

*WHATCOM COUNTY COUNCIL AGENDA BILL*

*NO. 1998 - 254 B*

CLEARANCES		Date	Date Received in Council Office	Agenda Date	Assigned To
Orig. Dept.:	County Council	10/7/98		10/27/98	Regular Council
Division Head:					
Dept. Head:					
Prosecutor:					
Budget:					
Executive:					

*SUBJECT:*

Perm. Ord. Establishing WCC Chapter 16.28, Manure & Agricultural Nutrient Mgmt.

*ATTACHMENTS*

*SUMMARY STATEMENT:*

Related County Contract #:	Should the Clerk schedule a hearing? (Y/N)	Requested Date:
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*RECOMMENDED MOTION (for final action):*

*COUNCIL ACTION TAKEN:*

1998 - 254 B 10/27/98: Amended and Adopted 6-0, Brown Absent - Ord. #98-074

*Related File Numbers:*  
AB98-254A

*Ordinance or Resolution Number (this item only):*

**Ord. #98-074**

2 SPONSORED BY: Natural Resources Committee  
3 PROPOSED BY: Portage Bay Closure Response Team  
4 INTRODUCED: 10/27/98

5  
6 **ORDINANCE NO. 98-074**

7 **ESTABLISHING AGRICULTURAL NUTRIENT MANAGEMENT PROVISIONS**

8  
9  
10 **WHEREAS**, Whatcom County has been officially notified by the Washington State  
11 Department of Health of the classification downgrade of certain commercial shellfish beds in  
12 Portage Bay and Drayton Harbor due to fecal coliform bacteria levels exceeding National  
13 Shellfish Sanitation Program standards; and,

14 **WHEREAS**, improper dairy waste management was identified as the largest potential  
15 contributor of fecal coliform pollution in the Nooksack River watershed and a significant source  
16 of fecal coliform pollution in the Drayton Harbor watershed by the Washington State  
17 Department of Health; and,

18 **WHEREAS**, both the Portage Bay Shellfish Closure Response Team and Drayton  
19 Harbor Shellfish Protection District Advisory Committee considered the best available science in  
20 the development of the closure response strategies, and recommended the prohibition of manure  
21 applications at certain times of the year and proximate to waterways; and,

22 **WHEREAS**, excess and untimely applications of manure increase nitrate contamination  
23 of groundwater; and,

24 **WHEREAS**, the County Council Natural Resources Committee held a public meeting on  
25 July 21, 1998 and the County Council held a public hearing on August 11, 1998 on the  
26 recommendations and considered further testimony; and

27 **WHEREAS**, the Council has adopted the following Findings and Conclusions:

28  
29 **FINDINGS:**

- 30 1. Data from the Washington State Department of Ecology’s Total Maximum Daily Load  
31 (TMDL) study of the Nooksack River watershed shows high levels of fecal coliform  
32 bacteria in the river and most of its tributaries throughout the year, with the highest levels  
33 of the year in the months of November and March.

- 1 2. Best available science shows that fall, winter, and early spring surface applications of  
2 manure to land with little vegetative cover or, regardless of time, proximate to waterways  
3 can present a significant risk of discharge of bacteria, nutrients and organic matter  
4 through storm water.
- 5 3. Historically, manure is applied in Whatcom County post-harvest to corn ground and to  
6 bare ground in the fall and winter. Applications during these times cannot be justified as  
7 agronomic practices. They are, instead, waste disposal practices that should be  
8 prohibited. There are currently about 15,000 acres planted to corn in Whatcom County.
- 9 4. Data from recent groundwater studies shows elevated levels of nitrate and nitrite-N in  
10 many of the Whatcom County's drinking water wells.
- 11 5. The best available science also shows that fall, winter, and early spring sub-surface  
12 applications of manure can present a significant risk of leaching of nitrate and nitrite-N  
13 into groundwater.
- 14 6. Both elevated levels of nitrate nitrogen and fecal coliform bacteria in water are a human  
15 health concern.
- 16 7. Spreading of manure to land adjacent to streams, rivers, ponds, and lakes is an activity  
17 already regulated by the Whatcom County Critical Areas Ordinance (WCC 16.16). To  
18 achieve the objective of reducing fecal coliform in County waterways, drainage ditches  
19 that empty into these critical areas must be subject to similar buffer requirements.
- 20 8. The Whatcom Conservation District has a history of successful cooperation with county  
21 farmers to implement conservation plans that foster the application of nutrients in a  
22 manner that protects surface and groundwater quality.
- 23 9. This ordinance must be adopted immediately to prevent an imminent threat to public  
24 health due to the onset of the fall season and its accompanying rainfall.
- 25 10. On October 1, 1998, the Whatcom County SEPA Official issued a Determination of  
26 Nonsignificance.

27

28 **CONCLUSION:**

29 This ordinance will provide additional needed protection of the surface and groundwater  
30 resources of Whatcom County.

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# EXHIBIT A

**Section:**

<b>16.28.010</b>	<b>Application - Buffers</b>
<b>16.28.020</b>	<b>Application – Liquid Manure</b>
<b>16.28.030</b>	<b>Definitions</b>
<b>16.28.040</b>	<b>Annual Review</b>
<b>16.28.050</b>	<b>Penalties and Enforcement</b>
<b>16.28.060</b>	<b>Adjudication of Invalidity</b>

**16.28.10**     **Application – Buffers.** Unless it is pursuant to a management plan approved by the Whatcom Conservation District, the spreading of manure within 50 feet of drainage ditches leading to rivers and streams is prohibited (for buffer requirements on streams, rivers, and other bodies of water, see WCC 16.16).

**16.28.20**     **Application – Liquid Manure.** Unless it is pursuant to a management plan approved by the Whatcom Conservation District, the spreading of liquid manure, by any means, to either corn ground or bare ground during the non-application period is prohibited.

**16.28.30**     **Definitions.** For the purpose of this chapter:

- A. “Bare ground” means land upon which a vigorously growing crop has not been established immediately prior to the non-application period.
- B. “Corn ground” means land upon which a crop of corn has been grown immediately prior to the non-application period.
- C. “Drainage ditch” means an artificially created watercourse constructed to convey surface or groundwater.
- D. “Management plan” means a plan containing:
  - 1. Results of soil and manure testing,
  - 2. An analysis demonstrating that the proposed manure application is necessary to meet the needs of the growing crop, and a recommendation as to the amount of manure applied;
  - 3. A description of the proposed application site, including; soil type, percent slope, drainage class, flood hazard, erosion hazard, seasonal water table depth, leaching and run-off potential;
  - 4. Features designed to prevent the transportation of manure by natural processes away from the site.
- E. “Non-application period” means September 1 through March 15 of the following calendar year. For the year of 1998 only, the non-application period will begin October 1. Any liquid manure applied prior to this date should be worked in, with a cover crop planted by October 1 to help minimize run-off and nitrate contamination of ground water. Should favorable climatic conditions exist, application may begin earlier in the spring than the dates

established in this ordinance, following approval from the Whatcom Conservation District Board based on T Sum 200 or best available science. Soil conditions must also be considered when deciding when to apply nitrogen.

- F. "Liquid manure" means a suspension of livestock manure in water in which the concentration of manure solids is low enough to maintain a free flowing fluid. Liquid manure also includes slurry which is a mixture of livestock manure, bedding and waste feed in water. Liquid manure and slurry is typically applied to fields by pumping through irrigation equipment or by hauling and spreading with a tank wagon. The solids content of liquid manure or slurry is usually less than 10 percent. A practical definition of liquid manure includes any livestock manure mixture that can be pumped through conventional liquid manure handling equipment.
  
- G. T Sum 200 is a method used to determine the optimum time for applying the first application of nitrogen to grassland in the spring. This method uses adds the mean daily air temperature (mean of maximum and minimum in °C) from January 1<sup>st</sup> to the date when the sum of the daily mean temperature accumulated number reaches 200. Negative mean temperatures (below 0°C) are assigned a zero value, i.e. not subtracted. At this point T-sum 200 the soil is generally considered to be warm enough to begin to use additional nitrogen without increased risk of nitrate leaching.

**16.28.40 Annual Review.** On at least an annual basis, the Portage Bay Shellfish Protection District Advisory Committee shall review bacterial water quality data collected by at least the North West Indian College, and Washington State Departments of Ecology and Health for the Shellfish Districts, to monitor the effectiveness of this ordinance. The bacterial water quality data collected for the Shellfish Protection Districts shall be public and, specifically, made available to the Whatcom County Dairy Producer Advisory Committee.

**16.28.50 Penalties and Enforcement.** Violations of the provisions of this section shall be enforced by the Whatcom County Planning and Development Department pursuant to Section 16.16.270 of the Whatcom County Critical Areas Ordinance (WCC 16.16)

**16.28.60 Adjudication of Invalidity.** Adjudication of Invalidity of any of these articles, sections, clauses, or provisions of this ordinance shall not affect or impair the validity of the ordinance as a whole or any part thereof other than the part so declared to be invalid.