

1 have one consistent voice and organization that works to protect the entire Columbia River
2 Basin, including the Columbia River’s tributaries and groundwater resources that impact
3 surface water quality. Riverkeeper has approximately 12,000 members and volunteers,
4 including many that live, work, and recreate in the Umatilla Basin and downstream of the
5 water use at issue in this proceeding. Riverkeeper has a history of working to improve water
6 quality and quality of life near and along the Columbia River and its tributaries in Morrow
7 County. This includes volunteer water quality monitoring and restoration and campaigns to
8 reduce pollution from existing and proposed facilities located in the county.
9

10 2.

11 Petitioner Center for Food Safety (“CFS”) is a national non-profit organization that
12 seeks to empower people, support farmers, and protect the environment from harmful
13 industrial agriculture. On behalf of CFS’s 830,000 farmer and consumer supporters,
14 including tens of thousands in Oregon, CFS works to protect public health and the
15 environment from industrial agricultural pollution, including ground water
16 pollution. Through its Animal Factories program, CFS uses regulatory action, citizen
17 engagement, litigation, and legislation to promote transparency and accountability in the
18 Animal Factory industry. CFS addresses one of the major problems with large animal
19 factories: the millions of gallons of untreated manure waste produced and concentrated in
20 one area, which leaches into groundwater, including drinking water, when stored in lagoons
21 and excessively sprayed on crops. One of the core concepts behind this program is more
22 stringent regulation of unchecked practices and enforcement of applicable laws affecting our
23 health, environment, and economic livelihoods. This includes using Oregon state laws to
24
25
26

1 protect people and farmers, like those in the Umatilla Basin, from the harmful groundwater
2 pollution caused by large animal factories.

3 3.

4 Humane Oregon is a non-profit Oregon corporation formed in 2014 to help advocate
5 for animal welfare in Oregon. Humane Oregon has participated in a number of regulatory
6 reviews for the proposed dairy at issue in this proceeding, primarily to express concern for
7 the welfare of dairy cows in large industrial facilities such as the one that would be enabled
8 by the water use permit at issue in this proceeding. Humane Oregon specifically raised those
9 concerns in comments on the water use permit, as shown in Exhibit 2.
10

11 4.

12 WaterWatch of Oregon (“WaterWatch”) is an Oregon non-profit corporation. Since
13 1985, WaterWatch has invested time and money in protecting the water resources of Oregon,
14 including groundwater resources, and in promoting sound water policy and faithful
15 implementation of that policy. WaterWatch’s work has included work in the Umatilla Basin
16 and, specifically, in and around the Ordnance Gravel Critical Groundwater Area.
17 WaterWatch’s work to promote sound water policy has included advocating the position that
18 limited licenses for water use, given the limited review conducted for such uses, should be
19 limited to uses that are short-term in character and not long-term uses seeking to get
20 entrenched with an early start.
21
22

23 5.

24 Respondent Oregon Water Resources Department (“Department”) is an
25 administrative agency of the State of Oregon.
26

1 BACKGROUND FACTS

2 6.

3 Greg te Velde, a resident of Tipton, California, is an owner and operator of large-
4 scale dairies in California, Oregon, and possibly other locations not presently known to
5 petitioners. Te Velde does business in Oregon under the assumed business names of Willow
6 Creek Dairy and, more recently, Lost Valley Farm.
7

8 7.

9 In or about November 2015, te Velde purchased some or all of a tree farm near
10 Boardman, Oregon. He is in the process of removing the trees and building an industrial-size
11 dairy that will eventually confine 30,000 cows and grow crops to feed the cows.
12

13 8.

14 Petitioners oppose the new dairy because, among other reasons, it will consume large
15 amounts of water in a water-starved area, pollute the air and water, and subject cows to
16 extreme confinement and other inhumane treatment. These concerns are expressed in more
17 detail in Exhibit 2, which are comments that petitioners submitted on the application at issue
18 in this proceeding.
19

20 9.

21 The property on which te Velde is building his new dairy is near the Columbia River.
22 It also is on top of several layers of groundwater. The Department distinguishes the
23 groundwater layers as being in either the “basalt” aquifer or the “alluvial” aquifer. The basalt
24 aquifers are deep in the basalt rocks formed by ancient lava flows. The alluvial aquifers are
25 closer to the surface, in sedimentary materials deposited on top of the basalt formations.
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10.

After rapid declines in groundwater levels from over-use, the Department in 1976 designated portions of the alluvial and basalt aquifers as “critical groundwater areas.” These are called the Ordnance Gravel Critical Groundwater Area and the Ordnance Basalt Critical Groundwater Area. The order designating the areas closed them to new appropriations of groundwater.

11.

The dairy is within one mile, and “up-gradient” from, the Ordnance Gravel Critical Groundwater Area. That means extractions from the alluvial aquifer on the dairy property are likely to reduce the amount of groundwater flowing to users in the critical area. The dairy is inside the Ordnance Basalt Critical Groundwater Area, meaning new extractions from the basalt aquifer are expressly prohibited.

12.

To operate the dairy as planned, te Velde needs a seasonal water supply to irrigate crops. He also needs a year-round supply of potable water for the cows to drink and for dairy operations such as cooling milk, running equipment, and cleaning barns. The land te Velde purchased came with rights to use water from the Columbia River. That water can be used to irrigate crops. However, water from the river is not suitable as drinking water for the cows. Moreover, it cannot be used year-round because the water rights are limited to use during the irrigation season. Thus, for the dairy operations (including drinking water for the cows), te Velde hopes to use groundwater rights transferred by another party. However, the Department must approve the transfer, and that is expected to take some time, in part because petitioners and a neighboring dairy filed “protests” to the transfer.

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13.

Instead of waiting to find out if he will get permanent groundwater rights, te Velde has gone ahead with construction of his dairy. He hopes to secure a short-term supply of water for dairy operations with “limited licenses.” Limited licenses, which are authorized by ORS 537.140, are permits to use water for purposes that are of “short-term or fixed duration” (a maximum of five years). Typical examples include building a road or flushing a pipeline. Because the use is expected to last only a short time, the review is shorter and more limited than the review for a water use expected to continue for a longer period.

14.

On or about March 3, 2017, te Velde submitted to the Department an application for a five-year limited license to continuously take up to 644 gallons of water per minute (927,360 gallons per day) from the alluvial aquifer. Petitioners and others filed comments in opposition, including the comments attached as Exhibit 2.

FINAL ORDER

15.

On or about April 10, 2017, the Department issued a final order granting te Velde the limited license attached as Exhibit 1. The license allows te Velde to continuously draw 354 gallons of water per minute from the alluvial aquifer (up to 97 acre feet total) for dairy operations. It also allows him to draw another 53 gallons per minute (50 acre feet total) to finish construction of the dairy.

1
2 PETITIONERS ARE ADVERSELY AFFECTED AND AGGRIEVED

3 16.

4 Petitioners are adversely affected and aggrieved by the final order because it will
5 allow the dairy to complete construction and begin operations. That will undermine the
6 public interests that petitioners represent and have invested time and money to protect, as
7 more specifically set forth in Exhibit 2.
8

9
10 GROUND FOR REVERSING OR REMANDING THE FINAL ORDER

11 17.

12 Under ORS 536.075 and ORS 183.484(5), the court must set aside, modify or remand
13 the final order because it is based on errors of law and is not supported by substantial
14 evidence. Specifically, the final order should be set aside, modified, or remanded for at least
15 the following reasons:
16

17 a. The Department’s conclusion No. 1, that “[u]se of water . . . for dairy
18 operation is allowed under ORS 537.143,” is not supported by substantial evidence or is
19 based on an error of law because water use by the dairy will not be of “short-term or fixed
20 duration.”
21

22 b. The Department’s finding No. 9, that it “does not have authority to address the
23 water and air pollution concerns raised, nor to address the treatment of confined cattle,” is an
24 error of law. Before granting a limited license, the director of the Department must find “that
25 the proposed water use will not impair or be detrimental to the public interest.” OAR 690-
26 340-0030(2). The “public interest” is not defined, but any plausible interpretation of the

1 ordinary meaning of that term would include clean air, clean water, and humane treatment of
2 animals.

3 c. Given the numerous expected detrimental impacts of the dairy as explained in
4 the comments attached as Exhibit 2, the Department's conclusion No. 5, that "[t]he proposed
5 water use will not impair or be detrimental to the public interest," is not supported by
6 substantial evidence or is based on an incorrect interpretation of law.

7
8 d. The Department's finding No. 8 and conclusion No. 2, that "groundwater is
9 available in the amounts requested," is not supported by substantial evidence or is based on
10 an incorrect interpretation of law.

11 e. The Department's conclusion No. 3, that "[t]he proposed use will not injure
12 existing water rights," is not supported by substantial evidence or is based on an incorrect
13 interpretation of law.

14
15 f. The Department's conclusion No. 4, that "[t]he proposed use will protect the
16 groundwater resource," is not supported by substantial evidence or is based on an incorrect
17 interpretation of law.

18 18.

19 Pursuant to ORS 536.075(5), this petition for review stays the limited license,
20 meaning te Velde is not authorized to withdraw water under the limited license during the
21 pendency of this matter (or thereafter if petitioners prevail).

22
23 19.

24 Pursuant to ORS 183.497, petitioners are entitled to recover from the Department
25 their reasonable attorney fees incurred in this proceeding.
26

1 WHEREFORE, Petitioner prays for judgment:

2 (a) Reversing, setting aside and/or modifying the order approving the limited license;

3 (b) Awarding petitioners costs, disbursements, and attorney fees incurred in this
4 action;

5 (c) For such other relief as the Court deems just and proper.
6

7 DATED: May 11, 2017.
8

<p>9 COLUMBIA RIVERKEEPER 10 s/ Lauren Goldberg 11 Lauren Goldberg, OSB No. 085678 12 111 Third St. 13 Hood River, OR 97031 14 Telephone: 541-965-0985 Email: lauren@columbiariverkeeper.org Attorney for Columbia Riverkeeper</p>	<p>CENTER FOR FOOD SAFETY s/ Amy van Saun Amy Luisa van Saun, OSB No. 155085 917 SW Oak St Ste 300 Portland, OR 97205 Telephone: 971-271-7372 Email: avansaun@centerforfoodsafety.org Attorney for Center for Food Safety</p>
<p>15 NICHOLS LAW GROUP 16 s/ David R. Kracke 17 David R. Kracke, OSB No. 903174 18 4614 SW Kelly Ave. Ste. 200 Portland, OR 97239 19 Telephone: 503-224-3018 20 Email: david@craignicholslaw.com Attorney for Humane Oregon</p>	<p>WATERWATCH OF OREGON s/ Brian Posewitz Brian Posewitz, OSB No. 914002 213 SW Ash St. Ste. 208 Portland, OR 97204 22 Telephone: 503-295-4039 x 2 23 Email: brian@waterwatch.org Attorney for WaterWatch of Oregon</p>

24 Trial Attorneys: Same as Above
25
26



Final Order
Limited License Application LL-1690

Appeal Rights

This is a final order in other than a contested case. This order is subject to judicial review under ORS 183.484. Any petition for judicial review must be filed within the 60-day time period specified by ORS 183.484(2). Pursuant to ORS 536.075 and OAR 137-004-0080 you may either petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the Director, and if no action is taken within 60 days following the date, the petition was filed, the petition shall be deemed denied.

Requested Water Use

On March 3, 2017, the Water Resources Department received completed application **LL-1690** from Willow Creek Dairy c/o Greg te Velde for the use of 644 gallons per minute up to 1037 acre-feet per year from 3 alluvial wells, located in the SE ¼, NW ¼, the NW ¼, SW ¼, and the NW ¼, SE ¼, Section 16, Township 3 North, Range 26 East, W.M., for agricultural water use to construct and operate a dairy, for the period of 5 years from issuance.

On March 28, 2017, the applicant's attorney reduced the limited license request to use 354 gallons per minute for a total of 97 acre-feet March 30 to May 31, 2017, for dairy operations. From May 1 to November 30, 2017, the amended request is for 53 gallons per minute for a total of 50 acre-feet for the purpose of completing construction of the dairy.

Authorities

The Department may approve a limited license pursuant to its authority under ORS 537.143, 537.144 and OAR 690-340-0030.

ORS 537.143(2) authorizes the Director to revoke the right to use water under a limited license if it causes injury to any water right or a minimum perennial streamflow.

A license will not be issued for more than five consecutive years for the same use, as directed by ORS 537.143(8).

Findings of Fact

1. The application after amendment proposes use of 354 gallons per minute for a total of 97 acre-feet March 30 to May 31, 2017, for dairy operations. From May 1 to November 30, 2017, the application requests 53 gallons per minute for a total of 50 acre-feet for the purpose of completing construction of the dairy.
2. The forms, fees, and map have been submitted, as required by OAR 690-340-0030(1).

3. The Department provided public notice of the application, on March 7, 2017, as required by OAR 690-340-0030(2).
4. This license request is limited to an area within a single drainage basin as required by OAR 690-340-0030(3).
5. The wells described in the application are located west of, and, outside of, the Ordnance Alluvial Critical Ground Water Area. One well has been constructed, and two wells remain to be constructed.
6. The Department Watermaster for this area, Greg Sibernagel, submitted comments for this application on March 3, 2017. He asked that totalizing flow meters be required. He also suggested that the North Central Region well inspector be notified of well-construction activity prior to and during construction of wells.
7. The Department has determined that the proposed source has not been withdrawn from further appropriation.
8. The Department reviewed the application to determine groundwater availability, and found that groundwater is available in the amounts requested provided the use is conditioned to protect the groundwater resource.
9. The Department received comments related to the possible issuance of the license for the original request of 1037 acre-feet from Center for Biological Diversity, Center for Food Safety, Columbia Riverkeeper, Friends of the Columbia Gorge, Food and Water Watch, Humane Oregon, Humane Society of the United States, WaterWatch of Oregon, and individual citizens. These comments, which were read, evaluated, and considered, pertained to the following topics: injury to other water rights, limited water availability, water and air pollution, water quality, and treatment of confined cattle. Although the Department does not have authority to address the water and air pollution concerns raised, nor to address the treatment of confined cattle, the Department has conditioned the use to address the potential for injury to existing water rights.
10. Pursuant to OAR 690-340-0030(5), conditions have been added with regard to notice and water-use measurement.
11. Morrow County has indicated that the proposed use is compatible with the applicable acknowledged comprehensive land-use plan.
12. On March 28, 2017, the applicant provided notice to the Department of the location of the diversion, the quantity of water to be diverted, and the intended use and place of use, and indicated that they would like to begin use on March 30, 2017.

Conclusions of Law

1. Use of water for construction purposes and for dairy operation is allowed under ORS 537.143.

2. Groundwater is available in the amounts requested, provided the use is conditioned to require totalizing flow meters, water-use measurement and reporting, static water-level monitoring, and by limiting the duration of the license to no more than one year.
3. The proposed use will not injure existing water rights, provided groundwater-level measurements are collected monthly as provided in the order below.
4. The proposed use will protect the groundwater resource, provided wells are constructed in accordance with applicable well-construction standards. The order (below) is conditioned to require coordination with the regional well inspector.
5. The proposed water use will not impair or be detrimental to the public interest pursuant to OAR 690-340-0030(2), as conditioned in the order below.

Order

Therefore, pursuant to ORS 537.143, ORS 537.144, and OAR 690-340-0030, application **LL-1690** is approved as conditioned below.

1. The rate, volume and period of use for **LL-1690** shall be 354 gallons per minute for a volume of 97 acre-feet from April 10, 2017, for dairy operations. In addition, 53 gallons per minute for a volume of 50 acre-feet for the purpose of completing construction of the dairy from May 1 to November 30, 2017. The total volume allowed under this license is 147 acre-feet.
2. The licensee has provided notice to the Watermaster in the district, as required in OAR 690-340-0030(4), 15 days in advance of using water under the license. Use under the license may commence upon issuance of this order.
3. Groundwater shall be produced only from the alluvial groundwater aquifer from wells that meet well-construction standards.
4. Before and during any new well construction, the licensee shall notify the North Central Region Well Inspector by phone at 541-278-5456.
5. Before water use may begin under this license, the licensee shall install a totalizing flow meter at each point of appropriation. The totalizing flow meter must be installed and maintained in good working order. The licensee shall allow the Watermaster access to the device; provided however, where any device is located within a private structure, the Watermaster shall request access upon reasonable notice. The licensee shall keep a complete record of the volume of water diverted each month, and shall submit a report which includes water-use measurements to the Department monthly. Two copies shall be provided to the Department: one to the Pendleton office, and one to the Water-Use Reporting Section in Salem. Further, the Director may require the licensee to report general water-use information, including the place and nature of water use under the license. The Director may provide an opportunity for the licensee to propose alternative measuring and reporting procedures for review and approval.
6. Groundwater-level measurements shall be collected monthly. Two copies shall be provided to the Department: one to the Pendleton office and one to the Salem groundwater section as

long as this license is in effect. The measurements shall be collected at the wells known as: MORR 52293/L117303, MORR 52329/L120178, and MORR 52328/L120177.

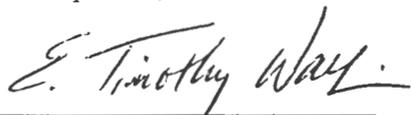
Measurements collected by Department staff will satisfy this condition. All measurements shall be made by a certified water rights examiner; registered professional geologist, registered professional engineer, licensed well constructor or pump installer licensed by the Construction Contractors Board, and be submitted to the Department on forms provided by the Department. The Department requires the individual performing the measurement to:

- A. Identify each well with its associated measurement;
- B. Measure and report water levels to the nearest tenth of a foot as depth-to-water below ground surface;
- C. Specify the method used to obtain each well measurement; and
- D. Certify the accuracy of all measurements and calculations reported to the Department.

- 7. The Director may revoke the right to use water for any reason described in ORS 537.143(2), and OAR 690-340-0030(6). Such revocation may be prompted by field regulatory activities or by any other reason.
- 8. Use of water under a limited license shall not have priority over any water right exercised according to a permit or certificate, and shall be subordinate to all other authorized uses that rely upon the same source.
- 9. A copy of this license shall be kept at the place of use, and be available for inspection by the Watermaster or other state authority.

NOTE: This water-use authorization is temporary. Applicants are advised that issuance of this final order does not guarantee that any permit for the authorized use will be issued in the future; any investments should be made with that in mind.

Issued April 10, 2017



E. Timothy Wallin, Water Rights Program Manager
for Director, Oregon Water Resources Department

cc: Gregory M. Silbernagel, District 5 Watermaster
Bill Duke, ODFW
Smita Mehta, DEQ
Hydrographics
Commenters via e-mail
File

If you need further assistance, please contact the Water Rights Section at the address, phone number, or fax number below. When contacting the Department, be sure to reference the license number for fastest service.

Remember, this license does not provide a secure source of water. Water use can be revoked at any time. Such revocation may be prompted by field regulatory activities or many other reasons.

Water Rights Section
Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem OR 97301-1271

BEFORE THE OREGON WATER RESOURCES DEPARTMENT

In the Matter of LL-1690 (Willow Creek Dairy c/o Greg te Velde))	Comments of Center for Biological Diversity, Center for Food Safety, Columbia Riverkeeper, Friends of the Columbia Gorge, Food & Water Watch, Humane Oregon, Humane Society of the United States, and WaterWatch of Oregon
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I. INTRODUCTION

Willow Creek Dairy, an assumed business name of California dairy magnate Greg te Velde, seeks a “limited license” to pump 664 gallons of water per minute from an alluvial aquifer near the Columbia River for his new mega-dairy. The application should be denied because the proposed use is not “short-term or fixed” in duration, and because it would result in limited licenses of more than five consecutive years for the same use. The application also should be denied because, under Oregon Administrative Rules, a limited license can be granted only if “the proposed water use will not impair or be detrimental to the public interest.” That finding cannot be made here because water is not available, because the proposed use would injure other water rights, and because the limited license would facilitate construction of large, industrial dairy that would pollute the air and water, hurt fish and wildlife, displace family farms, and subject nearly 10,000 cows (30,000 in the long-run) to extreme confinement and other inhumane treatment.

II. DISCUSSION

As discussed below, the application should be denied because the proposed use: (A) is not “for a short-term or fixed duration”; (B) would result in a limited license of more than five

consecutive years for the same use; and (C) would otherwise impair or be detrimental to the public interest.

A. The Proposed Use Is Not Short-Term or Fixed in Duration

A “limited license” is an authorization to use water on a short-term basis. *See* ORS 537.143. Because the authorization is short-term, the “[u]ses” that are “eligible” for a limited license must be of “short-term or fixed duration.” ORS 537.143(1).

In this case, Willow Creek seeks a limited license for “construction and operation of a dairy.” (Application, p. 1.) Attachment B to the application says that the water will be used as drinking water for the cows and for such things as “cooling milk,” “cleaning milk equipment,” “washing pens” and “flushing the livestock barns.” Unless Willow Creek plans to close the dairy within five years, none of these uses have a “short-term or fixed duration.”

Willow Creek in fact is seeking the limited license so it can have water now for a long-term use (a dairy operation) that it hopes to supply later with a transfer of groundwater rights from a neighboring landowner (in exchange for a transfer of some surface water rights). (*See* T-12247 and T-12248.) However, that is not an authorized purpose for a limited license.

B. The Proposed Use Would Result in A Limited License for The Same Use for More Than Five Consecutive Years

ORS 537.143(8) provides:

Except as provided in subsection (10) of this section [relating to water from storage], the department may not issue a limited license for the same use for more than five consecutive years.

Willow Creek seeks this five-year limited license for construction and operation of a dairy. Attachment B to the application admits it would use a “trench well” already being used

under Limited License 1645 (along with two new wells). Limited License 1645, for the period June 7, 2016, through April 30, 2017, also is for construction of a dairy.¹ Thus, the proposed limited license would add five years to a use that already has had at least one year. It therefore would violate ORS 537.143(8).

C. The Proposed Use Is Not in The Public Interest

Before granting a limited license, the Director of the Department must find “that the proposed water use will not impair or be detrimental to the public interest.” OAR 690-340-0030(2). Statutes and rules applicable to limited licenses do not limit the factors that may be considered for this. Presumably they include (but are not limited to) factors identified in “public interest” determinations for long-term water appropriations. For groundwater, this analysis asks generally if the proposed use “would preserve the public welfare, safety and health.” ORS 537.625(3). Specific considerations include:

- Whether water is “available” for the proposed use. ORS 537.621(2).
- Whether the proposed use would “injure” existing water rights. ORS 537.621(2).
- Whether the proposed use is within the “capacity” of the resource and would “maintain” stable groundwater levels. ORS 537.525(6), (7).
- Whether the proposed use would result in “impairment of natural quality of ground water by pollution.” ORS 537.525(8) (made applicable by ORS 537.621(2)).
- Whether the proposed use would otherwise adversely impact “fish and wildlife” or “water quality.” OAR 690-310-0140(3)(b).

¹ LL-1645 itself replaced LL-1636, an emergency limited license for “dust control,” apparently related to construction of the dairy, from March 16, 2016, through May 15, 2016.

While these factors are illustrative, anything relevant to the “public interest” should be relevant to whether the limited license should be granted.² Under this analysis, the proposed limited license also should be denied for at least the following reasons:

1. The proposed use seeks water that is not available.

Water is not “available” for a proposed use if the proposed source is “over-appropriated.” OAR 690-300-0010(57)(a). A groundwater source is “over-appropriated” if “[t]he appropriation of groundwater resources by all water rights exceeds the average annual recharge to a groundwater source over the period of record or results in the further depletion of already over-appropriated surface waters.” OAR 690-400-0010(11)(a).

In review of prior limited license applications by the same applicant for water from the same aquifer, the Department said it could not determine if the aquifer was over-appropriated. The Department therefore lacks substantial evidence to find that water is available for the limited license.

2. The proposed use would injure existing water rights.

The statutes and rules do not define “injure” for purposes of limited licenses. However, for water right transfers, “[i]njury to an existing water right” means “a proposed transfer would

² Although the rule does not explicitly state who has the burden of proof, courts have consistently held that permit applicants have the burden of proving that their proposed activity is within the public interest. *See, e.g., Kristensen v. Eugene Planning Comm’n*, 24 Or. App. 131, 544 P.2d 591 (1976) (“applicant for a conditional use permit must bear the burden of proving” it meets the public need recognized by the zoning ordinance); *Borich Transfer Co. v. Haley*, 2 Or. App. 666, 469 P.2d 638 (1970) (applicant for motor carrier permit has burden of proving permit is in the public interest); *see also Federation of Indep. Seafood Harvesters v. Ore. Fish & Wildlife Comm’n*, 291 Or. 452, 632 P.2d 777 (1981) (“Shifting the burden of presenting evidence from the applicant to the Commission or an outside interest group is inconsistent with the legislative intent to insure protection of the fishery resource”).

result in another, existing water right not receiving previously available water to which it is legally entitled.” OAR 690-380-0100(3).

In review of prior limited license applications by the same applicant for water from the same source, Department staff expressed concerns about possible injury to existing water rights in the nearby Ordnance Gravel Critical Groundwater Area. Staff concluded that a truly short-term use (a few months) could probably be accomplished without injury, but that longer term use could not. For example, in the groundwater review for LL-1637, which requested less water for a shorter time period (seven months) from the same aquifer, staff wrote:

The proposed use will likely intercept groundwater that would otherwise flow into the [Ordnance Gravel Critical Groundwater Area], so new long-term uses are not likely feasible without injury to other users.

(Groundwater Review, LL-1637, p. 2 (March 31, 2016).)

This license application now proposes substantial withdrawals from the same source on a continuous basis for five years. Given prior concerns about lower rates of appropriation for shorter periods of time, the Department cannot reasonably conclude that this proposed five-year use will not injure existing water rights.

3. The proposed use is not within the capacity of the resource or consistent with the public interest in maintaining stable groundwater levels.

The facts discussed above also show that the proposed use would not be within the capacity of the resource or consistent with the public interest in maintaining stable groundwater levels.

4. The proposed use would pollute the water.

The proposed use is for a mega-dairy to be used as drinking water for the cows and for such things as “washing pens” and “flushing the livestock barns.” This proposed use will contribute to and exacerbate pollution in the groundwater by adding more nitrate and other pollutants to the groundwater through disposal of cow waste, including washing and flushing of cow waste with water the applicant hopes to obtain through the proposed limited license.

The Willow Creek Dairy will operate in the Lower Umatilla Basin Groundwater Management Area.³ This Area was designated because of the elevated nitrate concentrations in the groundwater.⁴ Nitrate-nitrogen concentrations in many groundwater samples in the area exceed the federal safe drinking water standard.⁵ “Throughout the Umatilla Reporting Basin there are more than 20 locations with water quality concerns due to excess pathogens and chemicals from manure and bio-solids.”⁶ Morrow County officials who signed the facility’s Land Use Compatibility Statement for a proposed water quality permit expressed concern that “the addition of 30,000 cows has the ability to significantly contribute to the nitrogen loading of the [Groundwater Management Area],” and signed it only “with trepidation.”⁷

As EPA has established, “[p]ollutants in animal waste and manure [from “confined animal feeding operations” such as this] can enter the environment [by] leaching into soil and

³ See Or. Dep’t of Env’tl. Quality, Lower Umatilla Basin Groundwater Management Area, <http://www.deq.state.or.us/wq/groundwater/docs/GWMARegionsLoUmatilla.pdf> (map depicting the boundaries of the Lower Umatilla Basin Groundwater Management Area).

⁴ Or. Dep’t of Env’tl. Quality, Groundwater Management Areas, <http://www.deq.state.or.us/wq/groundwater/gwmas.htm>.

⁵ Or. Dep’t of Env’tl. Quality, Lower Umatilla Basin Groundwater Management Area, <http://www.deq.state.or.us/wq/groundwater/lubgwma.htm>.

⁶ Oregon Watershed Enhancement Board, 2013-2015 Plan Accomplishments: Umatilla Basin, https://www.oregon.gov/OWEB/Pages/BiennialReport1315/Umatilla_Basin.aspx.

⁷ Morrow County Planning Department, Land Use Compatibility Statement (Aug. 18, 2015).

ground water.”⁸ “Among the reported environmental problems associated with animal manure are . . . ground water quality degradation.”⁹ Indeed, one of the leading causes of nitrate contamination in the Lower Umatilla Basin’s groundwater is dairies.¹⁰ Excessive nitrate levels in drinking water are dangerous to both humans and livestock.¹¹ EPA has noted that:

CAFO wastes can contaminate ground water and thereby cause health risks and other welfare losses to people relying on ground water sources for their potable supplies or other uses. Of particular concern are nitrogen and other constituents that leach through the soils and the unsaturated zone and ultimately reach ground waters. Nitrogen loadings convert to elevated nitrate concentrations at household and community system wells, and elevated nitrate levels in turn pose a risk to human health in households with private wells.¹²

Adding large quantities of nitrates to an area with already heightened nitrate-nitrogen concentrations has serious implications for human health. Elevated nitrate levels can cause methemoglobinemia (also known as blue-baby syndrome). The Centers for Disease Control has determined that there may be a link between high nitrate levels in well water near feedlots and spontaneous abortions in humans.¹³ Additionally, there is a link between nitrate levels in water and increased risk of stomach and esophageal cancers.¹⁴

⁸ National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs), 68 Fed. Reg. 7176, 7181 (Feb. 12, 2003) (“EPA CAFO Reports”).

⁹ *Id.*

¹⁰ Or. Dep’t Env’tl. Quality, Lower Umatilla Basin Groundwater Management Area Action Plan 9 (Dec. 8, 1997), available at <http://www.deq.state.or.us/wq/groundwater/docs/lubgwma/actionplan.pdf>.

¹¹ EPA CAFO Reports at 7181.

¹² *Id.* at 7241.

¹³ Centers for Disease Control & Prevention, Spontaneous Abortions Possibly Related to Ingestion of Nitratecontaminated Well Water – LaGrange County, Indiana, 1991-1994, 45:26 Morbidity and Mortality Weekly 569, 569-71 (July 1996).

¹⁴ EPA CAFO Reports, 68 Fed. Reg. at 7238.

Willow Creek Dairy does not currently have an *approved* Animal Waste Management Plan (AWMP) (the one attached to the application is proposed) or a National Pollutant Discharge Elimination System (NPDES) permit. At a minimum, the Department cannot approve the proposed use as being in the public interest until those regulatory safeguards are in place.

Moreover, the draft AWMP and NPDES permit are inadequate to demonstrate that the animal wastewater will not pollute groundwater. Although the draft NPDES Permit requires several lagoons and cells to comply with seepage design rates, the groundwater vulnerability and already-high nitrates present in the Umatilla Basin groundwater call into question whether the projected seepage rates will be low enough to prevent exceedances of the nitrate Maximum Contaminant Level of 10 mg/L. The lagoon complex will use a double liner with a leak detection system. (AWMP App. A.) However, Willow Creek's own engineering firm has estimated that "[i]f we assume one small pinhole with a diameter of 2mm per acre, the leakage rate could be about 330 gallons per day per acre." *Id.* This means as much as 1,480 total gallons of leakage per day by the engineer's own estimate. *Id.* The AWMP provides no indication of how conservative or realistic this estimate may be.

In addition to polluting groundwater with waste leaking from lagoons, the proposed use could pollute through application of waste to crops. Without adequate and enforceable limits on land application of manure-filled wastewater, there is a significant risk of contamination of groundwater from greater than agronomic application. If plants cannot use all nutrients, there will be seepage of nitrogen and other nutrients beyond the root zone in fields where wastewater is applied.

In sum, there is significant risk that the proposed use will contribute significantly to pollution of an already impaired groundwater aquifer. For this reason, too, the proposed use would impair or be detrimental to the public interest.

5. The proposed use would pollute the air.

The dairy that would be constructed and operated under the license also would contribute significantly to air pollution in the Columbia Gorge. Industrial-scale dairies emit large amounts of air pollution, including methane, ammonia, nitrous oxide, volatile organic compounds, and particulate matter.¹⁵ The Columbia Gorge already has a problem with this from Threemile Canyon Farms, which at 70,000 cows is one of the largest dairies in the country. Studies link haze and acid deposition in the Columbia River Gorge to pollution from CAFOs in eastern Oregon and Washington, including Threemile.¹⁶ Allowing another huge dairy in the same area would add significantly to the problem. For this reason, too, the proposed limited license would impair or be detrimental to the public interest.

¹⁵ Oregon Dairy Air Quality Task Force, Final Report to the Oregon Department of Agriculture and Oregon Department of Agriculture (July 1, 2008), <http://library.state.or.us/repository/2012/201204101013082/finalReport.pdf>.

¹⁶ See, e.g., Bob Bachman, *Nitrogen increases in Eastern portion of the Columbia River Gorge National Scenic Area*, U.S. Forest Service (undated), <https://www.wilderness.net/toolboxes/.../Columbia%20River%20Gorge%20NSA.doc> (“The visibility impairment increase is supported by several sources of information including ammonia emission inventories in the Columbia Basin and along the Snake River drainage indicating steady growth in ammonia emissions – the Three Mile Canyon Farm near the Boardman Power Plant stands out as a new and extremely large ammonia source.”).

6. The proposed use would hurt fish and wildlife.

According to prior limited license applications for the same use from the same aquifer, the proposed use may affect habitat of sensitive, threatened or endangered fish species.

Presumably this refers to a possible connection between the aquifer and surface water in the nearby Columbia River. That means pumping groundwater from the aquifer as proposed could reduce flows in the Columbia River, which is not allowed between April 15 and September 30. OAR 690-033-0120(2)(b). Thus, the license should not be granted unless there is affirmative, substantial evidence to rule out any impact to surface flows during that period.

The potentially affected reach of the Columbia River also appears to have state-listed sensitive species (fall chinook), along with several threatened or endangered species. The Department therefore must consult with an inter-agency review team and ensure that the proposed use will not result in a net loss of essential habitat. OAR 690-033-0330, OAR 690-033-0340.

Finally, the proposed use would be within a few miles of the Boardman Grasslands nature preserve. Species there include “an array of wildlife species recognized as sensitive or vulnerable in Oregon, including the Washington ground squirrel — listed in Oregon as an endangered species — white-tailed jackrabbit, burrowing owl, ferruginous hawk, Swainson's hawk, loggerhead shrike, long-billed curlew, grasshopper sparrow, sage sparrow and northern sagebrush lizard.”¹⁷ The species would be harmed by the additional air and water pollution noted above. For this reason, too, the proposed use is not in the public interest.

¹⁷ <https://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/oregon/placesweprotect/boardman-grasslands.xml?redirect=https-301>.

7. The proposed use would hurt animals on the farm.

The proposed limited license would facilitate construction and operation of a dairy that would eventually use 30,000 cows for milk production. In dairies of this scale, the cows typically live short, confined lives on concrete, and are pregnant for most of the time. They get killed at an early age and turned into meat when they become “unproductive” for milk.¹⁸ They will rarely if ever get a chance to graze outdoors.¹⁹ Their offspring will be taken away almost immediately, to the audible distress of their mothers, and the male calves will quickly be turned into veal.²⁰ In short, industrial dairies such as the one proposed are inhumane. It is not in the public interest to facilitate construction and operation of such a thing.

8. The proposed use would displace family farms.

By facilitating another industrial scale dairy, the requested limited license also would contribute to the ongoing loss of family farms in Oregon. Mega-dairies flood the market with milk, driving down milk prices and making it increasingly difficult for family farmers to stay in business. In 2002, Oregon had over 1,100 dairy farms, mostly small and mid-sized, but now there are fewer than 250, a decline of more than 75% even as overall cow numbers have gone up. According to the Oregon Employment Department, between 2002 and 2007, the first five years

¹⁸ See E. Telezhenko & C. Bergsten, *Influence of Floor Type on the Locomotion of Dairy Cows*, *Applied Animal Behavior Science* 93(3-4):183-97 (2005) (dairy cows raised on concrete floors); U.S. Dep’t of Agric., *Dairy 2007: Part I: Reference of Dairy Cattle Health and Management Practices in the United States* (2007) (dairy cows constantly re-impregnated); HF Troutt & BI Osburn, *Meat from Dairy Cows: Possible Microbiological Hazards and Risks*, *Scientific & Technical Review* 16(2):405-14 (1997) (dairy cows slaughtered for meat).

¹⁹ U.S. Dep’t of Agric., *Dairy 2007 Part I: Reference of Dairy Cattle Health & Management Practices in the United States* (2007) (showing overwhelming majority of U.S. dairy operations confine lactating and dry cows in primarily indoor systems, with only 9.9% of operations primarily raising lactating cows on pasture).

²⁰ U.S. Dep’t of Agric., FSIS, *Veal from Farm to Table*, at https://www.fsis.usda.gov/wps/portal/food-safety-education/get-answers/food-safety-fact-sheets/meat-preparation/veal-from-farm-to-table/CT_Index (last visited Mar. 20, 2017); FC Flower & DM Weary, *The Effects of Early Separation on the Dairy Cow and Calf*, *Animal Welfare* 12(3):339-48 (2003).

after Threemile Canyon Farms came to the state, Oregon lost nearly half of its dairy farms, an average of nine per month for five straight years. At that point, Threemile had over 50,000 cows on site while the average dairy farm in Oregon had 200. Granting the requested limited license would exacerbate this trend. For this reason, too, the proposed use is not in the public interest.

III. CONCLUSION

For all of the above reasons, limited license application LL-1690 should be denied.

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<p>HUMANE SOCIETY OF THE UNITED STATES</p> <p><i>s/ Amanda Hungerford</i></p> <hr/> <p>By: Amanda Hungerford, Staff Attorney</p>	<p>WATERWATCH OF OREGON</p> <p><i>s/ Brian Posewitz</i></p> <hr/> <p>By: Brian Posewitz, Staff Attorney</p>