

# Whatcom County Rural Land Study: A Collaborative Report Identifying Rural Areas of Agricultural Significance



A Report Presented to the  
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Citizens and Landowners of Whatcom County, Washington



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**RURAL LAND STUDY  
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Introduction:

Rapid residential development of agricultural and forest lands has resulted in the need for greater protection efforts by the community. The Whatcom County Council submitted five items in the 2006 Annual Comprehensive Plan Docket, which address heightened protection of resource lands (Exhibit A). The protection of agricultural lands is the primary focus of the docketed items, while rural zoning and forestry lands are also included to a lesser extent.

PDS staff, County Council's Natural Resource Committee, and the Council of the Whole have met on several occasions to discuss the best way to address the agricultural related docket items in a "collective manner". To date, several decisions have been made.

Of primary significance is the development of an Agricultural Work Program that will address the docketed items as well as other actions that seek to achieve some of the same objectives of the docketed items. Programs and policies will be proposed that 1) reduce development density, 2) reduce conversion and fragmentation of farmland, and 3) protect open space from fragmentation.

This report provides a summary of one of the initial activities undertaken to address the impacts of development on rural zoned agricultural land.

Background:

The Whatcom County Council designated agricultural lands of long-term commercial significance in 1991 as required by the Growth Management Act, (RCW 36.70A.170). Land designated as agricultural was subsequently zoned Agriculture. Rural zoned lands do not include designated long-term, commercially significant agricultural land but do contain many working farms and prime agricultural soils. During the Comprehensive Plan adoption process, Whatcom County established 100,000 acres as the minimum quantity of land necessary to ensure the on-going viability of agriculture in Whatcom County (Exhibit B – Shipkey, 2002). In an effort to meet the "critical mass" protection goal, Whatcom County adopted the Agricultural Protection Overlay (APO) as part of the 1997 development regulations.

Changes have occurred to the APO Chapter text since its 1997 adoption. Changes occurred in the following years: 1) 1998 – Ordinance 98-083; 2) 2001 – Ordinance 2001-016; and 3) 2002 – Ordinance 2002-060. Recent changes have been proposed and are docketed as File# ZON2006-00014. The current proposal includes changes to the Agriculture District (WCC 20.40) as well as the APO Chapter (WCC 20.38). The

changes include cluster and residential siting criteria, eliminating the 20 acre lot size threshold exemption, and limiting the total development area to 35% of the entire parcel.

Central to the APO ordinance is the reliance on site-specific criteria to determine whether or not APO provisions are required. APO determinations are largely dependent on whether a majority of the property is comprised of APO soils (as listed in WCC 20.38.040) or if the majority of the property is enrolled in Agricultural Open Space tax program. APO protections and requirements are initiated at the time of property subdivision. Therefore, under this approach agricultural protection is random and highly scattered.

It has been estimated that APO protection could be applied to 28,000 acres of Rural zoned land. While the County goal is to protect 100,000 acres of farmland, it is unclear as to whether the APO “protected parcels” will be in proximity to areas that are currently in agricultural uses. The usefulness of land for agricultural purposes is dependent on many factors including the quality of soils and the size of the protected parcel. Additionally, convenience and proximity to other agricultural land is important, particularly in developing areas where increasing traffic volume is making the use of farm vehicles more and more impractical and dangerous.

In response to criticisms about the “scattered” nature of protection provided by the current APO, and in response to the County Council’s Comprehensive Plan Docketed items, the Agricultural Advisory Committee met over the summer of 2006 to identify areas in Rural 5 and 10 acre zones that are most important to maintaining the agricultural sector of Whatcom County.

#### Project Objective:

The primary objective of the rural land study was to identify and map areas within the Rural 5 and 10 Zones that are of agricultural significance and may require additional protection to ensure long-term agricultural viability. The areas identified in this study are in addition to and incorporate the Purchase of Development Rights program’s twelve target areas, which were recognized as areas of significant agricultural importance and thusly have required additional protection<sup>1</sup>. The twelve target areas are shown in the attached Map 1.

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<sup>1</sup> The Purchase of Development Rights Program development process included the identification of agricultural “target areas” that were established as a means to direct geographically strategic development right purchases. Section IV.A of the Whatcom County Purchase of Development Rights Advisory Committee’s Recommendations states:

*In developing the eligibility and selection criteria recommendations, the Committee acknowledged the importance of the remaining farmland in the county. With limited funds and a recognition that the PDR program will be one component of an integrated effort for farmland preservation, a balance is needed between PDR program capacity and program effectiveness. The Committee concluded that the protection of contiguous areas that could establish a perimeter of PDR farmlands would be more effective in preventing further agricultural conversion than an approach that would result in the selection of random, isolated pockets of farmland. As a result, twelve target areas were identified by the Committee. The Committee recommends that these target areas receive priority for PDR acquisition.*

### Project Data and Analysis:

1. Geographic Information System Analysis and mapping
  - a. 2004 digital air photos
  - b. APO Soils GIS layer
  - c. Critical Area GIS layers, Whatcom County
  - d. County Assessor data
  - e. Purchase of Development Rights Target Areas GIS layer
  - f. NOAA Coastal Change Analysis Program, 2004 based on Landsat Image, 2000

### Area Selection Process:

The Agricultural Advisory Committee, in conjunction with PDS staff, has identified 9 rural areas comprising over 21,000 acres that have high agricultural value. The 9 proposed areas are shown in the attached Map 2. The criteria for establishing these areas includes a consideration of:

1. Proximity to active agricultural areas:
  - a. Adjacent to Agriculture District
  - b. In or adjacent to a PDR Target Area
  - c. Inclusion of area provides buffer between Ag zone and more intensive uses
2. Current land use characterized by agriculture – visual analysis
3. High percentage of APO soils
4. Parcelization of the area:
  - a. Acreage totals by parcel size
    - i. Total acreage by parcel size is used to determine the percent of area still in large (20+ acre) parcels
  - b. Number of parcels by given size
    - i. Breakdown by parcel size indicates character of land use in the area
5. Land use as identified on Assessors records (Agricultural Open Space)
6. Evaluation of forested areas for potential agricultural use.
  - a. Land cover (forested) intersects with critical areas to determine likelihood that area could be developed for agricultural use.

A summary of acreage by area is included in Table 1.

**TABLE 1- Proposed Rural Areas**

<b>Area</b>	<b>Acreage</b>
Guide/Aldrich R5A	1,992
Guide/Aldrich R10A	2,547
Ten Mile Rd R10A	3,133
Loomis Trail - R5A	3,607
Custer R10A	2,707
Harksell Rd R5A	3,323
East Badger Rd R10A	2,090
Minaker Rd R10A	286
Lawrence Rd R5A	503
South Fork Nook R10A	1,323
South Fork Nook R5A	439
<b>Total</b>	<b>21,950</b>

Area Summaries:

Summaries for each proposed area are provided in Exhibit C. Exhibit C also contains maps and graphs detailing specific characteristics of each area. Exhibit D provides a table of each area’s characteristics and Exhibit E provides a table of the residential development permit activity from 2000-2006.

Final Review, Conclusions, and Recommendations:

The initial project assignment involved a visual analysis of County Rural 5 and 10 acres zoned lands. The western portion of the County was depicted on maps that included the combination of air-photo, parcel layer, soils layer and PDR target areas. Each area of the County was carefully reviewed by the AAC and specific areas were identified as possible “keepers” or as not likely to provide significant benefit to overall agricultural productivity within the County.

The Smith Road was determined to be the southern limit of agricultural lands for consideration in this project. This perception has been expressed by the agricultural community on many occasions and is based on the increase in development and the lesser quality of soils south of Smith Road.

The eastern boundary of the agricultural area has historically been the foothills, although there are exceptions – South Fork Valley, Minnikier Road area and along South Pass Road.

The western boundary of agricultural lands considered for this project elicited much debate. While Interstate 5 has been identified by many as a logical boundary to the west, nearly 3,000 acres just west of I-5 are zoned R10A and are adjacent to agriculturally

zoned land near Custer. Although all agricultural areas west of Interstate 5 were assessed in this study, only the proposed Custer area was determined to require additional protection.

After the first area selection, PDS staff employed GIS to develop characterizations of each proposed area. In addition, adjacent areas not chosen were analyzed as a means of comparison with selected areas. Areas that were predominately forested but contain both a high percentage of APO soils and large parcels were further analyzed using Landsat land coverage data and County Critical Area data layers. The analysis determined the suitability of the forested acres for farming activities. It was determined that areas with underlying wetlands would be unlikely to obtain clearing permits. Several areas were not included due to this limitation.

Some areas that were originally included were discarded after GIS analysis revealed low percentages of agriculture or resource uses and high parcelization rates. For instance, the area southwest of Ferndale between Aldergrove Road and Slater Road was ultimately discarded due to the high level of parcelization as much of this area is designated R5A and has been heavily subdivided. Additionally, the level of farming activity is not as significant as other proposed areas such as the Custer R10A or the Harksell Road R5A.

During a follow-up project meeting with the AAC to review PDS staff findings, the AAC requested PDS staff to review additional rural areas, specifically those agricultural areas in the foothills. As a result areas along the South Pass Road and the South Fork Valley of the Nooksack River have also been included.

#### Conclusions:

The areas identified in this study comprise some of the best soils and are in close proximity to the heart of actively farmed land within Whatcom County. While some areas have not been included that continue to have some level of agricultural activity, it is the concern of the AAC that locations too far away from core agricultural areas will be less likely to stay in agricultural use. The project's determination of proposed areas should not be viewed as a basis to foreclose agricultural activities in other areas of the County. Rather the focus of this study is identify those lands that are critically important for the reasons noted previously in the report – quality of soils, current land use, and proximity to intensively farmed areas of the County.

#### Recommendation:

The Agricultural Advisory Committee recommends that Whatcom County develop heightened agricultural protection measures for the rural areas identified by this study.