

# The Urgent Case for a Moratorium on Mega-Dairies in Oregon

The expansion of large-scale dairy operations in Oregon poses increasing risks to human health and the environment. As the dairy industry in Oregon grows, smaller family farms are displaced in favor of industrial mega-dairies that house thousands of cows in confined spaces. These factory farms create colossal volumes of waste, pollute the air and water, contribute to climate change, threaten animal welfare and wildlife, and undermine the economic vitality of our rural communities. As illustrated by the recent Lost Valley Farms disaster, Oregon cannot afford to ignore the many threats that mega-dairies pose.

## Mega-dairy expansion in Oregon

A rapidly growing dairy industry has fueled the rise of large dairy CAFOs in Oregon, often referred to as “mega-dairies.”<sup>3</sup> From 1997 to 2012, the average size of large dairy CAFOs in Oregon nearly doubled, while the total number of dairy cows in the state more than tripled.<sup>4</sup> The number of mega-dairies with over 1,000 cows in Oregon also tripled from 1997 to 2012.<sup>5</sup>

Threemile Canyon Farms is the largest dairy operation in Oregon — as well as one of the largest in the country — permitted to house 70,000 cows.<sup>6</sup> Oregon’s small and mid-sized dairies declined significantly after Threemile began operating in 1999; an average of nine family dairy farms went out of business each month between 2002 and 2007.<sup>7</sup> Oregon has lost more than a third of its licensed dairies since 1997.<sup>8</sup>

The increase in mega-dairy operations in Oregon and nationally is also linked to an ever-growing demand for dairy abroad. To remain competitive with suppliers from Europe and New Zealand on the world market, the United States has expanded dairy production, exporting 20 percent more dairy in 2018 than in 2017.<sup>9</sup> This drive to increase dairy exports threatens to bring additional mega-dairies to Oregon.

## Mega-dairy water pollution on the rise

Agriculture is the leading polluter of U.S. rivers and streams.<sup>10</sup> The EPA’s weak rules allow most factory farms to avoid meaningful regulation.<sup>11</sup> Oregon is no exception. ODA

## What is a factory farm?

A factory farm is a facility that raises large numbers of animals in intensive confinement, concentrating the animals and their manure. Instead of allowing animals to forage for their feed, factory farms confine the animals and bring food to them.

The U.S. Environmental Protection Agency (EPA) uses the terms animal feeding operation (AFO) and concentrated animal feeding operation (CAFO) to describe these operations. The Oregon Department of Agriculture (ODA) also uses the term “CAFO,” but this refers to the state’s definition of confined animal feeding operations, which applies to the majority of farms with any livestock in the state. In this fact sheet, CAFO refers to the federal definition.

According to the EPA, large CAFOs contain 700 or more mature dairy cattle.<sup>1</sup> In Oregon, we are calling for a moratorium on new and expanded dairy operations with more than 2,500 cows and those with at least 700 cows that lack seasonal daily access to pasture.<sup>2</sup>





## The danger of Lost Valley Farm

It is difficult to adequately consider the risks of CAFOs in Oregon without considering Lost Valley Farm, a mega-dairy near Boardman, Oregon that began operating in April 2017 despite widespread public opposition.<sup>16</sup> Lost Valley became the second largest dairy operation in the state, with a permit to confine 30,000 cows.<sup>17</sup> From the time it began operating, to when it ceased operations in 2018, Lost Valley was cited for over 200 environmental violations.<sup>18</sup>

At full capacity, Lost Valley would have generated 187 million gallons of wastewater and manure annually.<sup>19</sup> Lost Valley's violations — which included the improper storage of manure, overflowing lagoons and improper management of dead animals — put nearby communities and 81 public drinking water systems at risk.<sup>20</sup>

Due to these numerous violations, after just over a year of operation ODA initiated the process to revoke Lost Valley's permit.<sup>21</sup> The operator has declared bankruptcy, and the facility's herd and assets were sold.<sup>22</sup> The buyer could seek to open a new mega-dairy on the site,<sup>23</sup> but it remains to be seen whether the state has learned that Oregon cannot afford another mega-dairy disaster like Lost Valley Farm.

records demonstrate that mega-dairies, despite discharge permit requirements, do not always keep manure pollution from reaching waterways.<sup>12</sup>

Oregon CAFOs typically flush untreated waste into large cesspools called lagoons, where it is stored until it is applied as fertilizer on fields. In 2018, Oregon's large dairy CAFOs produced 5 billion pounds of manure — 42 times the waste produced by the population of Portland.<sup>13</sup>

The sheer amount of manure that mega-dairies produce often exceeds what crops can absorb, resulting in over-application and runoff into local waterways.<sup>14</sup> In the summer of 2018 there were warnings to stay out of the water at some of Oregon's most popular beaches as a result of elevated fecal bacteria, much of which can be attributed to manure from nearby livestock operations.<sup>15</sup>

Lost Valley is not an exception. In 2011, the state prosecuted Volbeda Dairy for discharging pollutants into Truax Creek, resulting in an \$8,000 penalty.<sup>24</sup> By October 2017, the mega-dairy racked up enough additional water pollution violations to close the operation.<sup>25</sup> In April 2017,

Tony Silveira Dairy released 190,000 gallons of untreated manure into the Tillamook River during a manure tank malfunction, closing Tillamook Bay to commercial shellfish harvesting for a week.<sup>26</sup>

## Groundwater shortages and pollution threaten the state

Mega-dairies are enormous water users, extracting millions of gallons of groundwater to flush manure from barns, water cattle and run milking operations. When Lost Valley was at one-third of its permitted size, it was using nearly 1 million gallons of water per day.<sup>27</sup> What's worse, Lost Valley was getting water for its cows under a permit loophole that allowed water to be pulled from an aquifer that had been closed to new withdrawals for decades.<sup>28</sup>

This immense water use is unsustainable, particularly considering that nearly every river in Oregon suffers from low flows and warming water, while most of Oregon's surface water and much of the groundwater is already overallocated.<sup>29</sup>

Mega-dairy waste disposal also threatens to contaminate these scarce groundwater resources. Drinking water contamination from factory farms has been likened to rural America's "own private Flint,"<sup>30</sup> and in Oregon CAFOs are a primary source of dangerous nitrate contamination in the Lower Umatilla Basin Groundwater Management Area — where both Threemile Canyon Farms and Lost Valley Farm are located.<sup>31</sup> High nitrate levels threaten both aquatic species and public health.<sup>32</sup>

## **Air quality and climate at risk**

The large quantities of manure that mega-dairies produce creates air pollution that puts the environment and public health at risk. Decomposing manure emits substantial amounts of toxic air pollutants — including ammonia, hydrogen sulfide and particulate matter — known to cause respiratory symptoms and nuisance odors.<sup>33</sup> A growing body of research shows that living near CAFOs increases childhood asthma rates and the need for asthma treatment.<sup>34</sup>

These emissions also harm Oregon's environment. According to the Department of Environmental Quality, livestock manure is "by far the most significant source of ammonia" in the state, and contributes to regional haze.<sup>35</sup> The haze resulting from mega-dairy ammonia emissions is harming the iconic Columbia River Gorge National Scenic Area.<sup>36</sup> When the state was considering Lost Valley's application, the U.S. Forest Service cited the mega-dairy as a threat to the Gorge and requested that the operators mitigate emissions to prevent haze.<sup>37</sup>

Mega-dairies also contribute significantly to climate change through methane and nitrous oxide emissions.<sup>38</sup>

Livestock production is the dominant source of the greenhouse gas methane in the United States, and manure management is the fastest growing major source of methane, increasing by more than 50 percent between 1990 and 2008.<sup>39</sup> In Oregon, agriculture is the leading source of methane emissions.<sup>40</sup>

## **Animal welfare concerns**

Industrial dairies also raise numerous animal welfare concerns. Cows are highly confined, often standing or lying all day in their own manure, with little or no opportunity to graze outdoors. These confined conditions prevent physical movement, resulting in disease and infection, stress disorders, stunted growth and chronic lameness.<sup>41</sup>

Repeated reimpregnation, short calving intervals and high milk demand cause reproductive and fertility problems in female cows. Male calves are of "little to no value to the dairy farmer," and those that are not used for dairy cow breeding are often killed for veal.<sup>42</sup>

## **It's time to stop the spread of mega-dairies in Oregon**

Thousands of citizens across the state called on the state to deny approval to Lost Valley Farm, then again for its closure. But the problem in Oregon is far more complex than just one badly managed operation. The state's existing rules are not up to the task of protecting our water, air, public health, animal welfare and family farms from mega-dairies — particularly on the scale of those now moving into the state. Oregonians deserve a time-out, and the legislature must act. It's time for a moratorium on mega-dairies in Oregon.

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### **Supported by:**

Food & Water Watch  
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Center for Biological Diversity  
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Farm Forward  
Humane Society of the United States

## Endnotes

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