from a confined aquifer.

63. Marker unit 2 appears to be a confining layer overlying the aquifer(s) below it. The bottom of marker unit 2 is at 148 feet below land surface. The Meadows geothermal well is cased and sealed through marker unit 2. The water in the Meadows geothermal well rose between 66-69 feet above the bottom of the casing, which is at 164 feet below land surface. This indicates that the water in the aquifer or aquifers entering the uncased interval below the casing was under sufficient hydrostatic head to rise above the bottom of the overlying confining bed into which the well was cased and sealed.

64. The preponderance of the evidence supports the conclusion that the lower aquifers, including the aquifer tapped by the Meadows geothermal and proposed wells, are confined.

65. Where the aquifer is determined to be confined, OAR 690-09-040(1) further requires the Department to determine, based on the best available information, whether the aquifer is in hydraulic connection with the surface water source.

66. An aquifer is hydraulically connected to a surface water source if water can move between the surface source and the aquifer. Water movement can be in both directions, or from the aquifer to the surface water body at a natural discharge point.

67. If a proposed well would produce water from an aquifer which is determined to be in hydraulic connection with the surface water body, the Department is directed to assume that the potential for the well to cause substantial interference with the surface water source exists if the proposed well falls within one of four categories listed in OAR 690-09-040(4)(a-d).

68. OAR 690-09-040(4)(a) provides that if the horizontal distance between the point of appropriation at the proposed well and the nearest surface source is less than one-quarter mile, the proposed well is assumed to have the potential to cause substantial interference with the surface source. The proposed point of appropriation for the MWC well is located a horizontal distance of 840' from the East Fork Hood River, therefore, the potential for substantial interference is assumed.

69. Substantial or undue interference is defined in OAR 690-08-001(8). In the context of this groundwater application, substantial interference would be found if groundwater pumping caused the spread of the cone of depression in the aquifer to intersect with the East Fork Hood River. The nearest point at which the cone of depression would intersect with the East Fork Hood River is near Sahalie Falls. Substantial interference would also be found if the ground water gradient and flow were reduced resulting in a reduction in surface water availability so that any senior water right could not be satisfied.

70. Under the conditions proposed, the probable source for the well is from aquifers between marker units 3 and 4, which might result in reduced seepage or discharge in the area of Sahalie Falls. If the proposed well is ultimately drilled into the aquifer(s) below marker unit 4 and cased and sealed into the marker unit 4 basalt layer, any effects would be outside the ski facility area, two and more miles distant from the point of appropriation.

71. The effects of pumping groundwater are dampened over time and distance. While pumping during the summer will eventually reduce the flow that would otherwise reach the stream, the reduction in groundwater discharge at the point of hydraulic connection approaches the average pumping rate spread over the entire year. Thus, pumping at the rate of 0.11 cfs during half the

year would result in a net loss to the stream, on average, of approximately 0.055 cfs, year round, at the point of aquifer discharge.

72. The discharge at the sewage treatment plant of close to 90-97% of the groundwater pumped and used at the lodge facilities will enhance streamflow during summer low flow periods.

73. The proposed permit conditions reduce the likelihood of and potential for impacts from groundwater-surface water interference.

74. The aquifer from which the Meadows geothermal well draws or the proposed production well will draw is not the source for the Stringer Meadows wetlands. The source of water for the Stringer Meadows wetlands is water from the water table aquifer, subsurface or storm flow, or a combination of water from those sources.

CRYSTAL SPRINGS WATER DISTRICT

75. Crystal Springs is located approximately 10 miles from Mt. Hood, on a hillside two or three hundred yards from the East Fork Hood River.

76. Crystal Springs Water District (CSWD) holds Certificate 10115 for 1 cfs for group domestic use with a priority date of 1930, permit 29377 for 2.65 cfs for group domestic use with a priority date of 1964, and permit 34196 for 3.5 cfs for municipal use with a priority date of 1969. The source of water for these rights is Crystal Springs. Approximately 1,700 connections receive water from the distribution system.

77. The flow at the Crystal Springs fluctuates seasonally and is lower during the winter months and higher in the spring and summer. Total flows available at the Springs have diminished over the years, and have further been affected by the drought-like conditions prevailing in the 7 years prior to 1994. The collection box at the spring has never been cleaned nor has the spring been reconditioned to improve the flow at the spring. However, demand on the system has apparently never exceeded the available flow nor has the full amount of CSWD's water right been required.

78. The East Fork Hood River is not the source of water for Crystal Springs. The proposed use will not impact the Crystal Springs Water District's senior rights.

QUASI-MUNICIPAL

79. Municipal uses include, but are not limited to, domestic, commercial, industrial, fire protection, irrigation and other water uses in park and recreation facilities, irrigation of lawns and gardens, and street washing. OAR 690-300-010(29).

80. Quasi-municipal use is defined in OAR 690-300-010(40) as uses which are usual and ordinary to a municipal water supply system. The statutory preferences extended to municipalities are expressly not extended to quasi-municipal users. Non-municipalities with municipal-like uses may apply for a quasi-municipal use permit.

81. ORS 537.352 provides that where an instream water right is established by conversion of a minimum streamflow previously set by administrative rule, later-established municipal rights shall not have precedence over such converted instream rights.

82. The Department and MWC agreed that MWC's proposed quasi-municipal permit shall not be entitled to any preference over Instream Water Right Certificate 59677 nor shall this instream water right be subordinated to MWC's proposed quasi-municipal use.

83. When the applicant is not a municipality, it is the nature of the proposed uses and the nature of the applicant that determines qualification for the quasi-municipal appellation.

84. Commission policy and practices and the municipal-like nature of MWC's proposed uses indicates that quasi-municipal is the most appropriate label for these uses.

ECONOMIC DEVELOPMENT OF WATERS INVOLVED

85. The Mt. Hood Meadows Ski Facility (MHMSF) presently employs 650 seasonal and 50 year-round employees, paying approximately \$2.3 million annually in salary. In addition, MHMSF pays approximately \$145,000 in property tax, \$125,000 in payroll tax and \$186,000 in U.S. Forest Service fees. Of these USFS fees, 25%, or \$46,500, is dedicated to roads and schools in Hood River County.

86. The fishery on the East Fork Hood River generates an estimated net economic value to the state of \$706,636, and an estimated annual state level income of \$1,061,414.

TREATY RIGHTS

87. The Warm Springs Tribes' treaty fishing rights have been recognized in U.S. v. Oregon. However, the conditions imposed by the Order provide adequate protection of those rights.

CONCLUSIONS OF LAW

1. OAR 690-410-070 was adopted after the instant applications were referred to contested case hearing. Applications filed or referred to contested case hearing prior to its adoption are not expressly excluded from consideration under this rule.

2. OAR 690-410-070(2)(a) provides that in general, applications for out-of-stream uses shall be approved only during months or half-month periods when the allocations will not contribute to overappropriation. Some exceptions to this provision are allowed.

3. "Overappropriated," as applied to surface water, is defined in the December 7, 1990 version of OAR 690-400-010 as a condition of water allocation in which, for a specified period, the quantity of surface water available an average of four out of five years is not sufficient to meet the expected demands from all water rights during the specified period. Water availability determinations made under this version of the rule were done on a 50% exceedence basis.

4. "Overappropriated" is defined in the July 17, 1992, version of OAR 690-400-010 as a condition of water allocation in which the quantity of surface water available during a specified period is not sufficient to meet the expected demands from all water rights at least 80% of the time during that period. OAR 690-400-010(11) was amended July 27, 1993, to include the following provision: The standards for determining over-appropriation described in paragraph (A) of this subsection shall apply to water availability determinations for permit applications submitted after July 17, 1992. OAR 690-400-010(11)(b).

5. If a surface water source is found to be overappropriated for a month or half-month period, OAR 690-410-070(2)(a) prohibits further allocations of water to new uses unless the public

interest in those uses is high and the uses are conditioned to protect instream values. Further allocations may be made for those month or half-month periods when water is determined to be available. Daily flow data is used to determine whether water is available in monthly or half-monthly increments for a proposed use.

6. Under the 50% standard applicable here, water is available in the East Fork Hood River for allocation to MWC between November 1 and July 31. Issuance of these permits as conditioned below would not be in conflict with the Commission's water availability and water allocation policies and rules.

7. Contrary to FOMH's claim, diversion and use of less water than the full amount to which a water right holder is entitled by permit or certificate does not constitute waste. Waste is the continued use of more water than is needed to satisfy the specific beneficial uses for which a right is granted. OAR 690-400-000(16).

8. Use of water for erosion control under the instant applications is an allowed quasi-municipal use. The watermaster may regulate this use at times when senior rights, including the instream right, are not satisfied.

9. MWC is not authorized to divert water for erosion control from any source not authorized under these quasi-municipal permits.

10. Due to insufficient funding and staff, the watermaster cannot constantly monitor the flows in the East Fork Hood River. This does not constitute a failure to secure the maximum beneficial use and control of the state's water resources or to protect all vested and inchoate rights to the waters of this state. It is not grounds for denial of these applications.

11. Quasi-municipal use is a restricted subset of municipal use which is not entitled to the municipal exceptions or privileges available to municipal use under ORS 537.190(2), 537.352, 537.410(2), 540.510(3), 540.610(2-3), or any other preferences over minimum streamflows designated in the applicable basin program.

12. The determination that quasi-municipal use is an approvable use in the Hood Basin is authorized by ORS 536.295, by the definition of quasi-municipal in OAR 690-300-010(40) and by OAR Ch. 690 Div. 500.

13. A proposed use need not include overnight lodging facilities to constitute a quasi-municipal use.

14. The two reservoirs applied for under application R71657 are part of the lodge's water supply and delivery system and do not require a separate permit. Nevertheless, a permit having been applied for and there being no factual or legal reason to deny it, application R71657 should be approved.

15. As modified by the conditions proposed in this order, use of water under applications 69976 and R71657 will not impair or be detrimental to the public interest. The public interest presumption applicable to these applications under ORS 537.153 has not been overcome.

16. A determination that a proposed well has the potential to cause, or will cause, substantial interference, as defined by rule, does not require denial of the permit. However, in order to determine whether the proposed use will ensure the preservation of the public welfare, safety and health, further review must occur. The likelihood of actual interference may be determined to be

minimal as demonstrated by the particular facts of the case, or may be reduced by permit conditions modifying the manner, timing or other elements of the proposed use.

17. As modified by the conditions proposed in this order, use of water under groundwater application G12550 will ensure the preservation of the public welfare, safety and health. The public welfare, safety and health presumption applicable to this application by ORS 537.621 has not been overcome.

18. The use of water as proposed in these applications and as further conditioned or limited herein will not harm, impair or have a significant adverse effect on the public interest or on senior rights.

19. The use of water as proposed in these applications and as further conditioned or limited herein is consistent with the considerations outlined in ORS 537.170(8), OAR Ch. 690 Division 300, OAR 690-400-010, OAR 690-410-070, the Hood Basin Program, and other applicable statutes, rules and policies governing permit issuance, water allocation and water use.

OPINION

QUASI-MUNICIPAL USE

A major point of contention between the parties was whether a permit for quasi-municipal use could be issued in a basin which lacks a specific classification for that use. Although ORS 536.300, 537.170(8)(a) and 537.625(3)(a) list beneficial uses, these are not the only allowable uses of water in Oregon. ORS 537.170(8)(a) and 537.625(3)(a) also refer to any other beneficial use to which the water may be applied. The legislature did not provide a statutory laundry list of all possible beneficial uses of water, and instead established broader, more general statutory guidelines to be further developed by the Commission.

Passage of ORS 536.295 removed any question or ambiguity about whether the Commission may approve an application for quasi-municipal use, and whether quasi-municipal use is an allowed use, in a basin where the basin program references only municipal use in its classifications.

WATER QUALITY STANDARDS

Another point of disagreement between the parties was whether it was appropriate or even lawful for questions of water quality and possible impacts on wetlands to be considered in relation to these applications.

DEQ has primary responsibility for administration and enforcement of its statutes and administrative rules regarding water quality and pollution, including permits issued under its jurisdiction. The Commission does not determine whether DEQ can issue a water quality permit or if DEQ is properly monitoring and regulating a permitted use.

However, the Commission has complementary authority to require compliance with DEQ's water quality statutes and rules as a condition of water use and to consider potential impacts to water quality when considering a proposed use under its public interest analysis. This analysis requires the Commission to consider conserving the highest use of water for all purposes. In this instance, there is an existing instream water right established for the purposes of fish life and pollution abatement. Both uses require undegraded water quality. Consequently, consideration of water quality impacts from a proposed use is within the Commission's jurisdiction.

Evidence in the record establishes that MWC is properly operating under its DEQ permit. No evidence demonstrates that MWC is likely to violate its permit in the future or that DEQ will fail to adequately monitor and regulate use under the permit or enforce its statutes and administrative rules.

QUANTITY OF WATER RIGHTS

Another significant issue is whether an application should grant the amount of water requested or the amount needed. Water rights are issued for diversion and use of "up to" a certain amount of water. Commonly, less than the full amount of a water right is actually diverted and put to beneficial use. The "up to" amount establishes a maximum amount which may be developed during the permit stage, and provides some flexibility to respond to changing circumstance once the right is perfected.

FOMH argued that granting a permit for more than the needed amount constituted waste. In this case, the amount of water requested in the original and amended applications was greater than the actual amount for which need was demonstrated. As a result, and due in part to the quantity available under the applicant's existing right, the amount proposed to be allowed is 0.21 cfs less than requested from surface water in winter, and 0.37 cfs less than requested from groundwater in the summer. However, FOMH confuses the potential for use of up to the maximum allowed with actual appropriation where the ability to put the entirety of the appropriation to beneficial use is lacking. The former is appropriate; the latter constitutes waste.

The opponents in this case further argued that if water rights on a stream were regulated at any time, the stream is overappropriated and further allocation is improper. However, the water allocation policy does not require such a stream closure. Rather, the policy requires a water availability determination based on the best available evidence following adopted Commission methodologies, and denial for those periods when it is determined that water is not available to meet expected demands by existing uses and proposed uses under consideration. In this case, surface water was found to be available between November 1 and July 31 each year based on the 50% exceedence standard. The finding of water availability does not ensure against possible regulation to protect more senior water rights, but it is intended to provide a reasonable estimate of expected flows over time.

UNPERMITTED USE

The opponents also asserted that the Commission should deny these applications because MWC diverted and used water without a permit and used water under an existing right for an unauthorized use. Opponents argued that since MWC continued irrigating after the watermaster informed MWC that irrigation was not authorized under MWC's existing right, this demonstrated that the use, or at least the user, could not be controlled. Therefore, they argue, granting the applications would not be consistent with the Commission's statutory directive to control the waters of the state.

MWC, on the other hand, asserted that the USFS had decided that MWC's use of water from whatever source was covered by the 1897 Organic Act and the 1960 Multiple-Use Sustained-Yield Act. Consequently, MWC asserted, at least until the MWC obtained an irrigation right from the state it was not required to comply with the watermaster's directive. Moreover, it appears that MWC believed that the USFS's determination, as expressed in its letter to MWC's general manager, satisfied the underlying requirements of the Department's policy not to enforce for or

against a use, where a claim sufficient to substantiate a federal reserved right is submitted and until such time as the claim is resolved through adjudication.

The assertions of the opponents have been answered elsewhere in this order and will not be addressed here. The assertion of a possible reserved right, however, bears further examination.

The U.S. Supreme Court has clearly stated that Congress did not intend, in enacting the Multiple-Use Sustained-Yield Act, to reserve additional water for the secondary forest use purposes established in that Act. Recreation, fish and wildlife, or range uses which were additional purposes for national forest administration authorized under the Multiple-Use Sustained-Yield Act were to be supplemental to, but not in derogation of, the purposes for which the national forests were established in the Organic Act. United States v. New Mexico, 438 U.S. 696, 714-716 (1978). In short, the Multiple-Use Sustained-Yield Act will not support any claim of a federal reserved right for use in national forests beyond the right reserved to fulfill the two purposes for which the national forest was originally established pursuant to the Organic Act of 1897. Those purposes were to furnish a continuous supply of timber and to insure favorable conditions of water flow so that sufficient quantities of water would be available to the settlers of the arid West. United States v. New Mexico, *supra*.

It could be argued that the use of water for erosion control would contribute to protection of favorable water flow conditions. Nevertheless, it cannot be denied that but for the construction of the Meadows ski facility there would be no reason to now find it necessary to use water for erosion control at that facility.

No determination is made on the potential success of a federal reserved right claim if one is finally submitted to the Department. However, a courtesy copy of a letter from the Mt. Hood National Forest Supervisor to the applicant in this case does not constitute a claim which would justify invocation of the Department's "non-regulation" policy.

In order for the Department to forebear regulation of apparently unauthorized or unpermitted uses, there must be both a legal basis for the claim and an actual claim. Here, there is neither. Until a proper legal claim is submitted, the watermaster may regulate any irrigation from surface water within the Mt. Hood Meadows ski area. Regardless of the validity of a reserved rights claim, these applications must be judged on their merits alone.

DIVISION 9

The final issue relates to the Division 9 rules on groundwater-surface water interference. Regardless of confinement, all groundwater and surface water must perforce be in connection at some point in the world. The Division 9 rules focus the inquiry primarily on the potential for impacts within a one-mile radius from the well. The Division 9 rules do not, however, require denial of a permit if hydraulic connection is found, nor even if the potential for substantial interference is found pursuant to OAR 690-09-040(4) or (5). Additionally, the rules do not require that mitigating conditions completely negate any impact or return the system to the condition it was in prior to the exercise of the right. The rules simply require a determination of the potential for substantial interference, and provide for regulation, through conditions or otherwise, where that potential is found.

WEIGHT OF EVIDENCE PRESENTED

There were a number of conflicts in the testimony, evidence and analyses of the applicant and the opponents. In the process of developing further analysis and testimony, the applicant discovered

that even less water was required than had been requested in amended application. Testimony was thus developed with that focus. On the other hand, the opponents in some instances developed their analyses and testimony on the full amounts of water requested in the original, not the amended, applications, and assumed year-round use at the full amount with 100% consumption. Recently-taken measurements and the Dog River were used to develop predicted flows for water availability, rather than longer term measurements and a reliable estimate of East Fork contributions to mainstem flows as were used by the Department and MWC. In addition, the opponents' testimony focused on what the Commission's rules and policies should require, rather than what is required. While the opponents' evidence was credible, as far as it went, the reliability of much of opponents' testimony was necessarily reduced because of the differences in base data and focus.

FINAL ORDER

NOW, THEREFORE, it is ORDERED that Application 69976 in the name of Meadows Water Company for quasi-municipal use should be approved for diversion and use each year between November 1 and July 31 of up to 0.27 cfs from two unnamed springs, tributary to the East Fork Hood River, subject to the conditions set out below and to any other conditions deemed by the Department to be necessary and appropriate, which conditions shall be included in a permit issued on this application.

It is further ORDERED that Reservoir Application R71657 be approved, subject to any conditions deemed by the Department to be necessary and appropriate, which conditions shall be included in a permit issued on this application.

It is further ORDERED that Application G12250 in the name of Meadows Water Company for quasi-municipal use should be approved for diversion and use each year between August 1 and October 31 of up to 0.11 cfs (50 gpm), subject to the conditions set out below and to any other conditions deemed by the Department to be necessary and appropriate, which conditions shall be included in a permit issued on this application.

It is further ORDERED that the permit issued on application 69976 shall contain the following conditions:

S1 The use of water allowed herein may be made only at times when sufficient water is available to satisfy all prior rights, including rights for maintaining instream flows. The use of water under this permit shall not have priority over instream water right Certificate 59677, and no other preferences accorded municipal rights are applicable to this permit.

S2 A maximum of 0.055 cfs may be used under this permit for erosion control.

S3 The permittee shall comply with all applicable DEQ and EQC statutes, rules, policies and permits in the use of water under this permit. If the permittee's waste water discharge permit issued by the DEQ is amended or revoked, the Department may review and modify this permit to reflect changes in the DEQ permit. No changes shall be required in this water right permit unless consistent with the findings, conclusions and opinion granting this permit.

- S4 Consistent with DEQ permit requirements and subject to its approval, monitoring and regulation, the permittee shall operate the sewage treatment plant at Mt. Hood Meadows ski facility to provide more continuous effluent releases and reduce the effect of batch processing.
- S5 Consistent with DEQ permit requirements and subject to its approval, monitoring and regulation, the permittee shall continue to operate the sewage treatment plant so as to maintain a minimum 90% return of waters used in the facilities which are tied to the sewage treatment plant. The permittee shall maintain a recording flow meter with totalizer to measure effluent discharge from the waste water treatment plant, shall retain the records for not less than two years, and shall make such records available to the watermaster on request in a format adequate to address compliance with applicable conditions of this permit.
- S6 The permittee shall obtain any necessary authorization, easement or special use permit and shall, under the supervision of the watermaster, purchase, install, operate and maintain to the watermaster's satisfaction, a recording device or devices at location(s) to be determined by the Department in consultation with the permittee and ODFW that enables measurement of and regulation to protect the instream water right on the East Fork Hood River. The installation shall be completed prior to use of water under this permit. The device or devices shall be operated from June 1 through October 31, unless the watermaster requests earlier or later operation after determining that operation will not result in undue risk to the facility. The permittee's obligation to pay for the operation and maintenance of the device or devices may be reduced to the extent of any contribution the Department may require in the future as a condition of any permit junior to this permit.
- S7 This permit is for the beneficial use of water without waste. The water user is advised that new regulations may require the use of best practical technologies or conservation practices to achieve this end. Any use which is to be supplied water under this permit shall use the best available water-saving devices.
- S8 Before water use may begin under this permit, the permittee shall install a meter or other suitable measuring device above the first diversion on the transmission line as approved by the Director. The permittee shall maintain the meter or other approved measuring device in good working order.
- S9 The permittee shall allow the watermaster access to the meter or measuring device. If the meter or measuring device is located within a private structure, the watermaster shall request access upon reasonable notice.
- S10 The Director shall require the permittee to keep and maintain a record of the rate and duty of water used and shall require the permittee to report water use on a periodic schedule as established by the Director. In addition, the Director may require the permittee to report at least annually general water use information, the periods of water use and the place and nature of use of water under this permit. The Director may provide an opportunity for the permittee to submit alternative reporting procedures for review and approval.
- S11 The permittee's municipal water management and conservation plan must be approved by the Department prior to permittee's first diversion of water under this permit. The permittee shall comply with Commission rules found at OAR Ch. 690 Div. 86.
- S12 Any impacts to wetlands providing water-related recreational opportunities or flows to water-dependent resources which result from the use of water as herein allowed shall be avoided or mitigated pursuant to the terms of the FEIS, ROD and special use permit issued by the USFS.

It is further ORDERED that the permit issued on application G12250 shall contain the following conditions:

G1 The well shall be constructed in accordance with the General Standards for the Construction and Maintenance of Water Wells in Oregon and shall further be constructed so as to appropriate water from a confined aquifer below the basalt encountered in the geothermal well beginning at 289 feet below land surface. The works shall be equipped with a usable access port and may also include an air line and pressure gage adequate to determine water level elevation in the well at all times.

G2 Before water use may begin under this permit, the permittee shall install a meter or other suitable measuring device as approved by the Director. The permittee shall maintain the meter or other approved measuring device in good working order.

G3 The permittee shall allow the watermaster access to the meter or measuring device. If the meter or measuring device is located within a private structure, the watermaster shall request access upon reasonable notice.

G4 The Director shall require the permittee to keep and maintain a record of the rate and duty of water diverted and shall require the permittee to report water use at least annually on a periodic schedule as established by the Director. In addition, the Director may require the permittee to report general water use information, the periods of water use and the place and nature of use of water under this permit. The Director may provide an opportunity for the permittee to submit alternative reporting procedures for review and approval.

G5 The permittee shall conduct or cause to be conducted static water level measurements in all water-producing zones encountered during drilling. In addition, one pump test shall be conducted within one week following completion of the well, and a second pump test shall be conducted no earlier than three months and no later than four months after completion of the well. The pump tests will be conducted to determine aquifer properties, presence of flow boundaries in the aquifer and well recovery characteristics. The tests shall be designed in consultation with Department staff. The results of the pump tests and static water level measurements shall be submitted to the Department no later than one month after the last pumping test and static water level measurements are conducted.

G6 The use of water for erosion control allowed herein may be made only at times when sufficient water is available to satisfy all prior rights, including rights for maintaining instream flows. The use of water under this permit shall not have priority over instream water right Certificate 59677, and no other preferences accorded municipal rights are applicable to this permit.

G7 The permittee shall comply with all applicable DEQ and EQC statutes, rules, policies and permits in the use of water under this permit. If the permittee's waste water discharge permit issued by the DEQ is amended or revoked, the Department may review and modify this permit to reflect changes in the DEQ permit. No changes shall be required in this water right permit unless consistent with the findings, conclusions and opinion granting this permit.

G8 A maximum of 0.055 cfs may be used under this permit for erosion control.

G9 From August 1 through October 31 for any year after the initial use of groundwater under this permit, the permittee shall discharge effluent from the waste water treatment plant beginning not earlier than 5:00 a.m. and continuing at a rate consistent with the NPDES permit, but not to exceed

0.11 cfs, until all effluent has been discharged, provided, however, that the permittee shall not be required to discharge effluent that does not meet the standards of the NPDES permit.

G10 Consistent with DEQ permit requirements and subject to its approval, monitoring and regulation, the permittee shall continue to operate the sewage treatment plant so as to maintain a minimum 90% return of waters used in the facilities which are tied to the sewage treatment plant. The permittee shall maintain a recording flow meter with totalizer to measure effluent discharge from the waste water treatment plant, shall retain the records for not less than two years, and shall make such records available to the watermaster on request in a format adequate to address compliance with applicable conditions of this permit.

G11 The permittee shall obtain any necessary authorization, easement or special use permit and shall, under the supervision of the watermaster, purchase, install, operate and maintain to the watermaster's satisfaction, a recording device or devices at location(s) to be determined by the Department in consultation with the permittee and ODFW that enables measurement of and regulation to protect the instream water right on the East Fork Hood River. The installation shall be completed prior to use of water under this permit. The device or devices shall be operated from June 1 through October 31, unless the watermaster requests earlier or later operation after determining that operation will not result in undue risk to the facility. The permittee's obligation to pay for the operation and maintenance of the device or devices may be reduced to the extent of any contribution the Department may require in the future as a condition of any permit junior to this permit.

G12 This permit is for the beneficial use of water without waste. The water user is advised that new regulations may require the use of best practical technologies or conservation practices to achieve this end.

G13 Any use which is to be supplied water under this permit shall use the best available water-saving devices.

G14 Any impacts to wetlands providing water-related recreational opportunities or flows to water-dependent resources which result from the use of water as herein allowed shall be avoided or mitigated pursuant to the terms of the FEIS, ROD and special use permit issued by the USFS.

G15 The permittee's municipal water management and conservation plan must be approved by the Department prior to permittee's first diversion of water under this permit. The permittee shall comply with Commission rules found at OAR Ch. 690 Div. 86.

G16 At the request of the Department, the permittee shall obtain approval from the Department for a monitoring program. The permittee shall retain the services of a groundwater geologist licensed in Oregon and cause the geologist to submit a plan for monitoring groundwater and surface water to the Department for approval. The plan shall provide for a long-term monitoring program which shall be conducted in a manner that will assist the Department in detecting any interference with surface water.

G17 In the event the Water Resources Department determines that use from the well for erosion control interferes with a senior surface water right, use from the well shall be regulated as surface water. Regulation may be initiated at any time and in any manner in order to assure protection of senior surface water rights, provided that prior to controlling the use of the well, the Department shall determine whether any control would provide relief to the surface water supply in an effective and timely manner.

Issued and Placed in the U.S. Mail this 28th day of AUGUST, 1997.



Nancy E. Leonard
Chair, Oregon Water Resources Commission

NOTICE: You are entitled to judicial review of this Order. Judicial review may be obtained by filing a petition for review within 60 days from the date of service (date of mailing) of this Order. Judicial review is pursuant to the provisions of ORS 536.075.

Certificate of Service

I certify that on August 28, 1997, a copy of this Final Order was mailed, first-class postage prepaid, to the following individuals:

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