



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

4601 N Monroe Street • Spokane, Washington 99205-1295 • (509)329-3400

July 9, 2013

Hayes Farms  
PO Box 133  
Hartline, WA 99135

Re: Water Right Change Application No. G3-28971

Dear Sir or Madame:

Enclosed is the Department of Ecology's Report of Examination. This report contains our decision regarding your application.  
Your application has been denied.

You have a right to appeal this action to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this document. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal, you must do the following within 30 days of the date of receipt of this document:

- File your appeal and a copy of this document with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this document on Ecology in paper form - by mail or in person. (See addresses below.) Email is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel Road SW Suite 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903



*For additional information visit the Environmental Hearings Office Website:  
<http://www.eho.wa.gov> . To find laws and agency rules visit the Washington State Legislature  
Website: <http://www1.leg.wa.gov/CodeReviser> .*

If you have any questions, please contact Dan Tolleson at 509 329-3526.

Sincerely,



Keith L. Stoffel  
Section Manager  
Water Resources Program

KLS:DT:ka

Enclosures:      Report of Examination for Change  
                         *Your Right To Be Heard*

By Certified Mail 7011 3500 0001 8626 3320

cc: John Hayes

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

**REPORT OF EXAMINATION**  
TO APPROPRIATE PUBLIC WATERS OF THE STATE OF WASHINGTON

- Surface Water (Issued in accordance with the provisions of Chapter 117, Laws of Washington for 1917, and amendments thereto, and the rules and regulations of the Department of Ecology.)
- Ground Water (Issued in accordance with the provisions of Chapter 263, Laws of Washington for 1945, and amendments thereto, and the rules and regulations of the Department of Ecology.)

PRIORITY DATE April 29, 1991	APPLICATION NUMBER G3-28971	PERMIT NUMBER	CERTIFICATE NUMBER
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NAME Hayes Farms			
ADDRESS (STREET) PO Box 133	(CITY) Hartline	(STATE) WA	(ZIP CODE) 99135

cc: John Hayes, 1206 Cascade Ave, Moses Lake, WA 98837

**PUBLIC WATERS TO BE APPROPRIATED**

SOURCE Two (2) wells
TRIBUTARY OF (IF SURFACE WATERS)

MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE	MAXIMUM ACRE FEET PER YEAR
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QUANTITY, TYPE OF USE, PERIOD OF USE

**DENIED**

**LOCATION OF DIVERSION/WITHDRAWAL**

APPROXIMATE LOCATION OF DIVERSION--WITHDRAWAL

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP N. 25	RANGE, (E. OR W.) W.M. 30 E	W.R.I.A. 42	COUNTY Grant
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**RECORDED PLATTED PROPERTY**

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)
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**LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED**

**DESCRIPTION OF PROPOSED WORKS**

**DEVELOPMENT SCHEDULE**

BEGIN PROJECT BY THIS DATE:	COMPLETE PROJECT BY THIS DATE:	WATER PUT TO FULL USE BY THIS DATE:
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**REPORT**

**BACKGROUND**

An application to appropriate public ground water was submitted by Hayes Farms to the Department of Ecology on August 1, 1990. The application was accepted and assigned Ground Water Application No. G3-28971. The application was then amended and given the new priority date of April 29, 1991. The applicant proposes to withdraw water from two wells in the amount of 5400 gallons per minute for the seasonal irrigation of 800 acres. The proposed points of withdrawal are to be located as follows:

- Well No. 1 within the SE¼ of Section 18, T. 25 N., R. 30 E.W.M.
- Well No. 2 within the NW¼ of Section 20, T. 25 N., R. 30 E.W.M.

A notice of application was duly published in accordance with RCW 90.03.280 in the Coulee City News-Standard on May 2 and 9, 1991. An amended notice of application was duly published in accordance with RCW 90.03.280 in the Coulee City News-Standard on May 23 and 31, 1991. The amended notice was published due to an amendment to the application. A total of seven protests were received (see Protests).

A water right application is subject to a SEPA threshold determination (i.e., an evaluation whether there are likely to be significant adverse environmental impacts) if any one of the following conditions are met.

- (a) It is a surface water right application for more than 1 cubic foot per second, unless that project is for agricultural irrigation, in which case the threshold is increased to 50 cubic feet per second, so long as that irrigation project will not receive public subsidies;
- (b) It is a groundwater right application for more than 2,250 gallons per minute;
- (c) It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above;

- (d) It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA);
- (e) It is part of a series of exempt actions that, together, trigger the need to do a threshold determination, as defined under WAC 197-11-305.

Because this application would entail the withdrawal of more than 2,250 gallons per minute, it is subject to SEPA. A final Determination of Non-Significance was issued by the Department of Ecology on April 15, 2013, stating that no environmental impact statement is required.

When an application for appropriation of public waters of the state is made, it is the responsibility of the Department of Ecology, Water Resources Program to determine whether or not the application meets the four tests listed in RCW 90.03.290(3):

1. is water available for appropriation,
2. is the proposed use a beneficial use, and
3. will the appropriation as proposed in the application not impair existing rights,
4. nor be detrimental to the public welfare.

The “Wilson Creek – Coulee City Area” is a work area that was designated during the 1980s for new ground water applications. This work area is located primarily within the central portion of WRIA 42, with a small portion being in western WRIA 43. See hydrogeologic “*Analysis: Coulee City* dated October 3, 2012” for a current description.

### **INVESTIGATION**

In considering the proposed application, the investigation included, but was not limited to, research and review of: (1) appropriate rules and statutes; (2) other water rights, claims, and applications in the vicinity; (3) USGS topographic maps; (4) air photographs; (5) Hydrogeologic Analysis: Coulee City Dated October 3, 2012; and (6) discussions with Department of Ecology regional program staff.

A field investigation was conducted by Dan Tolleson on January 16, 2008. In addition, 2011 air photographs were reviewed to verify any changes in the site. This site is approximately 1.5 miles southeast of the Town of Hartline, Washington. This proposed project lies within what has been historically referred to as the Wilson Creek – Coulee City Study Area.

The proposed place of use is 960 acres of land lying approximately one mile south of US Hwy. 2 within portions of Sections 17, 18 and 20. The terrain of this project is relatively flat and slopes generally to the south, with a shallow coulee that bisects the area. Currently, the entire parcel of land, less road, is farmed with dry land crops. Much of the place of use is not owned by Hayes Farms. They currently own the E½ of Section 18 and the south 720 feet of the W½ of Section 20. The application originally proposed to irrigate 800 acres of the place of use, which at that time would have been practical due to the farming practices and land use of the time. Modern farming practices, economic factors and trends for farming in this region have changed to the use of irrigation pivots. It is estimated that two 130 acre pivot irrigation systems and one smaller 20 acre partial sweep pivot could be utilized on the portion of the place of use owned by Hayes Farms. This means that 280 acres of land could be practically irrigated under this project.

The applicant proposes to withdraw 5,400 gallons per minute from two proposed well sites (Well Nos. 1 and 2). Currently, no wells or water delivery system have been developed for this proposed project. Since the acres available for irrigation have been significantly reduced, the rate of withdrawal would need to reflect that reduction. A typical use of water for irrigation is 10 gallons per minute per acre, so a 280-acre irrigation project would require a maximum of 2,800 gallons per minute.

The proposed place of use and the proposed water transmission facilities are not located on lands wholly owned by the applicant.

### **WATER QUANTITIES**

A standard water duty of 2.5 acre-feet per acre has been determined as a maximum water duty for agricultural irrigation within the Wilson Creek – Coulee City Study Area. This water duty was derived from the standards used in the Odessa Subarea and has been used on all new agricultural water rights issued in this area since the 1980s.

A typical requirement for irrigation is 10 gallons per minute per acre. This is often less with larger projects since rotation and the irrigation system vary greatly. The instantaneous quantities proposed for this project appear to be reasonable.

### **OVERLAPPING AND ADJACENT WATER RIGHTS**

A review of Ecology records was conducted for existing water rights, permits, and claims in the area surrounding the proposed place of use and wells under this application. The search focused primarily on Sections 17, 18, 19 and 20 of T. 25 N., R. 30 E.W.M. The review of Ecology records shows multiple water right certificates and water

right claims within the vicinity of the project. Two claims are appurtenant to the proposed place of use and are as follows:

Water Right Claim No. 136678 claims domestic supply and stock water on a short form within the W½ of Sec. 20 of T. 25 N., R. 30 E.W.M. It appears that this claim is not in use, because the entire claimed place of use is a dry land wheat field.

Water Right Claim No. 136679 claims domestic supply and stock water on a short form within the E½ of Sec. 18 of T. 25 N., R. 30 E.W.M. It appears that this claim is not in use, because the entire claimed place of use is a dry land wheat field.

*(The extent and validity of the above listed rights are not determined in this report.)*

### **WILSON CREEK – COULEE CITY STUDY AREA**

The “Wilson Creek – Coulee City Area” is a work area that was designated during a hydrogeologic study conducted in the 1980s for new water right applications. The study indicated that there were essentially two aquifers within the area, the shallow Wanapum Basalt aquifer and the deep Grande Ronde Basalt aquifer. At that time there was significant public concern that water was not available and new uses would impair existing rights.

The Wanapum aquifer was determined to have limited physical capacity. It was determined that the proposed appropriations for new water from the shallow aquifer would exceed the capacity of the formation to yield water and would impair existing rights. A small quantity of water was held in reserve for exempt wells.

The Grande Ronde aquifer was deemed to have adequate water available, and water table declines in the 1980s were not considered significant. The declines were found to be from zero to a maximum two feet per year. The average was estimated to be less than one foot.

In the 1980s, applications for new water from the Grande Ronde aquifer requested a total of 18,900 acre-feet per year. The first water right issued after this study, in 1984, was G3-25926. Ecology’s decision was appealed to the PCHB, but the appeal was eventually withdrawn. The remaining applications were put on hold pending the PCHB case and further investigation of water availability in the study area. In 1987, 17 additional water rights were issued. To protect existing domestic and stockwater rights, all of the newly authorized wells were required to be cased and sealed into the deeper aquifer.

The majority of the approved water right permits issued in the 1980s were not developed and were subsequently cancelled. As of 2013, only seven of the original 18 water right approvals remained active. They authorized a total of 4,500 acre-feet. The extent and validity of these rights is not determined within this report.

Applications received for new water rights in the Wilson Creek – Coulee City Area after 1987 were put on hold until a new determination of water availability was made. The intent was to monitor the aquifer to determine actual impact of the water rights issued in 1984 and 1987. As of early 2012, there were 19 applications on file for new water rights requesting a total of 74,145 gallons per minute and 8,100 acre-feet per year.

A second water availability study of the area was conducted in recent years and is documented in an Ecology internal report entitled *Hydrogeologic Analysis: Coulee City*, dated October 3, 2012. This study indicated that water levels in the shallow and deep aquifers are declining at a rate of 0.25 to 3 feet per year, an increase in the rate of decline estimated in the 1980s study.

The only area not exhibiting water level declines is the shallow aquifer in the vicinity of Banks Lake and the main irrigation canal. The lack of decline is the result of leakage of waters from the US Bureau of Reclamation project. This leakage water is claimed by the US Bureau of Reclamation and is not available for appropriation through the state permitting system.

In the Fall of 2012, letters were sent to each of the 19 applicants on file for new water. The letters stated that applications would most likely be denied because water was not available for appropriation. Eight of the applications were rejected because applicants were no longer interested in obtaining water or the applicants could not be located by Ecology. The remaining 11 applicants, including the applicant for this permit, requested that a formal appropriation decision be made by Ecology. Each application will be evaluated on its own respective findings.

### **HYDROGEOLOGIC ANALYSIS**

The following hydrogeologic analysis was written by Tracy Band, Hydrogeologist, and was reviewed by Guy J. Gregory, L.G., L.Hg. Hydrogeologist and Unit Supervisor of the Water Resources Program Technical Unit in Ecology’s Eastern Regional office.

The proposed points of withdrawal for this application are located within the Wilson Creek-Coulee City area. A detailed hydrogeologic analysis of this area was completed by Ecology Eastern Region Water Resource Program hydrogeologists in October 2012. This assessment of water availability for new water rights in this area is based

on this report (and the referenced reports therein) including water level measurements obtained by Ecology staff over the last 30 years.

There are two proposed well sites for this project. Well No. 1 is proposed to be within the SE1/4 of Section 18, T. 25 N., R. 30 E.W.M. Well No. 2 is proposed to be within the NW1/4 of Section 20, T. 25 N. R. 30 E.W.M. The site is approximately 1.5 miles southeast of the Town of Hartline, Washington and approximately eight miles east of the east bank of Banks Lake.

Several wells in the vicinity have been measured in the spring of many recent years by the Department. Hydrographs, or plots of these static water levels over time, are created from these measurements. The hydrographs of wells in the area show that the majority of wells in the upper and lower portions of the basalt aquifer system are declining at a rate between 0.25 to 3 feet per year. This rate of decline indicates current use exceeds the rate of recharge to the aquifers in this area. The result is declining water tables and groundwater mining.

RCW 90.44.070 indicates that “No permit shall be granted for the development or withdrawal of public ground waters beyond the capacity of the underground bed or formation in the given basin, district, or locality to yield such water within a reasonable or feasible pumping lift in case of pumping developments, or within a reasonable or feasible reduction of pressure in the case of artesian developments. The department shall have the power to determine whether the granting of any such permit will injure or damage any vested or existing right or rights under prior permits and may in addition to the records of the department, require further evidence, proof, and testimony before granting or denying any such permits.”

The above analysis indicates current appropriations exceed available recharge, and approval of additional withdrawal from this basin, as requested in this permit application, will further exceed the available recharge in this basin. The data available to the department indicates current quantities of water use are resulting in a decline in wells at a rate between 0.25 and three feet per year. Taken together, this suggests that issuance of additional withdrawal in this area may injure or damage existing vested rights due to increasing the withdrawal beyond the capacity of the formation in this basin to yield water. Ecology concludes this long term decline indicates issuance of water for this permit would exceed the capacity of the formation to provide it, thus there is no water available for this application in consideration of the criteria of RCW 90.44.070.

Furthermore, withdrawal of additional water from two new wells would increase the quantity of water withdrawn from the aquifer. Several wells already exist in the vicinity of the proposed location with similar depths and water levels. There has been documented history of pumping interference problems between existing water users in the Coulee City study area, and withdrawal of additional water from the aquifer system would probably cause impairment to existing water rights.

### **WATER AVAILABILITY**

For water to be available for appropriation, it must be both physically and legally available.

#### Physical availability

For water to be physically available for appropriation there must be ground or surface water present in quantities and quality and on a sufficiently frequent basis to provide a reasonably reliable source for the requested beneficial use or uses. To determine whether water is physically available for appropriation, the following factors are considered:

- Volume of water represented by senior water rights, including federal or tribal reserved rights or claims;
- Water right claims registered under Chapter 90.14 RCW
- Ground water uses established in accordance with Chapter 90.44 RCW, including those that are exempt from the requirement to obtain a permit; and
- Potential riparian water rights, including non-diversionary stock water.

Lack of data indicating water usage can also be a consideration in determining water availability, if the department cannot ascertain the extent to which existing rights are consistently utilized and cannot affirmatively find that water is available for further appropriation.

#### Legal availability

To determine whether water is legally available for appropriation, the following factors are considered:

- Regional water management plans – which may specifically close certain water bodies to further appropriation.
- Existing rights – which may already appropriate physically available water.
- Fisheries and other instream uses (e.g., recreation and navigation). Instream needs, including instream and base flows set by regulation. Water is not available for out of stream uses where further reducing the flow of surface water would be detrimental to existing fishery resources.
- The Department may deny an application for a new appropriation in drainages where adjudicated rights exceed the average low flow supply, even if the prior rights are not presently being exercised. Water would

not become available for appropriation until existing rights are relinquished for non-use by state proceedings.

## **IMPAIRMENT ANALYSIS**

“Impair” or “impairment” means to: 1) adversely impact the physical availability of water for a beneficial use that is entitled to protection, and/or 2) to prevent the beneficial use of the water to which one is entitled, and/or 3) to adversely affect the flow of a surface water course at a time when the flows are at or below instream flow levels established by rule (POL-1200), and/or 4) degrade the quality of the source to the point that water is unsuitable for use by existing water right holders (WAC 173-150). Demonstration of impairment would require evidence of a substantial and lasting or frequent impact reflecting such conditions.

Water use in this region is predominately for agricultural irrigation. Other existing water uses in this area are comparatively small. Since most of these rights are for irrigation they tend to be for larger quantities, so each appropriation has a significant potential for impact. This proposed appropriation is located in the vicinity of the most heavily pumped region of the Wilson Creek – Coulee City Area. As indicated above, this area has two major sources of water, the shallow Wanapum Aquifer and the deeper Grand Ronde Aquifer.

The shallow aquifer within the vicinity of the proposed project has been determined to produce limited quantities of water and is declining. This proposed appropriation would further exceed the yield of the formation by mining the aquifer and negatively impacting existing water rights. This is consistent with the water right determinations made in the 1980s, that water was unavailable. Furthermore, the 2012 Hydrogeologic Analysis referenced above indicates that new appropriations will amplify the decline in the aquifer and cause impairment.

The deep aquifer within the vicinity of the proposed project also is declining. These declines have exceeded the estimates in the 1980s hydrogeologic study with only a quarter of the quantities authorized being developed. This aquifer is declining at a greater rate than anticipated in 1980s. Further appropriation of this aquifer will negatively impact the existing water rights which are primarily for irrigation. This proposed use would further exceed the yield of the formation by mining the aquifer and negatively impacting existing water rights and cause impairment of existing rights.

As stated above in the Water Availability section, there are several existing municipal water right certificates and a permit that do not appear to be fully developed within the Wilson Creek-Coulee City area. These inchoate rights must be evaluated under RCW 90.03.330, which indicates they are rights in good standing. The water under these rights has not yet been put to full use. The proposed appropriation would impair these existing municipal rights by ultimately preventing them from obtaining water to which they are entitled.

This area is experiencing significant ground water level declines. Based on the analysis above, all water in this area has been allocated. Ground water mining is occurring in both aquifers. Additional uses created by issuing the proposed new water right within this area would impair existing rights.

## **BENEFICIAL USE**

The use proposed under this project is a beneficial use of water on the lands that are practically irrigable as described above in the investigation.

## **PUBLIC INTEREST AND CONSIDERATION OF PROTESTS**

Seven protests were received against granting this water right permit, in response to the public notices. In addition the Bureau of Reclamation has made comments about new applications in the Wilson Creek – Coulee City area. The following is a summary of each protest and comments:

### **Protests**

Tom McPherson’s (Wilbur Security) protest was received on June 10, 1991. He is concerned that the water withdrawal proposed under this application will create excessive declines in the aquifer and will negatively affect his ability to farm economically.

Phil Isaak’s (Isaak Brothers) protest was received on June 11, 1991. His concern is general to any new water rights. He wants Ecology to make sure that there is adequate water for existing rights and future development within the area. Mr. Isaak has three applications on file for new water rights within this area.

Harry Boger’s protest was received on June 14, 1991. His concern is that the water withdrawal proposed under this application will dry up his wells.

David and Patricia Goodwin’s protest was received on June 19, 1991. Their concern is that the water withdrawal proposed under this application will negatively affect their well.

The Town of Hartline's protest was received on May 14, 1991. Their concern is that the water withdrawal proposed under this application will negatively affect the town's ability to serve water. The Town of Hartline holds inchoate municipal water rights.

Frances Kendall's protest was received on June 3, 1991. Her concern is that the water withdrawal proposed under this application will negatively affect her domestic well, the aquifer and make the noxious weed problem worse.

Margret and Bernard Kendall's protest was received on June 3, 1991. Their concern is that the water withdrawal proposed under this application will negatively affect their wells, the aquifer and make the noxious weed problem worse.

### Bureau of Reclamation Comments

The United States Department of the Interior, Bureau of Reclamation's comments were received on February 4, 2013. They indicated that they agree, absent further investigation, with Ecology's Hydrogeologic *Analysis: Coulee City* dated October 3, 2012. In particular, Reclamation agrees with the conclusion that the shallow aquifer lying immediately east and southeast of Banks Lake is in direct continuity with Banks Lake. Reclamation has requested that Ecology deny any applications in these areas, on the basis they would impair existing water rights. The Bureau of Reclamation has proposed to work with the applicants to identify alternate water sources. Further information can be obtained from Ms. Christi Davis-Kernan, Water & Contracts Specialist at [cdaviskernan@usbr.gov](mailto:cdaviskernan@usbr.gov) or by phone at 509-754-0227.

As stated above, in the Water Availability section, there are several existing municipal water right certificates and a permit that do not appear to be fully developed within the Wilson Creek-Coulee City area. These inchoate rights must be evaluated under RCW 90.03.330, which indicates they are rights in good standing. The water under these rights has not yet been put to full use, with some quantities held in reserve for future development. Municipal suppliers ultimately depend on these rights for growth and certainty of water supply for their community. The proposed appropriation is anticipated to have a negative impact to the existing municipal rights. It is not in the public interest.

There has been a significant public expression of protest and concerns regarding the proposed applications in the Wilson Creek – Coulee City area. This includes the protests of many of the other applicants for new water rights within the work area. The protestants of these other applications hold a variety of rights including state issued certificates, claims and permit exempt wells. This area is experiencing significant ground water level declines. The result of issuing new water rights in the area would create greater water level declines and worsen aquifer mining. In addition, it would impair existing water rights and would not be beneficial to the long term economic stability of the area which relies heavily on agriculture and ranching. Therefore, issuance of this application is not in the public's interest.

### CONCLUSIONS

It is the conclusion of this examiner that although the proposed use is a beneficial use, water is **not** legally or physically available for further appropriation. Further appropriations within this area will cause impairment to existing rights and might restrict existing water users from exercising their full quantities. Additional allocations of ground water in excess of the capacity of the formation to satisfy the newly proposed uses would be contrary to the public interest and would be detrimental to the public welfare.

### RECOMMENDATIONS

Therefore, it is recommended this application be **DENIED**.

Signed at Spokane, Washington this 9th day of July, 2013.



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Dan Tolleson  
Water Resources Program  
Department of Ecology