

Got Milk? Got Manure!

Industrial Dairy Pollution Tip Sheet



- In the U.S., Concentrated Animal Feeding Operations (CAFOs) produce an estimated **335 million tons of dry manure every year** – three times the amount of waste humans produce. The average dairy cow produces over 120 pounds of manure per day. Washington's 200,000 dairy cows produce over **24 million pounds of manure each day**. A single lactating cow produces about **365 pounds of nitrogen per year**.
- CAFOs use unlined manure storage lagoons to store the manure waste. Manure lagoons leak at least 1,000 gallons per day per acre. There are approximately **415 unlined manure storage lagoons** in close proximity to the waters that feed Puget Sound, all of which are leaching nitrates, fecal coliform and other pollutants to the waters of the state.
- **Nitrates are acute contaminants**, which means an immediate (within hours or days) health effect may result from exposure. High doses particularly threaten pregnant mothers with miscarriages, while babies can get methemoglobinemia, or “blue baby syndrome,” which can be fatal. High nitrate levels may increase the risk of spontaneous abortions and other birth defects.
- The Washington Department of Health has confirmed that manure from dairy CAFOs is responsible for the shellfish bed closures that have plagued Puget Sound. In September 2014, the **Lummi Nation was forced to close 335 acres** of Portage Bay shellfish beds due to high levels of fecal coliform contamination. In December 2014, the Lummi Nation had to close **an additional 161 acres**.
- The Sumas-Blaine Aquifer in northwestern Whatcom County is the major, and only, drinking water source for up to 27,000 local residents and is the most contaminated aquifer in the state. Ecology and USGS report **29% of sampled wells in the aquifer exceed the nitrate maximum** contaminant level (MCL) of 10 mg/L, with **14% more than double** the MCL.
- **Over 20% of wells used for drinking water in the Lower Yakima Valley exceed** EPA's maximum contaminant level of 10 mg/L for nitrates. EPA has confirmed that the dairies are the predominant source of nitrate in the drinking water wells, as **up to 61% of wells** in close proximity to three large Dairy CAFOs exceeded the nitrate maximum contaminant limit (MCL), with some wells at least **23 times over the MCL**.
- **Over-application of CAFO manure** to fields as fertilizer is common practice and is estimated to contribute **66% of the nitrogen inputs to the Sumas-Blaine Aquifer**, and **58% of nitrate contamination in the Lower Yakima Valley**.
- **The Washington CAFO General Discharge Permit expired in 2011**. Agency scientists and staff know that **the CAFO permit should require them to monitor nearby soil and groundwater**. But Ecology keeps extending and re-extending its deadline for issuing a draft permit.
- In **January 2015**, a Judge in the Eastern District of Washington held that Cow Palace Dairy was **violating the federal solid waste management law** because the millions of gallons of manure it stored in unlined lagoons and dumped onto crop fields contaminated the soil and underlying aquifer. In an **unprecedented consent decree filed with the court in May 2015**, Cow Palace and two other dairies agreed to provide clean drinking water to local residents and change their operations to stop future contamination of the area's water supply to protect public health and the environment.