BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

IN THE MATTER OF REAUGH RANCHARDS, INC Appellant, v STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY, Respondent	PCHB Nos 82-206, 82-207, 82-208, 82-209, 82-210, 82-211, 82-212, & 83-27 FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

This matter, eight consolidated appeals from findings and orders of the Department of Ecology approving in part and denying in part eight separate applications for a permit to withdraw public ground waters submitted on behalf of Reaugh Ranchards, Inc . came on for hearing before the Pollution Control Hearings Board Gayle Rothrock, Chairman, and David Akana Lawyer Member sitting for the Board convened at Yakima and Lacey, Washington Lawrence Faulk, Vice Chairman heard the matter in person and through review of tape-recorded transcripts of testimony The hearing convened in Yakima Washington, on November 9 and 10 1983 The hearing was reconvened in Lacey, Washington, on January 23 and 24, 1984 Respondent elected a formal hearing pursuant to RCW 43 21B 230

Appellant Reaugh Ranchards, Inc appeared through its President Dan Reaugh and through James Porter George Merker and James Turner, Attorneys at Law from Seattle and Bellevue Washington Respondent appeared through Charles Douthwaite, Assistant Attorney General Reporters Duane Lodell and Bibi Carter reported the proceedings in Lacey and Ruby Winters reported the proceedings in Yakima

Having heard or read testimony, having examined the exhibits, having considered the arguments of counsel and having reviewed the proposed findings and conclusions submitted by counsel the Board now makes these

FINDINGS OF FACT

I

Appellant Reaugh Ranchards, Inc (RRI) owns about 1270 acres of land situated within Sections 10 15, 16, 17 20, 21 and 22 of T 28 N R 22 E W M, in Chelan County, Washington The property lies within three drainage basins known as Cooper Gulch, Swanson Gulch and Rattlesnake Canyon and is located 9 miles north of Chelan, 9 miles east of Manson, and borders on the east boundaries of the Lake Chelan Reclamation District RRI acquired the land between 1945 and 1977 as a part of the Reaugh family apple and cattle operations RRI has sold some of its orchard lands

RRI is now attempting to develop, as necessary, and to sell most of its land in order to divide the family estate and to provide family members with a retirement income Appellant asserts its potential use for agricultural, recreational, and residential purposes Appellant generally contemplates these three uses, depending upon the demands and desires of the purchasers

II

Appellant submitted several applications to withdraw public ground waters to the Department of Ecology (DOE) between October 6, 1980 and November 7, 1980 Eight of these applications, later appealed were assigned by the DOE Application Nos G4-27156, G4-27157 G4-27158 G4-27159 G4-27160 G4-27161, G4-27162 and G4-27164

Prior to application RRI began ground water explorations by drilling several wells The applications to appropriate groundwater were filed with the respondent DOE as follows

DOE APP #	RRI WELL #	PRIORITY DATES	QUANTITY REQUESTED	INTENDED USE
G4-27156	1A	10-16-80	450 GPM	Irrigation & Domestic Supply
G4-27161	4	10-06-80	50 GPM	"
G4-27157	10	10-14-80	200 GPM	"
G4-27162	11A	10-06-80	200 GPM	"
G4-27164	11B	11-07-80	875 GPM	"
G4-27158	13	10-06-80	875 GPM	"
G4-27159	14	10-10-80	300 GPM	"
G4-27160	16	10-14-80	200 GPM	"

Protests were received concerning all eight of the applications after proper notice was published.

The DOE's field examinations occurred in February and May of 1982 The DOE staff revisited the site several times also after these appeals had been filed

III

As appellant reviewed its data on well capacities the quantity of water applied for was reduced to conform to RRI's belief about probable capacity of each well

DOE APP #	RRI WELL #	AMENDED REQUEST	INTENDED USE
G4-17156	1A	150 GPM	Irrigation & Domestic Supply
G4-27161	4	20 GPM	"
G4-27157	10	40 GPM	"
G4-27162	11A	20 GPM	"
G4-27164	11B	60 GPM	"

G4-27164	13	100- GPM or yield of well (all granite)	"
G4 27159	14	150- GPM or yield of well (all granite)	"
G4-27160	16	50 GPM or yield of well (all granite)	"

IV

In making an investigation and evaluation for recommendations on permitted water withdrawals respondent agency checked data on groundwater geology, topography, climate, water duty experiences of nearby water users, and on the existence of certificated water rights and permits for appropriation which might limit or be impacted by new withdrawals While the evaluations made are not error-free they are reasonable and supportable

Appellant RRI disagreed with most data relied upon and facts ascertained by DOE depending instead on recollections of the Reaugh family, outside experts, isohyetal precipitation maps, and other sources of data for the findings which underpin their argument for the appropriation of additional water

The data and information DOE gathered was presented in Report of Examination findings and in testimony by deposition and at hearing A range of available groundwater in each of the three drainages was ultimately set forth as acre feet available annually for sustained long-term withdrawal using water budget calculations From this the accumulation of existing rights and permits was subtracted and a reasonable amount of acre feet for requested domestic uses by RRI was recommended for appropriation under terms of a permit

V

No irrigation water was recommended for permit since DOE found the limited water available could not support both the domestic uses and the seasonal irrigation Domestic uses have a less severe impact on a watershed than irrigation uses since domestic water is rather easily returned to

the ground through on-site sewage disposal systems Appellant did not inform DOE of specific crops he intended for planting or when and if a water distribution system or electricity supply would be put in place to serve both agricultural and domestic uses for each well The applications lacking very specific plans for the future around which a permit could be fashioned placed the respondent in a position of acknowledging the overall importance of domestic uses amongst all beneficial uses of water applied for where water is limited Appellant, in fact, established that demand for domestic water is highly likely to occur in the future

The details respondent was given on the applications were the particulars of already constructed wells and the various changes--both increases and decreases--in instantaneous withdrawals desired Some information was given on general acreages to be irrigated, and homes to be served This information kept changing At hearing on appeal some applications were requested to be amended again at least twice, leaving the record unclear on appellant's actual plans and interests in many instances

VI

The respondent DOE made findings, conclusions, and recommendations on the eight applications, which are here summarized

DOE APP #	RRI WELL #	QUANTITY	AUTHORIZED USE
G4-27156	1A	150 gpm, total of 50 af/year	50 homes, no irrigation
G4-27161	4	15 gpm, total of 4 af/year	4 homes, no irrigation
G4-27157	10)	170 gpm, total of 17 af/year	17 homes, no irrigation
G4-27162	11A)		
G4-27164	11B)		
G4-27158	13)		
G4-27159	14	Denial of any use whatsoever	

G4-27160	16	50 gpm, total of 8 af/year	8 homes, no irrigation

RRI appealed the denial of irrigation uses on each application and the denial of any uses under application G4 27159

VII

Application G4-27156

Cooper Gulch has a total area of approximately 3,943 acres The elevation of Cooper Gulch varies from 2000 feet to 4324 feet above mean sea level Only some 1260 acres lie above Well 1A the point of withdrawal proposed for Application G4-27156, and could possibly contribute water to that well There are several close-by wells The estimated long-term average incident precipitation in Cooper Gulch is 13 inches per year Between 85 to 90 percent of this precipitation will be lost to runoff or evapo-transpiration because of the slope, soil type, vegetation and condition of the ground and bedrock formation The remaining 10 to 15 percent of this precipitation percolates underground and flows at shallow depths atop granitic bedrock Only 50 percent of the precipitation which percolates to the water table can be withdrawn for irrigation The area's irrigation season is six months of each year In sum between 68 and 102 acre-feet of water are physically available for withdrawal on a sustained, long-term basis, at the site of the well covered by Application G4-27156

DOE authorized the appellant to withdraw 50 acre-feet per year from that well for community domestic supply to the appellant's proposed 50 homes There is not sufficient water for appellant's proposed irrigation of 75 acres under this application

Application G4 27161

Appellant's well #4 one-half mile downdrainage from Well 1A and which is covered by Application G4 27161, produces only 10 to 15 gpm of water Appellant had reduced its requested appropriation to 15 gpm by the time DOE issued the Report of Exam and Order appealed here Said Report and Order authorized withdrawal of 15 gpm for domestic use

Approximately 213 to 320 acre-feet of water are available annually for sustained long-term withdrawal in all of Cooper Gulch, using the water budget method Of that total, 143 6 acre-feet have been allocated to currently existing uses Appellant's Applications G4-27156 and G4-27161 represent allocations of an additional 54 acre-feet Clearly, more than one-half of the available water has been spoken for

Applications G4-27157, G4-27158, G4-27162, and G4-27164

The appellant submitted four applications which were consolidated for processing by DOE These applications all pertain to Swanson Gulch The applications in numerical order are G4-27157 G4-27158, G4-27162, and G4-27164

The place of use under Application G4-27157, G4-27158, G4-27162, and G4-27164 is identical and is in Swanson Gulch All the proposed points of withdrawal are located in that gulch DOE approved all four applications for a total, between the four wells, of 170 gpm, 17 acre-feet per year for continuous community domestic supply for 17 homes The appellant's requests for irrigation water were denied

The water requirement for irrigation, generally, in the Swanson/Cooper Gulch area is 3 5 acre-feet of water per year per acre irrigated This requirement can vary according to the type of crop irrigated Appellant did not specify for DOE what crops it planned to irrigate The neighboring Lake Chelan Reclamation District provides 3 0 acre-feet per year to its customers

The water requirement for each home served is 1 acre-foot per year

Swanson Gulch has a total area of approximately 2416 acres The elevation of Swanson Gulch varies from 1800 feet to 3949 feet above mean sea level The estimated long-term average incident precipitation in Swanson Gulch is 13 inches per year Only 10 to 15 percent of this precipitation percolates to the ground water table and is available for withdrawal due to slope, soil type, vegetation and condition of the ground Only 50 percent of the precipitation which percolates to the ground water table can be withdrawn on a sustained basis Therefore, between 131 and 196

acre feet of water are available for withdrawal on a sustained, long-term basis spread out within Swanson Gulch

Application G4-27160

This application was a request for a permit authorizing the withdrawal of 300 gpm of water for domestic use to supply 10 homes and for irrigation of 50 acres The request was later reduced to 50 gpm for domestic supply to 8 homes and to irrigate a maximum of 20 acres

Appellant s well # 16 which is covered by Application G4-27160 produces only about 50 gpm of water This amount is not sufficient for all uses proposed by appellant. DOE thus approved this application for only four acre-feet for the domestic uses requested by the appellant The irrigation use requested was denied on the basis of inadequate production by the well

Approximately 131 to 196 acre-feet of water are available annually for sustained long-term withdrawal in Swanson Gulch using the water budget method Of that total, 153 5 acre-feet have been allocated to currently existing uses

Appellant's Applications G4-27157, G4-27158 G4-27160 G4-27162, and G4-27164 represent allocations of an additional 21 acre-feet

Application G4-27159

This application, when filed, requested 300 gpm for irrigation of 100 acres and continuous domestic supply for up to 10 homes This request was changed before and during the hearing The last statement by appellant was a request for 100 gpm for 20 acres of irrigation

Rattlesnake Canyon has a total area of approximately 760 acres The estimated long-term average incident precipitation in Rattlesnake Canyon is also 13 inches per year Approximately 123 acre feet of water are physically available for withdrawal on a sustained long term basis Approximately 50 percent of this sum is reasonably available for irrigation

The maximum total water usage potential under existing rights in Rattlesnake Canyon is 114 acre-feet per year There is not sufficient additional water available to service appellant's 100 acres of irrigation as proposed under Application G4-27159

Application G4-27159 was denied altogether by DOE

VII

From these several use limitations and denials of permit applications appellant RRI appealed to this Board on December 30, 1982 and on April 4, 1983

VIII

Any Conclusion of Law which should be deemed a Finding of Fact is hereby adopted as such From these Findings the Board comes to the following

CONCLUSIONS OF LAW

I

Applications for permit to withdraw public ground water must be made in accordance with RCW 90 03 250 through RCW 90 03 340 RCW 90 44 060

II

Appeals to DOE permit decisions properly come before this Board with appellants bearing the burden of proof RCW 43 21B

III

The Water Code, in RCW 90 03 290, provides that permits such as those appellant applied for shall issue " if there is water available for appropriation " There is not sufficient water available in Cooper Gulch, Swanson Gulch or Rattlesnake Canyon after the waters already appropriated are subtracted from the total quantity of water available for withdrawal, to satisfy appellant's requested appropriations in their entirety

Appellant s requests for water for irrigation were correctly denied by DOE because water was not available under the following applications G4-27156, G4-27157, G4-27158, G4-27159, G4-27160, G4-27161, G4-27162 and G4-27164

IV

DOE correctly approved these applications in the full amount of water requested for withdrawal for domestic use G4-27156, G4-27161, and G4-27160. Applications G4-27157, G4-27158,

G4-27162 and G4-27164 were also correctly approved for the quantity requested by the appellant for domestic use The appellant, by failing to identify one particular domestic development permitted DOE to consider its request to be limited to the smaller development The appellant further placed DOE in position to deny its request for any domestic use under Application G4 27159 by failing to firmly identify its plans for development

V

DOE is statutorily permitted to approve applications for permit in less than the amount of water applied for See RCW 90 03 290 which provides, in part,

> Any applicaton may be approved for less amount of water than applied for, if there exists substantial reason therefore

DOE correctly approved appellant's several applications only for the domestic use requested The appellant established that considerable development of domestic uses is likely to occur in Cooper Gulch and Swanson Gulch in the near future Domestic uses have a far less severe impact on a watershed than irrigation uses The limited water shows its impact in this area

It is detrimental to the public interest to approve irrigation developments which request all the water available in an area where development of domestic uses is as likely to occur as it is here Further, DOE did not act unlawfully or outside its jurisdiction by treating Cooper Gulch and Swanson Gulch as areas of limited availability because over one-half the available water has been appropriated There are "substantial reasons" for limiting appellant to its request for domestic uses

VI

Any Finding of Fact which should be deemed a Conclusion of Law is hereby adopted as such From these Conclusions the Board enters this

ORDER

The Department of Ecology's Orders under Applications G4-27156, G4-27157, G4-27158 G4-27159, G4-27160, G4-27161, G4-27162, and G4-27164 are affirmed

DATED this 13th day of June, 1984

POLLUTION CONTROL HEARINGS BOARD

Gayle Rothrock

GAYLE ROTHROCK, Chairman

(See Attached Statement)

DAVID AKANA, Lawyer Member

(See Dissenting Opinion)

LAWRENCE J FAULK, Vice Chairman

STATEMENT:

Although I have personally heard the evidence in this matter, I have not participated in the results reached by the other members because of a potential appearance of fairness situation which arose after the hearing was closed.

I therefore abstain.

David Akana

DAVID AKANA, Lawyer Member

BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

IN THE MATTER OF REAUGH RANCHARDS, INC., Appellant, v. STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY, Respondent.	PCHB Nos. 82-206, 82-207, 82-208, 82-209, 82-210, 82-211, 82-212 & 83-27 Dissenting Opinion

This matter is consolidated appeals from findings and orders of the Department of Ecology approving in part and denying in part eight separate applications for a permit to withdraw public ground waters submitted on behalf of Reaugh Ranchards, Inc. This matter came on for hearing before the Pollution Control Hearings Board. Gayle Rothrock, Chairman, and David Akana, Lawyer Member sitting for the Board, convened in Yakima and Lacey, Washington. Lawrence J. Faulk, Vice Chairman, heard the matter in person and through review of tape-recorded transcripts of testimony. The hearing convened in

Yakima, Washington, on November 9, 1983, and ran through November 10, 1983. The hearing was reconvened in Lacey, Washington, on January 23, 1984, and continued through Janaury 24, 1984. Respondent elected a formal hearing pursuant to RCW 43.21B.230.

Appellant Reaugh Ranchards, Inc. appeared through its President Dan Reaugh and through James Porter, George Merker, and James Turner, Attorneys at Law from Seattle and Bellevue, Washington. Respondent appeared through Charles Douthwaite, Assistant Attorney General. Reporters Lois Anderson and Ruby Winters recorded the proceedings in Yakima. Reporters Duane Lodell and Bibi Carter reported the proceedings in Lacey.

Having heard or read testimony, having examined the exhibits, having considered the arguments of counsel, and having reviewed the proposed findings and conclusions submitted by counsel, the Board now makes these

FINDINGS OF FACT

I

Appellant is a Washington corporation which has owned land north of Chelan and east of Manson in an area known as Cooper Gulch, Sanson Gulch, and Rattlesnake Canyon, siince 1945. Appellant operates a family apple orchard and cattle ranch. Appellant submitted nine applications for a permit to withdraw a public ground waters to the Department of Ecology (DOE) between October 6, 1980, and November 7, 1980. The nine applications were assigned by DOE Application Nos. G4-27156, G4-27157, G4-27158, G4-27159, G4-27160, G4-27161, G4,27162,

G4-27163 and G4-27164. Application G4-27163 has not been appealed.

The DOE's field examination occurred in February and May of 1981 and May of 1982. The Department staff revisited the site several times after these appeals had been filed also.

II

Application G4-27156 was received by DOE on October 16, 1980. This application requested that a permit be issued to authorize withdrawal of ground water from a well on Cooper Gulch. The use of water proposed was irrigation and domestic supply. The well has already been constructed. The location of the well is within the SW 1/4 SE 1/4 of Section 10, Township 28 North, Range 22 East, Willamette Meridan.

The appellant originally requested 450 gallons per minute (gpm) of water for a continuous domestic supply for up to 50 homes and irrigation of 75 acres. This application was amended and final relief sought is for 150 gpm for continuous domestic supply for up to 50 homes and irrigation of 75 acres (RRI's post hearing memo). The DOE granted a water right upon this application for an annual quantity of 50 acre-feet per year and an instananeous quantity of 150 gpm. The use was continuous domestic supply for 50 homes. The request for water for irrigation on this application was denied.

III

The DOE received Application G4-27161 on October 6, 1980. This application requested water from a well which had been constructed in Cooper Gulch in the SE 1/4 NW 1/4 of Section 15, Township 28 North,

Range 22 East, Willamette Meridian.

Application G4-27161 originally requested 50 gpm for irrigation of 50 acres and continuous domestic supply for 50 homes. The application was amended and the final relief sought is for 20 gpm for continuous domestic supply for up zero homes and irrigation of zero acres (RRI's post hearing memo). The DOE granted a water right upon this application in the amount of 4 acre-feet per year and 15 gpm instantaneous supply to be used for continuous group domestic supply for 4 homes. The applicant's request for irrigation water was denied, and the applicant's request for domestic use was denied in part.

IV

Application G4-27160 was received by DOE on October 14, 1980. This application was a request for a permit authorizing the withdrawal of 300 gpm of water for domestic use to supply 10 homes and for irrigation of 50 acres. The application was amended and the final relief sought is for 50 gpm for domestic supply to service 8 homes and irrigation of a maximum of 20 acres.

The well is located in Swanson Gulch. It is a 6-inch diameter well and is 310 feet deep.

The DOE granted this application for water right in the amount of 8 acre-feet per year and an instantaneous quantity of 50 gpm to service eight homes. The appellant's requested irrigation use was denied.

V

The appellant submitted 4 applications which were consolidated for

processing by DOE. These applications all pertain to Swanson Gulch. The applications in numerical order are G4-27157, G4-27158, G4-27162, and G4-27164.

Application G4-27157 was received by DOE on October 14, 1980. Application G4-27157 at that time requested 200 gpm of ground water for irrigation of 150 acres and for a domestic supply for up to 10 homes. This request was amended and the final relief sought is for 40 gpm for continuous domestic supply for up to zero homes and irrigation of zero acres (RRI's post hearing memo).

Application G4-27157 covers a well which has been constructed. This well is 6 inches in diameter and 129 feet deep. The well is located in the NW 1/4 SW 1/4 of Section 21, Township 28, Range 22 East, Willamette Meridian.

Application G4-27158 was received by DOE on October 14, 1980. This application originally requested the right to withdraw public waters in the amount of 875 gpm for irrigation of 150 acres and domestic supply for up to 10 homes. This request was amended and the final relief sought is for 100 gpm for continuous domestic supply for zero homes and irrigation of zero acres (RRI's post hearing memo).

The source of water proposed for application G4-27158 is a well which as been constructed and which is 8 inches in diameter and 270 feet deep. This well is located in the NE 1/4 of SE 1/4 of Section 20, Township 28 North, Range 22 East, Willamette Meridian.

Application G4-27162 was received by DOE on October 6, 1980. This application, when filed, requested 200 gpm of public waters for the

irrigation of 150 acres and domestic supply for up to 10 homes. This request was amended and the final relief sought is for 20 gpm for contiuous domestic supply for up to zero homes and irrigation of zero acres (RRI's post hearing memo).

The well which is to provide water on this application has been constructed. It is 6 inches in diameter and 162 feet deep, and is located in the NW 1/4 SW 1/4 of Section 21, Township 28 North, Range 22 East, Willamette Meridian.

Application G4-27164 was received by DOE on November 7, 1980. This application, at that time, requested that a withdrawal of public waters be authorized in the quantity of 875 gpm for irrigation of 150 acres and for domestic supply for up to 10 homes. This request was amended and the final relief sought is for 60 gpm for irrigation of up to 20 acres and supplemental domestic supply. (RRI's post hearing memo.)

The source of water to be withdrawn under Application G4-27164 is a well which has been constructed. That well is 8 inches in diameter, 100 feet deep, located in the NW 1/4 SW 1/4 of Section 21, Township 28 North, Range 22 East, Willamette Meridian.

The place of use under Applications G4-27157, G4-27158, G4-27162, and G4-27164 is identical and is in Swanson Gulch. All the proposed points of withdrawal are located in Swanson Gulch. The total requested under these four applications is for 220 gpm for continuous domestic supply irrigation. The DOE approved all four applications for a total, between the four wells, of 170 gpm, 17 acre-feet per

year, for contiuous community domestic supply for 17 homes. The appellant's requests for irrigation water were denied.

VI

The DOE received Application G4-27159 on October 14, 1980. The application, when filed, requested 300 gpm for irrigation of 100 acres and continuous domestic supply for up to 10 homes. This request was amended and the final relief sought is for 150 gpm for continuous domestic supply for up to zero homes and irrigation of 20 acres. (RRI's post hearing memo.)

The source of water proposed is a well which has already been constructed. This well 6 inches in diameter and 275 feet deep. The well is located in Rattlesnake Canyon, which was also referred to as a small side gulch west of Swanson Gulch, within the SE 1/4 SE 1/4 of Section 20, Township 28 North, Range 22 East, Willamette Meridian.

Application G4-27159 was denied by DOE.

VII

Feeling aggrieved by these decisions appellant filed appeals PCHB 82-207 through PCHB 82-212 with this Board on December 30, 1982. PCHB 83-27 was filed with this Board on April 4, 1983.

VIII

Protests were received concerning all 8 of the applications described above.

IX

DOE maintains that the water requirement for irrigation, generally, in the Swanson/Cooper Gulch area is 3.5 acre-feet of water

per year per acre irrigated. This requirement can vary according to the type of crop irrigated. Appellant indicates that 3 acre feet should be more than adequate to irrigate land above the 2000 foot elevation.

The water requirement for each home served is 1 acre-foot per year.

X

Cooper Gulch has a total average area of appoximately 3,836 acres. The elevation of Cooper Gulch varies from 2,000 feet to 4,720 feet above mean sea level. The estimated long term average incident precipitation in Cooper Gulch is between 13 and 22.5 inches per year. DOE maintains that between 85-90 percent of this precipitation will be lost to runoff or evapo-transpiration. Appellant argues that in applying its infiltration factor of 10-15% to total precipitation, DOE gave no consideration to the effect that the 1968 and 1970 forest fires destroyed most of the forest trees using water in the three basins and thus reducing the amount of evapo-transpiration.

The remaining 10 to 15% of this precipitation percolates underground and flows at shallow depths atop granitic bedrock. Somewhere between 50% and 60% of the precipitation which percolates to the water table can be withdrawn for irrigation because the irrigation season is only six months of each year. In sum, between 68 and 102 acre-feet of water are physically available for withdrawal on a sustained, long-term basis, at the site of the well covered by Application G4-27156.

DOE authorized the appellant to withdraw 50 acre feet per year

from tht well for domestic suppply to the appellant's proposed 50 homes, and denied appellant's proposed irrigation of 75 acres.

XI

Appellant's well which is covered by Application G4-27161 was developed by a backhoe which apparently tapped a confined aquifer under sufficient pressure to produce a artesian flow independent of either the ground water immediately above the bedrock or the surface under the area. (Testimony of Dan Reaugh.)

This application was amended and the final relief sought is for 20 gpm for domestic and irrigation use. DOE authorized withdrawal of 15 gpm for domestic use and denied appellant's proposed irrigation request.

XII

Appellant established that significant increased demand for water for domestic use in Cooper Gulch is highly likely to occur in the near future.

XIII

DOE maintains that approximately 213 to 320 acre-feet of water are available annually for sustained long-term withdrawal in all of Cooper Gulch, using DOE's logic set forth in Finding IX above. Appellant argues that approximately 253.40 to 445.67 acre feet are available annually for withdrawal. DOE maintains that 143.6 acre-feet have been allocated to existing uses. (Ex. R-12.) Appellant argues that 183.6 acre-feet have been allocated to existing uses. (RRI's post hearing memo.) Therefore, it would appear that there is anywhere from 69.4 to

262.1 acre-feet available for appropriation.

XIV

Swanson Gulch has a total average area of approximately 2,598 acres. The elevation of Swanson Gulch varies from 1,800 feet to 3,949 feet above mean sea level. The estimated long-term average incident precipitation in Swanson Gulch is between 13 and 20 inches per year. DOE maintains only 10 to 15% of this precipitation percolates to the ground water table and is available for withdrawal. Somewhere between 50 and 60% of the precipitation which percolates to the ground water table can be withdrawn on a sustained basis.

XV

Appellant's well (#16) which is covered by Application G4-27160 produces approximately 50 gpm of water. (Ex. A-42; Maddox testimony, pp. 63 & 64; Ex. R-6.) DOE approved this application for 8 acre-feet for domestic use as requested by the appellant. The irrigation use requested was denied on the basis of inadequate production by the well.

XVI

Appellant presented two proposals to DOE for the development of domestic uses of water in Swanson Gulch to be served by the wells covered by Applications G4-27157, G4-27158, G4-27162, and G4-27164. One proposal was for 17 homesites, the other was for 38 homesites. (Ex. R-7.) DOE authorized appellant to withdraw 17 acre-feet of water for development of the smaller proposal presented by Applications G4-27157, G4-27158, G4-27162, and G4-27164. DOE maintains there is not sufficient water available for irrigation of 40 to 70 acres as

proposed under Applications G4-27157, G4-27158, G4-271652, and G4-27164.

XVII

Appellant established that significant increased demand for water for domestic use in Swanson Gulch is highly likely to occur in the near future.

XVII

DOE maintains that approximately 131 to 196 acre-feet of water are available annually for sustained long-term withdrawal in Swanson Gulch. Appellant argues that approximately 178.04 to 305.43 acre-feet is available for withdrawal on a sustained long-term basis in Swanson Gulch. DOE maintains that 153.5 acre-feet have been allocated to existing uses. (EX. R-4) Appellant argues that 111.5 acre-feet have been allocated to existing uses. (RRI's post hearing memo.) Therefore it would appear that there is either a shortage of 22.5 acre feet or that anywhere from 42.5 to 193.9 acre-feet is available for appropriation. Appellant's Applications G4-27157, G4-27158, G4-27160, G4-27162 and G4-27164 represent allocations of an additional 21 acre-feet.

XIX

Rattlesnake Canyon has a total average area of approximately 1092.5 acres. The estimated long-term average incident precipitation in Rattlesnake Canyon is anywhere from 13 to 20 inches per year. DOE argues that approximately 51.4 to 123 acre-feet of water are physically available for withdrawal on a sustained, long term basis.

Appellant argues that approximately 60.8 to 213.5 acre-feet is available for withdrawal on a sustained, long-term basins, within Rattlesnake Canyon.

Approximately 50% of this sum is not available for irrigation because irrigation occurs only during 6 months of the year. Therefore it would appear there is either a shortage of 62.6 acre feet or anywhere from 9.0 to 125.9 acre feet available for appropriation. DOE maintains there is not sufficient additional water available to service appellant's 100 acres of irrigation as proposed and therefore denied Application G4-27159.

XX

Any Conclusion of Law which should be deemed a Finding of Fact is hereby adopted as such.

From these Findings of Fact the Board comes to these

CONCLUSIONS OF LAW

I

Applications for permits to withdraw public ground water must be made in accordance with RCW 90.03.250 through RCW 90.03.340. RCW 90.44.060.

II

DOE correctly approved the applications listed below in the amounts listed for domestic use: G4-27156 (150 gpm), G4-27161 (15 gpm), and G4-27160 (50 gpm). Applications G4-27157, G4-27158, G4-27162, and G4-27164 were also approved for 170 gpm while the quantity requested by the appellant for domestic use was 220 gpm.

Application G4-27159 was denied.

III

The Water Code, in RCW 90.03.290, provides that a permit such as those appellant applied for shall, ". . . if there is water available for appropriation . . ." There is sufficient water available in Cooper Gulch and in Swanson Gulch, after the waters already appropriated are subtracted from the total quantity of water available for withdrawal, to satisfy appellant's requested appropriations in their entirety. Appellant's requests for water for irrigation were incorrectly denied by DOE because water is available for the following applications: G4-27156, G4-27157, G4-27158, G4-27159, G4-27160, G4-27161, G4-27162, and G4-27164.

IV

DOE is permitted to approve applications for permit in less than the amount of water applied for. See, RCW 90.03.290, which provides, in part,

> Any application may be approved for less amount of water than applied for, if there exists substantial reason therefore . . .

The Department correctly approved appellant's applications for domestic use requested. The appellant did establish that considerable development of domestic uses is likely to occur in Cooper Gulch and Swanson Gulch in the near future. Domestic uses have a far less severe impact on a watershed than irrigation uses because much of the water withdrawn for domestic uses is returned to the watershed through sewage disposal systems.

V

The applications should be approved as finally amended by the applicant in their post hearing memo. This would be a total of 590 gpm for domestic use and irrigation; as opposed to DOE's position which was to approve 385 gpm for domestic use only.

VI

Any Finding of Fact which should be deemed a Conclusion of Law is hereby adopted as such.

From these Conclusions the Board enters this

ORDER

The Department of Ecology's Orders under Applications G4-27156, G4-27157, G4-27158, G4-27159, G4-27160, G4-27161, G4-27162, and G4-27164 are reversed and the applications are granted as stated in paragraph 1.4 of the appellant's proposed findings of and conclusions of law.

DONE this 13TH day of June, 1984.

POLLUTION CONTROL HEARINGS BOARD

LAWRENCE J. FAULK, Vice Chairman