Preparing for the Wet Season

Things you need to do to maximize your storage

Is your storage barely making it to February each year? Tired of hauling water out to your fields every spring? If so, you should take a second look at your clean water management.

In general, runoff from roofs, driveways, and clean slab areas should be diverted away from the manure collection area. This is to minimize the amount of clean water that is collected in your storage system and/or lagoon. Clean water collection reduces storage capacity and compromises your storage time.

Here are a few ways you can manage runoff water properly and make sure you still have some storage room left come February.

Roof Water Runoff

Gutters should be maintained on all roof lines that drain to an area that may be collected by the manure conveyance system.

All uncontaminated roof water should be collected and diverted away from the manure storage area and into a proper grass treatment area or routed and discharged into the appropriate ditch. Roof panels should be properly maintained and repaired when necessary to eliminate the inflow of

Silage Juice

Short duration collection can save your grass

The seepage liquid or “juice” from freshly put up silage is very acidic, odiferous and can cause vegetation kill and stream degradation. Concentrated runoff from your silage bunker should be collected into your storage system for the first few weeks after it is put up to avoid any issues. This can be done by creating a diversion with temporary berms into the collection system or pumping the liquid into your lagoon. If you divert your silage juice into a grassed filter area, make sure that it is diluted first so that it doesn’t kill the vegetation prior to the wet season. Killing the vegetation in your filter strip will render it ineffective in filtering out nutrients and sediment during the time of year that is most critical. For assistance with silage juice diversion and/or collection, contact your planner today.
Clean Water Management

Good clean water management is key to your storage success this winter

Rainfall timing and amount is something we have no control over, but that greatly affects storage capacity, manure application timing, and liquid manure nutrient content. By paying attention to the monthly rainfall amounts in your area, you can manage these factors and better predict your storage capacity for the winter months. If your storage capacity is being maxed out each year, maybe it’s time for a change.

A La Nina weather pattern for the Pacific Northwest is characterized by cooler and wetter conditions than normal. We experienced a La Nina weather pattern starting in late 2010 and it is predicted to continue through 2011 and into 2012. This means more rainwater may be collected by your storage system and that proper clean water management is imperative this season.

The table to the right (Table 1) shows the average monthly rainfall for the Lynden area for the last five years. While yearly rainfall may tend to be similar, the time (month) at which we experience the highest rainfall may change from year to year.

Knowing historical and seasonal rainfall amounts can help you assess your annual storage limitations and identify areas that need improvement on a yearly basis. See our website for a historical rainfall analysis of your area.

Tracking annual precipitation amounts with your own rain gauge will help you evaluate your storage and adjust your rainwater collection accordingly. If you would like a rain gauge for your farm, just contact us at WCD. We now have them available for FREE!

Table 1. Precipitation amounts in inches for Lynden, WA (www.wunderground.com). Your annual rainfall will vary depending on your location in the County.

<table>
<thead>
<tr>
<th>Month</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>6.77</td>
<td>4.24</td>
<td>6.80</td>
<td>5.20</td>
<td>8.60</td>
</tr>
<tr>
<td>Feb</td>
<td>1.19</td>
<td>2.47</td>
<td>1.53</td>
<td>3.69</td>
<td>2.84</td>
</tr>
<tr>
<td>Mar</td>
<td>0.77</td>
<td>3.81</td>
<td>3.79</td>
<td>4.29</td>
<td>4.61</td>
</tr>
<tr>
<td>Apr</td>
<td>0.04</td>
<td>1.86</td>
<td>0.09</td>
<td>2.60</td>
<td>5.74</td>
</tr>
<tr>
<td>May</td>
<td>1.41</td>
<td>2.07</td>
<td>0.04</td>
<td>3.99</td>
<td>2.84</td>
</tr>
<tr>
<td>Jun</td>
<td>2.34</td>
<td>2.55</td>
<td>0.58</td>
<td>2.07</td>
<td>1.01</td>
</tr>
<tr>
<td>Jul</td>
<td>1.48</td>
<td>0.53</td>
<td>1.13</td>
<td>0.02</td>
<td>2.21</td>
</tr>
<tr>
<td>Aug</td>
<td>0.55</td>
<td>4.20</td>
<td>2.03</td>
<td>1.13</td>
<td>0.57</td>
</tr>
<tr>
<td>Sep</td>
<td>4.83</td>
<td>0.81</td>
<td>1.87</td>
<td>5.63</td>
<td>2.32</td>
</tr>
<tr>
<td>Oct</td>
<td>4.09</td>
<td>2.86</td>
<td>7.07</td>
<td>2.07</td>
<td>3.07</td>
</tr>
<tr>
<td>Nov</td>
<td>2.92</td>
<td>8.81</td>
<td>8.00</td>
<td>2.27</td>
<td>2.38*</td>
</tr>
<tr>
<td>Dec</td>
<td>7.40</td>
<td>3.71</td>
<td>1.42</td>
<td>4.44</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total (year)</strong></td>
<td><strong>33.79</strong></td>
<td><strong>37.92</strong></td>
<td><strong>34.35</strong></td>
<td><strong>37.40</strong></td>
<td><strong>36.19</strong></td>
</tr>
</tbody>
</table>
| **Winter Period:** | **2007-08** | **2008-09** | **2009-10** | **2010-11** | **Total (Oct-Jan)**
| 2007-08 | 18.65 | 22.18 | 21.69 | 17.38 | -    |

*Year to date as of 11/21/11. Not a total month estimate.
How to Keep Your Watershed Clean

Managing your farm for clean water benefits you and your children

Whatcom County is prized for its beauty, abundance of wildlife, and productive farmlands. This is due in large part to the watersheds that feed and support us. The health of your watershed, and its viability for future generations begins with you.

Watershed Analysis

Water Resource Inventory Area 1 (WRIA1) has been conducting in-stream analysis throughout Whatcom County for over 10 years.

Water quality data is taken monthly at 25 stations throughout the County (see red dots on Map). Most of these stations are located in agricultural and farming intensive areas and along some of the more sensitive and impacted waterbodies in the County.

The primary factor measured to assess the impact from livestock, wildlife, and human sources is fecal coliform bacteria. Fecal coliform is an indicator of the amount of waste derived pollution entering the waterbody. The higher the value, the more waste is entering the watershed.

How does your watershed look?

The map below is an example of the impact level of the monitored watersheds in Whatcom County. Monthly updates using real-time data can be found at: http://whatcomcd.org/monitoring-station-results.

Check the monthly health of your watershed to identify times and activities that lead to high levels of fecal coliform. Then, make changes to reduce your impact. Start today!

If your watershed has had a current or historical high level of fecal coliform, you should evaluate your own practices to see if you are a contributor. In most cases simple changes in your management can make big impacts.

What can you do to help?

If your watershed has had a current or historical high level of fecal coliform, you should evaluate your own practices to see if you are a contributor. In most cases simple changes in your management can make big impacts. Ways you can protect your watershed:

- Only apply when runoff conditions are low (soil is NOT saturated and no significant rainfall (>0.25 inches) is expected)
- Plant a relay and/or cover crop on your corn fields to limit surface runoff from rain and snow during the winter months.
- Stop manure spills before they happen – make sure your lagoon, equipment, pipelines, etc. are well maintained. If there are any potential issues, fix them before they turn into a problem!
- Monitor and follow all manure application setbacks and/or filterstrip widths outlined in your nutrient management plan.

Not sure what your setback distances are? Turn the page to find out....

Weather Resources

Our website (www.WhatcomCD.org) has many resources and links to helpful weather and forecast information, including a 4 day precipitation forecast and discussion on upcoming weather events. Just click on “Weather” at the top of the homepage.
Stay Back!

Manure Application Setback Distances

When applying manure, remember to obey all manure application setback guidance outlined in your Nutrient Management Plan. These distances are in place to help you avoid applying too close to a waterbody or sensitive area when the risk of runoff is high. When in doubt: stay back 40 feet from all waterways for most of the year and increase to 80 feet from October 1 - February 28. A big gun applicator should NEVER be closer than 40 feet at any time of the year due to drift. These guidelines apply to liquid and solid manures. The table below gives a summary of the distance you should be stay back from all waterways or sensitive areas.

<table>
<thead>
<tr>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr 1/15</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>80’</td>
<td>80’</td>
<td>40’</td>
<td>40’/10’</td>
<td>10’</td>
<td>10’</td>
<td>10’</td>
<td>10’</td>
<td>40’</td>
<td>80’</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Practice Low Risk Application

It is your responsibility to follow all guidelines in your DNMP and use your best judgment when applying manure. Always err on the side of caution to prevent unwanted discharges. Manure application practices that cause a discharge can lead to fines and/or necessitate a CAFO permit for your facility. The Whatcom Conservation District and the NRCS assume no responsibility for inappropriate manure application. Proper application is ultimately your responsibility.

If you would like email updates on current weather alerts, manure application tips and timing, and other important information, please email us your request and we will put you on the list (nembertson@whatcomcd.org). (This list will NOT be distributed).

Coming Spring 2012...

- Adaptive Management - What is it and how can you utilize it
- Tips for Agronomic Manure Application Through the Year
- Manure Export/Import Rules and Guidelines

Contact us at: (360) 354-2035 x3 www.WhatcomCD.org