



Whatcom County Farm Plan

Planning Workbook: Checklist and Action Plan

For use with the publication:
Tips on Land and Water Management

For: _____

Land Owner

Address

Date

Introduction

Conservation planning means different things to different people. Yet at its heart it is providing guidance to landowners to foster a healthy relationship between the environment and people. Our challenge is to help the hundreds of Whatcom County landowners protect certain areas of their community's critical areas, such as Critical Aquifer Recharge Areas, Wetlands, Frequently Flooded Areas, and Habitat Conservation Areas (e.g. streams, ponds and lakes). This conservation planning guidance empowers the individual by giving them the opportunity to understand the potential negative impacts of their agricultural activities and adopt best management practices that will harmonize their farm with the environment. We thank you for your anticipated responsible stewardship.

Overview of Standard Farm Conservation Plan Process

Ongoing agriculture activities are permitted within critical areas, and/or their buffers upon design and implementation of an approved farm conservation plan in accordance with the Whatcom County Critical Areas Ordinance (CAO). The goal of the Standard Farm Conservation Planning (SFCP) process is to protect certain critical areas and their associated buffers from the potential negative impacts of farming related activities through a simplified planning process.

Regulated critical areas include:

- 1) Geologically Hazardous Areas
- 2) Frequently Flooded Areas
- 3) Critical Aquifer Recharge Areas
- 4) Wetlands
- 5) Habitat Conservation Areas (including streams, rivers, ponds and lakes).

The scope of this guidance document is to address the protection of critical areas that contain open water, have saturated soils and/or areas that provide recharge to shallow aquifers. Aquifer recharge areas, streams, ditches, lakes, ponds and wetlands are the relevant regulated critical areas for CPAL. The following regulations are in place for these critical areas. Flexibility from these standards may be afforded through the farm plan process. Standard buffers for regulated critical areas are:

- Wetlands: 25 – 300 ft depending on function, value and use.
- Non-fish bearing streams: 50 ft.
- Fish-bearing streams: 100 ft.
- Shoreline Streams: 150 ft.
- Lakes: 100 ft.
- Ponds: 50 ft.
- Marine Shorelines: 150 ft.

Requirements for Standard Farm Conservation Plans (SFCP) are described in the CAO at WCC 16.16.290 and Appendix A - Conservation Program on Agriculture Lands (CPAL). The plan includes basic information about the agricultural activities on the farm, a map of the property, a standard checklist designed to protect critical areas and water quality, and an action plan describing Best Management Practices (BMPs) to be implemented to protect critical areas. Completing this workbook will create a Farm Plan that meets the requirements of the CAO. Under State and Federal law, you must also protect against untreated water leaving your property, if it has been polluted by your agricultural activities.

Step 1: Determination of Eligibility for Standard Farm Conservation Plan

If you have livestock on property in Whatcom County, Step 1 will help you determine if this workbook is the proper pathway to ensure that your farm meets the requirements of Whatcom County's CAO (WCC 16.16).

1. Determine if your ongoing agricultural activities are within the boundary of a critical area.

Maps identifying the general location and distribution of critical areas are available from Whatcom County PDS (360) 676-6907. These maps provide a general idea of if and where critical areas exist on your property. A site inspection by the Technical Administrator may be required to verify the actual presence and location of critical areas on your property. **Standard buffer widths will need to be determined by the technical administrator.** Contact PDS to assist in determining if critical areas occur on your property. You can view the maps online at:

<http://www.co.whatcom.wa.us/pds/planning/gis/gismaps/cao.jsp>.

- WCPDS has determined that there are no critical areas or their buffers on my farm and no water polluted by my agricultural activities is discharged to surface or groundwater. **Stop here, you do not need a farm conservation plan.**

2. Determine whether you may use Conservation Program on Agricultural Lands (CPAL). Only "ongoing agricultural" activities may make use of CPAL. Ongoing agricultural activities are typically associated with the production of crops and livestock. They do not include those activities that bring an area into agricultural use or are developed for use other than agriculture. Lands that have lain idle for over five years are not eligible. However, land enrolled in a Federal or State conservation program is considered ongoing agriculture.

- Agricultural activities presently occur and have occurred on my farm during the past five years. Continue on with this planning process.

3. Determine if you are a Low-impact Agricultural Operation.

- 1) Liquid manure application:

Utilizing liquid manure as a fertilizer is an agricultural activity that presents greater challenges to management and planning because pollution to surface or groundwater can easily occur. If you are applying liquid manure, the SFCP is not adequate to bring your operation into compliance with the County's CAO. The Custom Farm Conservation Planning process is the proper path for CAO compliance if you want to use liquid manure as fertilizer.

- I do not capture, hold and apply liquid manure as a fertilizer on my farm. Continue on with the SFCP planning process.

- 2) Number of animal units per acre:

Low impact operations cannot average more than one animal unit per one grazable acre (AU/Ac). Grazable acres include both pasture and hayland. The following worksheet will help you in determining your AU/Ac.

Question 1: How many Animal Units do I have on my farm?

TABLE 1 – AU Calculation

| | A | | B | | C |
|--------------------------------------------------|-----------|---|-------------------|---|----------|
| Livestock | AU Factor | | Number of Animals | | Total AU |
| Dairy – Holstein cow | 1.3 | X | | = | |
| Dairy – Heifer, bred | 1 | X | | = | |
| Dairy – Heifer, prebred | .4 | X | | = | |
| Beef (cow & calf) | 1.2 | X | | = | |
| Beef - Feeder | .7 | X | | = | |
| Horse - (mature 1,200 lbs.) | 1.2 | X | | = | |
| Horse - other: AU factor = lb. body weight /1000 | | X | | = | |
| Swine - Sow | .5 | X | | = | |
| Swine - Grower | .2 | X | | = | |
| Sheep (ewe & lamb) | .2 | X | | = | |
| Llama | .3 | X | | = | |
| Duck | .015 | X | | = | |
| Layer | .01 | X | | = | |
| Fryer | .007 | X | | = | |
| Total Animal Units (AU) for Farm: | | | | | |

NOTE: One acre equals 43,560 square feet.

TABLE 2 - Converting square feet to Acres

| | | | | |
|-------------|---|-------------------------|---|-----------|
| ___ sq feet | ÷ | 43,560 sq feet per acre | = | ___ Acres |
|-------------|---|-------------------------|---|-----------|

Question 2: How many grazable acres do I have on my farm?

TABLE 3 – Grazable Acres Calculation

| Total Property Acres | | Categories |
|----------------------------------|--|------------------------------------|
| <i>minus</i> | | Buildings |
| <i>minus</i> | | Roads |
| <i>minus</i> | | Other impervious surfaces |
| <i>minus</i> | | Wetlands |
| <i>minus</i> | | Streams & ditches |
| <i>minus</i> | | Cropland (where no manure applied) |
| <i>minus</i> | | Woodlands |
| Total Grazable Acres(Ac): | | |

Question 3: How many Animal Units per Grazable Acre (AU/Ac) do I have?

TABLE 4 – AU/Ac Calculation

| | | | | |
|-----------------------------------------------|---|-------------------------------------------|---|---------------------------------------|
| Total Animal Units <i>(Table 1)</i> | ÷ | Grazable Acres <i>(Table 2)</i> | = | Animal Units per Grazable Acre |
| | ÷ | | = | |

Step 2: Farm Plan Map

A map is an important tool to help you develop an effective farm conservation plan. It starts with inventorying what you have and recording that information. It's your chance to get an overall picture of what is happening on your property and how land uses may affect critical areas on or near your property. You will use this map and knowledge of your farm to work through a series of questions that will help you evaluate your operation, identify potential risks to critical areas, and determine which BMPs are appropriate to ensure that critical areas are protected against the potential negative impacts of your ongoing agricultural activities.

Inventory What You Have

Be sure to identify an approximate scale (map distance to distance on ground, e.g. one inch to 100 feet) and a north arrow. Figure out what the length of your stride is and pace off some distances. Consult online county assessor property maps or property purchase documents to help you determine lot dimensions. In your sketch, note approximate locations of:

- Property boundaries
- Buildings
- Wells (human, stock, and irrigation)
- Septic system and drain field
- Fences and confinement areas
- Filter strips
- Drains
- Bare ground
- Lawn, pasture, or crop land
- Woodlands
- Neighboring land uses
- Flat or sloped ground
- Roads
- Critical areas and associated buffers

Note that critical areas on neighboring parcels and their associated buffers may extend onto your property. These areas should be shown on your map as well. Please contact the WCPDS technical administrator for more information on the occurrence and distribution of critical areas on your property. By locating the components listed above, you will have a base map upon which to record locations of BMPs that you will determine are necessary, based on your Farm Review Worksheets (Step 3).

Step 3: Farm Review Worksheets

Now that you have developed a base map of your farm in Step 2, you can use the map and knowledge of your farm to work through a series of questions that will help you evaluate your operation, identify potential risks to critical areas, and determine which BMPs are appropriate to ensure that critical areas are protected from the potential negative impacts of your agricultural activities.

Questions in the Worksheets are grouped into eight topic areas. The page numbers at the beginning of each topic area refers to the page numbers in the *Tips on Livestock Management for Whatcom County Farms*, available through Whatcom County Planning and Development Services and the Whatcom Conservation District, where more information can be found. You should record an answer to all questions with a yes, no or n/a (not applicable). Check "yes" only if all areas on your farm meet the question; check "no" if all areas do not meet the question; check "n/a" if the question does not apply to your farm. **Farm Review Worksheets are only considered complete when you have answered all of the questions with either a "Yes", "No", or "N/A" response.**

Step 4: Action Plan

Once you have answered the questions, fill out the Action Plan form at the end of the questions for all questions for which you answered "no". Indicate, in the space provided, what BMP you plan to implement and the date by which it will be implemented. Refer to the timeframe indicated for each question. Submission of the worksheets, action plan, site map and submittal form constitutes a complete Farm Plan application which will then be reviewed for approval by the WCPDS Technical Administrator.

Checklist

SYSTEM SITING AND MANAGEMENT

Tips Guide Pages 3-4

FARM BUILDINGS

- 1) Are all existing barns and impervious surfaces sited to prevent manure, pathogens, sediment and other contaminants from entering all rivers, streams, ditches, ponds, lakes and associated wetlands?
Yes No Not Applicable
If No, practice(s) to correct on-going pollution discharges should be installed immediately and structural practice(s) should be installed prior to fall rains but no later than October 1st.
- 2) Is roof runoff managed so that it does not result in ponding and/or channeling in **confinement areas**, and/or contribute to the discharge of nutrients, sediment, pathogens and other contaminants to streams and ditches?
Yes No Not Applicable
If No, practice(s) to correct this problem should be installed prior to the next wet season but no later than October 1st.

Tips Guide Pages 5-6

LIVESTOCK CONFINEMENT AREAS

- 3) Is surface runoff from outside of livestock confinement areas (areas such as fields, hillsides, driveways and roads) managed so that it does not result in ponding and/or channeling and/or contribute to the discharge of nutrients, sediment, pathogens and other contaminants to streams and ditches?
Yes No Not Applicable
If No, practice(s) to correct this problem should be installed prior to the next wet season but no later than October 1st.
- 4) Is there an approved BMP or a permanent strip of grass that is at least the width of the livestock confinement area, but not less than 50 feet established between the livestock confinement area and all rivers, streams, ditches, ponds, lakes and associated wetlands?
Yes No Not Applicable
If no, practices(s) to correct this problem should begin immediately by excluding livestock from the area where the filter strip will be established. The filter strip should be planted, if necessary, as soon as growing conditions are appropriate. All practices should be installed prior to the next wet season and no later than October 1st.
- 5) Are all catch basins, drains, tiles, pipes and other conveyances of surface and ground water that outlet to streams and ditches installed in a manner that prevents the entry of manure, pathogens, sediment and other contaminants?
Yes No Not Applicable
If no, practice to correct this problem should be installed immediately.
- 6) Is the entire livestock confinement area managed to prevent manure, pathogens, sediment and other contaminants from entering any stream or ditch?
Yes No Not Applicable
If no, practice to correct this problem should be installed immediately.

MANURE COLLECTION, STORAGE & USE

Tips Guide pages 8-9

MANURE STORAGE

- 7) Is manure storage capacity sufficient to store manure and other wastes until they can be safely spread as fertilizer?
Yes No Not Applicable
If No, practice(s) to correct this problem should be installed prior to the next wet season but no later than October 1st.
- 8) Is manure stored at least 100 feet from all wells, rivers, streams, ditches, ponds, lakes and associated wetlands?
Yes No Not Applicable
If No, practice(s) to correct this problem should be installed prior to the next wet season but no later than October 1st.
- 9) Are outdoor manure piles completely covered from October 1st to April 1st?
Yes No Not Applicable
If No, practice(s) to correct this problem should be installed immediately.
- 10) Is manure handled and stored in a way that prevents nutrients, pathogens, sediment and other contaminants from entering streams and ditches?
Yes No Not Applicable
If No, practice(s) to correct this problem should be installed immediately.

FIELD APPLICATION OF SOLID MANURE

- 11) Is manure applied in a manner and is application timed to prevent pollution of streams and ditches and/or groundwater? Are the following practices observed?
- No applications when soils are saturated.
 - No applications that exceed crop nutrient requirements.
 - No applications when fields are frozen and/or snow covered.
 - No applications October 1st – March 15th on fields subject to flooding.
 - No applications within 100 feet of streams and ditches September 1st through March 15th.
 - No applications within 25 feet of streams and ditches March 15^h through September 1st, and then only if a buffer strip is present.
- Yes No Not Applicable
If No, practice(s) to correct this problem should be installed immediately.
- 12) Is manure applied in a manner and is application timed to prevent pollution of streams and ditches and/or groundwater?
Yes No Not Applicable
If No, practice(s) to correct this problem should be installed immediately.

PASTURE MANAGEMENT

Tips Guide Pages 10-13

SEASONAL FEEDING AREAS

- 13) Is all feeding (whether placed on the ground or in feed bunks, hay rings etc.) done at least 100 feet from rivers, streams, ditches, ponds, lakes and associated wetlands?
Yes No Not Applicable
If No, practice(s) to correct this problem should be installed immediately.
- 14) Are 100 foot wide buffer strips established and maintained between seasonal feeding areas and streams and ditches from October 1st - March 30th?
Yes No Not Applicable

If No, practice(s) to correct this problem should begin immediately by excluding livestock from the area where the filter strip will be established. The filter strip should be planted, if necessary, as soon as growing conditions are appropriate (questions 23-25 describe minimum requirements for plant growth and management in filter strips), and should be established no later than the next wet season or October 1st.

- 15) Is manure in seasonal feeding areas distributed over the site such that no area receives more manure nutrients than the fertilizer needs of the next year's crop?

Yes No Not Applicable

If No, practice(s) to correct this problem should be installed immediately.

PASTURE AND HAYLAND AREAS

- 16) Are livestock managed in a way that prevents trampling of river, stream, pond and lake banks and bottoms and associated wetlands?

Yes No Not Applicable

If No, practice(s) to correct this problem should be installed immediately.

- 17) Are 50 foot wide buffer strips established and maintained along all streams and ditches crossing through and/or adjacent to pastures and haylands?

Yes No Not Applicable

If No, practice(s) to correct this problem should begin immediately by excluding livestock from the area where the filter strip will be established. The filter strip should be planted, if necessary, as soon as growing conditions are appropriate (questions 18-20 describe minimum requirements for plant growth and management in filter strips), and should be established no later than the next wet season or October 1st.

- 18) Is the minimum forage height within the 50 foot wide buffer strip at least 3 inches in height from October 1st through March 15th?

Yes No Not Applicable

If No, practice(s) to correct this problem should begin immediately by excluding livestock from the area where the filter strip will be established. The filter strip should be planted, if necessary, as soon as growing conditions are appropriate (questions 18-20 describe minimum requirements for plant growth and management in filter strips), and should be established no later than the next wet season or October 1st.

- 19) Are pastures managed so that after most forage has been grazed, they have time to grow to a height of 4 to 6 inches before they are grazed/harvested again?

Yes No Not Applicable

If No, practice(s) to correct this problem should be applied over the next 2 years.

- 20) Are pastures and haylands mostly covered (at least 75%) with suitable forages for grazing livestock? Yes No Not Applicable

If No, practice(s) to correct this problem should be applied over the next 2 years.

- 21) Does your property contain grass-lined swales and depressions that lack a defined channel or bed, but that also carry seasonal runoff water to interconnecting ditches and streams? If yes, are livestock only pastured in the swales and depressions from the point in the spring when water no longer runs through them until September 30th?

Yes No Not Applicable

If No, practice(s) to correct this problem should be applied immediately.

- 22) In pastures, are all gates, access roads and lanes, watering facilities, supplemental feeding and other heavy use areas located to prevent nutrients, pathogens, sediment and other contaminants from entering streams and ditches?
Yes No Not Applicable
If No, practice(s) to correct this problem should be applied immediately.

RIPARIAN & WETLAND AREAS

Tips Guide Pages 14 and 15

RIPARIAN AREA MANAGEMENT

- 23) Are livestock excluded from rivers, streams, ditches, ponds and lakes (except as provided in next question)?
Yes No Not Applicable
If No, practice(s) to correct this problem should be applied immediately.
- 24) Are instream crossings for livestock and machinery constructed and managed to prevent and control sediment and manure discharge to the watercourse?
Yes No Not Applicable
If No, practice(s) to correct this problem should be applied immediately.
- 25) Is existing native woody vegetation growing within critical area buffers of streams and ditches protected from damage caused by livestock or human related activity?
Yes No Not Applicable
If No, practice(s) to correct this problem should be applied immediately.
- 26) Are the banks of watercourse free from damage that results in exposed soil or bank slumping resulting from recreational use, farm equipment, or hoof action of livestock?
Yes No Not Applicable
If No, practice(s) to correct this problem should be applied immediately.

Tips Guide Pages 16 and 17

WETLANDS MANAGEMENT

- 27) Are livestock excluded from wetlands that **directly connect** to rivers, streams, ditches, ponds and lakes, and are nutrients, pathogens, sediment and other contaminants prevented from entering them? (Note: This requirement may be relaxed if an approved SFCP is developed and implemented as described in WCC16.16.290 CPAL and Appendix A)
Yes No Not Applicable
If No, practice(s) to correct this problem should be applied immediately.
- 28) Are livestock excluded from wetlands that are **isolated** from rivers, streams, ditches, ponds and lakes, and are nutrients, pathogens, sediment and other contaminants prevented from entering them? (Note: This requirement may be relaxed if an approved SFCP is developed and implemented as described in WCC16.16.290 CPAL and Appendix A)
Yes No Not Applicable
If No, practice(s) to correct this problem should be applied immediately.
- 29) Are the functions of wetlands maintained by not filling, draining, grading or clearing them and by not introducing nutrients, pathogens, sediment and other contaminants?
Yes No Not Applicable
If No, practice(s) to correct this problem should be applied immediately.

Standard Farm Conservation Plan Checklist
Submittal Form

Ongoing agriculture activities are permitted within critical areas, and/or their buffers upon implementation of an approved farm conservation plan in accordance with WCC 16.16.290. The goal of this Plan is to protect critical areas from the potential negative impacts of livestock where the animal density is less than or equal to one animal unit per acre. (AU/Ac).

Name of Farm: _____

Land Owner: _____

Physical Address: _____

APN#: _____

City/Zip Code: _____

Mailing Address: _____

City/State/Zip Code: _____

Phone: (_____) _____-_____ Fax: (_____) _____-_____

Person Responsible: _____ Title: _____

Total Farm Acreage: _____ Animal Units per Acre (AU/Ac): _____

I understand that this application does not grant authorization to begin work and does not imply approval of the submitted Farm Plan. Furthermore, no work will begin until a permit/authorization is issued. The critical areas and management zones depicted on farm plans are approximate and are not appropriate for siting new structures and permanent infrastructure.

The information contained in the Worksheets, Site Map and Submittal Form is true and accurate to the best of my knowledge.

Signature: _____ Date: _____

For agency use:

This plan was developed in cooperation with

Consultant _____

Conservation District

Signature: _____

Date: _____

This plan was approved by the Planning & Development Services Staff:

Signature: _____

Date: _____