**WHATCOM COUNTY COUNCIL AGENDA BILL**

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<th>CLEARANCES</th>
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<tr>
<td>Originator: Matt W. Aumot</td>
<td>11-9-04</td>
<td>Introduction</td>
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<td>Division Head: Sylvia Goodwin</td>
<td>11-23-04</td>
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<td>Dept. Head: Hal Hart</td>
<td>12/7/2004</td>
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<td>Purchasing/Budget:</td>
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<td>Executive: Pete Kremen</td>
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<td>Public Hearing</td>
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**SUBJECT:** Ordinance adopting amendments to the mineral resource lands element of the Whatcom County Comprehensive Plan

**ATTACHMENTS:**

1. Proposed ordinance
2. Planning Commission Findings of Fact & Reasons for Action, Conclusions, and Recommendations

**Note:** Background materials are available for review at the County Council office.

**SUMMARY STATEMENT:** Review, evaluate and revise the mineral resource lands element of the Whatcom County Comprehensive Plan as part of the 7-year update required by the Growth Management Act. The purpose of the review is to invite public input on the mineral resource lands element, ensure compliance with the requirements of the Growth Management Act, consider recommendations of the Surface Mining Advisory Committee, and update the plan to reflect new information and County priorities. Proposed changes to the mineral resource lands element of the Comprehensive Plan include revising 30-year demand and supply projections, amending the criteria to create new or expand existing Mineral Resource Land (MRL) designations, and modifying the mineral resource action plan items. Additionally, the map entitled “Designation of Mineral Resource Lands and Classification of Mineral Resource Areas” (Map 21) will be replaced with a new version of the map showing current MRLs, depicting revised mineral resource areas and deleting the Agriculture/MRL study area west of Sumas.

**Note:** The subject proposal is one of a number of comprehensive plan amendments initiated this year. These amendments must be considered concurrently by the County Council so that the cumulative effect of the various proposals can be evaluated (RCW 36.70A.130). Additionally, pursuant to the review schedule established in WCC 20.10.120, final Council action on these amendments should occur on or about November 30.

**COUNCIL ACTION TAKEN:**

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<tr>
<td>11/9/2004</td>
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<td>11/23/2004</td>
<td>Held in Natural Resources Committee</td>
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<td>12/7/2004</td>
<td>Held in Natural Resources Committee</td>
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<td>1/11/2005</td>
<td>Amended in Natural Resources Committee - sent to full Council for Public Hearing on 1/25/05</td>
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<tr>
<td>1/25/2005</td>
<td>Adopted 5-2, Nelson, Crawford opposed, Ord. #2005-024</td>
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**Related County Contract #:**

**Related File Numbers:** AB2004-082

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ORDINANCE # 2005-024

ADOPTING AMENDMENTS TO THE
MINERAL RESOURCE LANDS ELEMENT OF THE
WHATCOM COUNTY COMPREHENSIVE PLAN

WHEREAS, The Growth Management Act requires counties and cities to review and, if needed, revise comprehensive plans to ensure continued compliance with the GMA (RCW 36.70A.130); and

WHEREAS, Review of the mineral resource lands element of the Whatcom County Comprehensive Plan occurred in the 2004 review cycle; and

WHEREAS, Legal notice was published in the Bellingham Herald; and

WHEREAS, The Planning Commission held a public hearing on the proposal; and

WHEREAS, The Planning Commission has evaluated the proposed amendments and made modifications; and

WHEREAS, the County Council has considered the Planning Commission’s Findings of Fact & Reasons for Action, Conclusions and Recommendations.

The Council makes the following findings of fact and conclusions:

FINDINGS OF FACT

1. Notice that Whatcom County passed a resolution initiating review, evaluation and, as needed, revision of certain elements of the Comprehensive Plan, including the mineral resource lands element, was published in the Bellingham Herald on February 22, 2004.

2. Notice of the proposed amendments was sent to state agencies, including the Department of Community, Trade and Economic Development (CTED) and the Department of Natural Resources (DNR), on October 8, 2004.

3. Notice of the Planning Commission hearing for the subject amendment was posted on the County’s website on October 14, 2004.
4. Notice of the Planning Commission hearing for the subject amendment was mailed to libraries and schools on October 14, 2004, with a request to post the notice on their bulletin boards.

5. Notice of the Planning Commission hearing for the subject amendment was sent to city planners, Tribal representatives and other interested parties on October 15, 2004.


7. A determination of non-significance was issued under the State Environmental Policy Act (SEPA) on October 26, 2004.

8. The Planning Commission held a public hearing relating to the subject amendment on October 28, 2004.


10. The County Council’s Natural Resources Committee met on November 23, 2004, December 7, 2004, and January 11, 2005 to consider the subject amendment.

11. The County Council held a public hearing relating to the subject amendment on January 25, 2005, after publishing notice of the hearing in the Bellingham Herald.

12. A planning goal of the Growth Management Act is to “Maintain and enhance natural resource-based industries . . . and discourage incompatible uses” (RCW 36.70A.020(8)).

13. The Growth Management Act (GMA) required Counties to designate where appropriate mineral resource lands that have long-term significance for extraction of minerals and adopt regulations to assure conservation of these mineral resource lands (RCW 36.70A.040, .060, and .170).

14. Whatcom County designated Mineral Resource Lands (MRLs) in the 1997 Comprehensive Plan (Ordinance 97-023). Whatcom County adopted policies and regulations to discourage incompatible uses and protect mineral resource lands from development. These include a 20-acre minimum lot size in designated MRLs (WCC 20.73) and requiring disclosure when someone buys property or receives a permit within 500’ of a designated MRL that mining activities may occur nearby (WCC 14.06).

15. The Growth Management Act requires Whatcom County to consider “New information made available since the adoption or last review of its designations or development regulations, including data available from the department of natural resources relating to mineral resource deposits” in the seven-year review of the Comprehensive Plan (RCW 36.70A.131).
16. The Whatcom County Surface Mining Advisory Committee considered two major sources of information that have been made available since adoption of the 1997 Comprehensive Plan:

- *Report Engineering Geology Evaluation Aggregate Resource Inventory Study Whatcom County, Washington*, (GeoEngineers, Inc., Sept. 2003); and


17. County-Wide Planning Policy I-9 states that “The County and the cities recognize the need for the protection and utilization of natural resources and resource lands including agricultural, mineral, forestry and fishing . . .”

18. Whatcom County Comprehensive Plan Policy 8P-1 is to “Designate a 50 year supply of commercially significant construction aggregate supply.”

19. The state DNR completed a study entitled *Reconnaissance Investigation of Sand, Gravel, and Quarried Bedrock Resources in the Bellingham 1:100,000 Quadrangle, Washington* (Jan. 2001). This study indicates that the working lifetime of most of the significant pits in the County is 10 to 20 years (p. 5).

20. The Whatcom County Surface Mining Advisory Committee met from February 2004 to October 2004 to evaluate surface mining issues. The evaluation included whether Whatcom County has a 50-year supply of mineral resources and criteria in the Comprehensive Plan for designating Mineral Resource Lands (MRLs).

21. The Whatcom County Surface Mining Advisory Committee concluded that there is less than a 50-year supply of mineral resources in existing MRL designations.

22. Amending the MRL designation criteria could facilitate better implementation of Comprehensive Plan Policy 8P-1, which is to designate a 50-year supply of mineral resources.

23. The Growth Management Act requires counties and cities to review and, if needed, revise comprehensive plans every seven years to ensure continued compliance with the GMA (RCW 36.70A.130).

24. Whatcom County has undertaken this seven-year review, evaluation and update in 2004 for the mineral resources element of the Comprehensive Plan. Whatcom County has identified the revisions shown on the attached Exhibit A to satisfy the mandatory mineral resource planning provisions of the Growth Management Act and to otherwise update this element.
CONCLUSIONS

1. The subject amendment is consistent with Growth Management Act, County Wide Planning Policies, and Whatcom County Comprehensive Plan.

2. The subject amendment complies with the approval criteria for comprehensive plan amendments of WCC 20.10.080.

NOW, THEREFORE, BE IT ORDAINED by the Whatcom County Council that:

Section 1. Chapter 8 of the Whatcom County Comprehensive Plan relating to mineral resource lands is hereby amended as shown on Exhibit A.

Section 2. Adjudication of invalidity of any of the 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.

ADOPTED this 25 day of January, 2005

ATTEST:

Dana Brown-Davis, Council Clerk

WHATCOM COUNTY COUNCIL
WHATCOM COUNTY, WASHINGTON

APPROVED as to form:

Civil Deputy Prosecutor

Laurie Caskey-Schreiber, Council Chair

() Approved  () Denied

Pete Kremen, Executive

Date: 12/28/05
INTRODUCTION

The growth and harvest of farm products, re-generation and harvesting of timber, and excavation of minerals all shape Whatcom County's landscape and strongly influence the economy. Resource lands, which include agriculture, forestry, and mineral resource lands, also largely represent Whatcom County's cultural heritage. These natural resource activities have been major industries since settlement began in the area.

Chapter Organization

This chapter is divided into three sections: Agricultural Lands, Forest Resource Lands, and Mineral Resources. The action plans for all three sections appear at the end of the chapter.

Purpose

This chapter contains goals and policies designed to identify and protect the important natural resource lands found in Whatcom County as defined by RCW 36.70A. The development of these goals and policies is necessary to ensure the provision of land suitable for long-term farming, forestry, and mineral extraction so the production of food, fiber, wood products, and minerals can be maintained as an important part of our economic base through the planning period. Without protection of these resource lands, some of the lands could be inappropriately or prematurely converted into land uses incompatible with long-term resource production. The premature conversion of resource lands into incompatible uses places additional constraints on remaining resource lands and can lead to further erosion of the resource land base.

Process

Each section of this chapter includes a description of the process followed in creating that section.

GMA Goals, County-Wide Planning Policies, and Visioning Community Value Statements

The following goals and policies in this chapter have been developed:

• to be consistent with and help achieve the state-wide GMA goals to "maintain and enhance" natural resource based industries
to implement County-Wide Planning Policies which express the desire for the county to become a government of rural lands and sustainable resource based industries

- to fulfill the citizens' vision of Whatcom County where resource based industries are widely practiced and encouraged

The Agricultural Lands, Forest Resource Lands, and Mineral Resources sections of this chapter address Goal 8 of the GMA, which reads:

"Natural Resource Industries. Maintain and enhance natural resource based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forest lands and productive agricultural lands, and discourage incompatible uses." (RCW 36.70A.020)

The goals, policies, and action plans of this chapter support the achievement of this goal by identifying, designating, and protecting productive resource lands from incompatible uses, thereby helping to maintain the county's important natural resource based industries.

Identifying and designating productive resource lands also helps implement the County-Wide Planning Policies which state that Whatcom County shall "become a government of rural areas in land use matters directed towards agriculture, forestry and other natural resources." [CWPP B(1)]. In addition, land use policies which encourage best management practices are included within this chapter to support the County-Wide Planning Policies regarding economic development:

As part of a broad based economy, productive timber, agriculture and fisheries industries should be maintained in a sustainable manner. [CWPP 1-9 F(7)]

Rationale for proposed amendment: The incorrect County Wide Planning Policy was cited. It should be noted that there is a proposal to change this County-Wide Planning Policy as follows: "The County and the cities recognize the need for the protection and utilization of natural resources and resource lands including agricultural, mineral, forestry and fishing. As part of a broad based economy, productive timber, agriculture and fisheries industries should be supported in a sustainable manner." If the County and cities eventually adopt this language, the above cited language would also have to be modified.

The results of the Visioning Process place a great importance on preserving agricultural lands while recognizing the economic pressures facing the farming community. The economics of forestry are recognized as well, along with the necessity of mining and the reality of impacts on affected neighbors. The goals, policies, and action plans of the Resource Lands chapter support the future vision of Whatcom County as a semi-rural region with productive resource based industries and a healthy environment by
encouraging the use of good management practices and resource conservation measures as well as designating and protecting resource lands.

MINERAL RESOURCES - INTRODUCTION

Purpose

The purpose of this section is to guide Whatcom County in land use decisions involving lands where mineral resources are present.

Process

To address the mandates of the Growth Management Act, Whatcom County formed a Surface Mining Citizens' Advisory Committee in the 1990s to produce, through a consensus process, the issues, goals, and policies found in this chapter. Planning staff drafted the sub-section on mineral designations following review and comments from the committee. The committee was comprised of a cross-section of community members including mining operators, foresters, farmers, and rural homeowners representing diverse interests and geographic areas in Whatcom County. The County Council adopted the original mineral resource provisions in the 1997 Comprehensive Plan. These provisions were updated in 2004-05 after reviewing the GMA, Surface Mining Advisory Committee recommendations and new information.

GMA Requirements

One of the goals of the Growth Management Act is to maintain and enhance resource based industries, including the aggregate and mineral resource industries, with the purpose of assuring the long-term conservation of resource lands for future use. The goals and policies in this section support that goal. In addition, the Act mandates that each county shall classify mineral resource lands and then designate and conserve appropriate areas that are not already characterized by urban growth and that have long-term commercial significance.

MINERAL RESOURCES - BACKGROUND SUMMARY

Mining activities in Whatcom County have taken place since the 1850s, though the nature, scope and extent of such activities has changed considerably through time. These changes have reflected the economics involved at each point in time at least as much as they reflect the geologic character of Whatcom County. Historically, the more important mineral commodities of Whatcom County have been coal, gold (placer and lode), sandstone, clay, peat, limestone, olivine, and sand and gravel aggregate, with the latter three being especially important at present. Many other commodities, however, have been prospected for or extracted.

In 2004, there were 24 Mineral Resource Land (MRL) designations throughout the County, covering 4,204 acres. For planning purposes, the Surface Mining Advisory Committee recommended using an annual demand for sand and gravel of 12.2 cubic yards per capita and annual demand for bedrock of 1.3 cubic yards per capita in the 2004-05 Comprehensive Plan update, consistent with the rates in the 1997
Comprehensive Plan. There were approximately 108 people directly employed by the mining industry in 2000 (Greater Whatcom Comprehensive Economic Development Strategy, p. III-16).

In 1993, there were approximately 78 permitted surface mines in Whatcom County covering a total of 2,268 acres. Also in 1993, the per capita consumption estimate for sand and gravel in Whatcom County was 12.2 cubic yards. For quarried stone the per capita consumption is 1.3 cubic yards (historic rates have been higher). The statewide per capita consumption rate is currently about 9 cubic yards for sand and gravel and 3 cubic yards for quarried stone. During 1990, approximately 140 people were directly employed by mining activities in Whatcom County.

In Whatcom County, sand and gravel mining occurs mainly east of Interstate-5 and north of Bellingham, with some exceptions. The more important areas from east to west include: (1) the Siper and Hopewell Road area two miles north of Nugents Corner; (2) the Breckenridge Road area just east of Nooksack; (3) the Pangborn and Van Buren Road area two and one half miles southwest of Sumas; (4) the Pole and Everson-Goshen Road area to the southwest of Everson; (5) the Axton Road area one mile east of Laurel; and (6) the Valley View Road area three miles to the east of Blaine. It is estimated that between 1999-2001 in-1993 approximately 1.73 1.5 million cubic yards of sand and gravel from upland pits were excavated annually in Whatcom County (Report Engineering Geology Evaluation Aggregate Resource Inventory Study Whatcom County, Washington (GeoEngineers, Inc., Sept. 30, 2003, p. 7).

Limestone has been mined since the early 1900s in Whatcom County. Historically, the main use for limestone was for portland cement manufacturers and pulp and paper industries. Today, limestone is mined in the Red Mountain area north of Kendall and is primarily used for rip-rap to mitigate effects of flooding, for crushed rock, and for pulp mills. Limestone mining has decreased significantly over the years. In 1966, about 500,000 tons of limestone were produced annually from deposits on Red Mountain and from deposits north of Maple Falls. Since then, limestone mining has decreased significantly.

Whatcom County is home to one of the largest known deposits of olivine in the United States, located in the Twin Sisters Mountain. The Twin Sisters Mountain is chiefly comprised of this mineral. The extraction of high quality Twin Sisters dunite (olivine) by the Olivine Corporation, largely from the Swen Larsen Quarry, has ranged from 400 tons in the early years of operation to a more recent annual average of approximately 70,000 to 80,000 tons.

**Rationale for proposed amendment: The staff geologist for Whatcom County Planning & Development Services indicated that it is an exaggeration to state that the Twin Sisters are chiefly comprised of olivine.**

In the past, extraction of river gravel occurred primarily within on the banks of the Nooksack River between Deming and Lynden, as determined by aggregate size and composition. As of March, 1993, 34 gravel bars had approved status for extraction. Between 1990 and 1993, an average of 170,000 cubic yards per year of river gravel were removed from the Nooksack River. Between 1960 and 1987, removal rates averaged
about 50,000 cubic yards per year. However, because of federal regulations and decreasing seasonal windows in which gravel could be removed from the river, there has not been any river bar scalping on the Nooksack River since 1995.

The Whatcom County Natural Resources Report: Mineral Resources Background Document contains in-depth information on the mineral resources of Whatcom County, their location, economics, and land use considerations within the context of the Growth Management Act. The document is intended to serve as an informational source to complement the following mineral resource issues, goals and policies.

Rationale for proposed amendment: This document will be cited in the bibliography, along with two other documents:

- Report Engineering Geology Evaluation Aggregate Resource Inventory Study Whatcom County, Washington (GeoEngineers, Inc., Sept. 30, 2003); and

MINERAL RESOURCES - ISSUES, GOALS, AND POLICIES

General Issues

While urbanization creates demand for sand and gravel resources, it may also encroach upon or build over those same resources, rendering them inaccessible. Strong community opposition to mining near residential, agricultural, or sensitive environmental areas may also limit extractive opportunities. Adequate resource protection could help to assure the long-term conservation of resource lands for future use. It would also help to ensure a competitive market and to guard against inflated land prices by allowing the supply of minerals to respond to the demand of a free market. Helping the aggregate industry and the associated businesses, trades, and export markets creates jobs and stimulates the economy, to the benefit of the county.

Potential conflicts with other land uses, however, may include increased noise, dust, visual blight, traffic, road wear, and neighboring property devaluation. Unreclaimed mines can affect property values while at the same time nearby residents may use the area for shooting, dirt bike riding, and other activities. Controlling trespassing to surface mining can be a significant safety issue for mine operators. Property rights issues range from the right to mine and use the value of mineral resource land to the right to live in an area with a high quality of life and retain home values. Citizens may be generally unaware of the county zoning of surrounding property and the mining uses that are allowed. These and other factors may contribute to a climate of distrust and hostility between the aggregate industry and property owners.

Environmental issues associated with surface mining include groundwater contamination and disruption of fish and wildlife habitat. Surface mines do have the potential, however, if reclaimed properly, to create wetlands and fish and wildlife habitat, possible productive agricultural land for a limited number of crops, or provide land for parks, housing, industrial and other uses.
As a natural result of geologic forces, it is not uncommon in Whatcom County to have excellent mineral deposits located under prime farmland soil and above an aquifer recharge area. Mining in these areas can substantially reduce the productive capacity of the soil and make the underlying aquifer more susceptible to contamination. Removing the soil overburden eliminates the natural filtration system, exposing the aquifer to direct contamination from turbidity, industrial spills, illegal dumping and agriculture products. Removing, stockpiling and spreading soil creates an unacceptable risk of compromising the productive capacity of the most productive and versatile farmland in the County. Another potential problem is that digging out a side hill and/or through a clay barrier could tap the groundwater and suddenly drain an aquifer. This creates a conflict between competing natural resource industries; agriculture and mining. While agriculture is a sustainable industry, mining is an industry that relies on a fixed, nonrenewable resource. Mining in these areas can make the area more susceptible to groundwater contamination because the smaller the soil barrier, the greater the chance for groundwater contamination from turbidity, industrial spills and agriculture products. Another potential problem is that digging out a sidehill and/or through a clay barrier could tap the groundwater and suddenly drain an aquifer. Mining below the water table, however, can minimize the amount of land disturbed or the occurrence of "mining sprawl" in the county. As mineral deposits are depleted, reclamation to lakes or wetlands can mitigate the displacement of wildlife and have a positive effect on water quality.

Associated mining activities such as rock crushing on-site can greatly increase the "industrial atmosphere" experienced by nearby property owners. This activity, however, helps to keep material transportation costs down. In addition, accessory uses are a necessary part of most operations, and to carry them out on site is cost-effective.

**GOAL 8J:** Sustain and enhance when appropriate Whatcom County’s mineral resource industries, support the conservation of productive mineral lands, and discourage incompatible uses upon or adjacent to these lands.

**Policy 8J-1:** Conserve for mineral extraction designated mineral resource lands of long-term commercial significance. The use of adjacent lands should not interfere with the continued use of designated mining sites that are being operated in accordance with applicable best management practices and other laws and regulations.

**Policy 8J-2:** Support the use of new technology and innovative techniques for extraction, processing, recycling and reclamation. Support recycling of concrete and other aggregate materials. Support the efficient use of existing materials and explore the use of other materials which are acceptable substitutes for mineral resources.

**Policy 8J-3:** Minimize the duplication of authority in the regulation of surface mining.

**GOAL 8K:** Ensure that mineral extraction industries do not adversely affect the quality of life in Whatcom County, by establishing
appropriate and beneficial designation and resource conservation policies, while recognizing the rights of all property owners.

Policy 8K-1: Avoid significant mineral extraction impacts on adjacent or nearby land uses, public health and safety, or natural resources.

Policy 8K-2: Consider the maintenance and upgrade of public roads. Address all truck traffic on county roads in a fair and equitable fashion.

Policy 8K-3: Avoid adversely impacting water quality. The protection of aquifers and recharge zones should have precedence over surface mining in the event it is determined by the county that adverse impacts cannot be avoided through the standard use of best management practices. Avoid contamination of aquifers by using uncontaminated material for reclamation or on-site storage.

Policy 8K-4: Encourage Require, where there exists County jurisdiction, the reclamation of mineral resource lands on an ongoing basis as mineral deposits are depleted. Best Management Practices should be used to achieve this.

Policy 8K-5: Have an ultimate use for land used for mineral extraction which will complement and preserve the value of adjoining land.

Policy 8K-6: Require security to cover the costs of reclamation prior to extraction activity, and insurance policies or a similar type of protection as appropriate to cover other potential liabilities associated with the proposed activity.

Rural and Urban Areas

Many of the rural areas in Whatcom County have been and are being used for mineral extraction. Low density rural areas with potential natural resources such as sand and gravel may be able to accommodate a variety of uses, and surface mining has been a traditional use. Significant mineral deposits occur in certain parts of the rural areas. Some of these areas have higher surrounding residential densities than others, and many rural residents expect less intrusive forms of land uses. Determining which areas are the most appropriate for mineral extraction is a difficult and challenging task.

GOAL 8L: Achieve a balance between the conservation of productive mineral lands and the quality of life expected by residents within and near the rural and urban zones of Whatcom County.

Policy 8L-1: Discourage new residential uses from locating near designated mineral deposit sites until mineral extraction is completed unless adequate buffering is provided by the residential developer.
Policy 8L-2: Protect areas where existing residential uses predominate against intrusion by mineral extraction and processing operations.

Policy 8L-3: Allow accessory uses to locate near or on the site of the mineral extraction source when appropriate. Authorize crushing equipment to locate near the mineral extraction source as a conditional use provided that all pertinent regulatory standards are maintained. Site asphalt and concrete batch plants as a conditional use, addressing potential impacts for the site.

Policy 8L-4: Buffer mineral resource areas adjacent to existing residential areas. Buffers preferably should consist of berms and vegetation to minimize impacts to adjacent property owners. Buffers should be reduced for a limited period of time during reclamation if quality minerals are contained therein.

Agricultural Areas

There is considerable overlap between high quality aggregate lands and high quality agriculture lands. Several deposits represent a primary source for sand and gravel and, as well, form the parent material for prime agricultural soils. Both large, deep, open pit mines and smaller projects removing ridges and high ground have been operating in these overlap areas in the agricultural district. The smaller projects usually occur on dairy farms where corn or grass is cultivated. Some raspberry farming has also occurred on reclaimed areas. Potential drawbacks from commercial mining in agricultural areas may include reclamation problems, the loss of scenic terrain, an increased risk of groundwater contamination from future agricultural practices, soil rehabilitation difficulties, and negative cost-benefit balance and drainage may also be adversely affected.

Some farmers want the freedom of choice to use their land for farming or surface mining, especially in cases where mining income could "save the farm." Others want to preserve farmland. Some questions to consider are the extent to which surface mining should occur on farmland and the extent to which it should be reclaimed back to farmland if it does occur.

The agriculture zone is sparsely populated and there are fewer conflicts between homeowners and mining industries than in urban or rural zones. Nevertheless, mining activities can significantly impact nearby landowners.

GOAL 8M: **Achieve a balance between the conservation of** the importance of conserving productive mineral lands and the conservation of conserving productive agricultural lands within or near the agricultural zones of Whatcom County without jeopardizing the critical land base that is necessary for a viable agricultural industry.

Policy 8M-1: Allow mining in the agriculture zone that would enhance farming by leveling knolls knobs and ridges when appropriate. In these areas, reclamation of mineral extraction sites should occur in a timely
fashion. The site should also be restored for uses allowed in an agricultural zone and blend with the adjacent landscape and contours.

Rationale for proposed amendment: Section 20.40.161(4) of the Official Whatcom County Zoning Ordinance implements Policy 8M-1 by allowing removal of knolls and ridges in the Agriculture zone. This section of the zoning code employs the term “knolls” rather than “knobs.” Additionally, “knoll” is specifically defined in the code whereas “knob” is not. In order to achieve consistency between the Comp Plan and zoning code, staff is recommending that “knob” should be changed to “knoll.”

Policy 8M-2: Avoid the use of designated agricultural land for mineral or soil mining purposes unless the soils can be restored to their original productive capabilities as soon as possible after mining occurs.

Policy 8M-3: Allow accessory uses such as washing and/or screening of material to locate near or on the site of the mineral extraction source when appropriate. Within MRL designations, authorize application for mineral processing facilities such as rock crushers and concrete plants through the conditional use process.

Forestry Areas

Surface mining of gravel and rock resources is an integral part of a forest landowner’s forest management. Adequate supplies of gravel and rock not only add to the economics of forest management, but also reduce environmental impacts of forest roads. Rock crushing helps conserve a valuable commodity by reducing the amount of material necessary for road construction. The use of crushed rock on roads reduces the amount of sediment developed and better protects water quality.

Zoning densities in the Forestry Districts protect the access to mineral resources in the future. These regions contain most of the county's hard rock reserves, such as olivine and limestone. In some areas, the soils overlaying mineral deposits may have a lower productivity for growing timber compared to the high mineral resource value.

As lowland sand and gravel resources become exhausted or unavailable, the commercial potential of mining in forest zones increases enough to warrant the expense of hauling. While this would increase the potential for impacts, such as heavier truck traffic, land use conflicts may be minimal based on the lack of or low residential densities in these zones.

GOAL 8N: Maintain the conservation of productive mineral lands and of productive forestry lands within or near the forestry zones of Whatcom County.
Policy 8N-1: Recognize the importance of forest lands in the county and the importance and appropriateness of surface mining as part of conducting forest practices within the forest zones.

Policy 8N-2: Allow rock crushing, washing and sorting in the forest zones when appropriate as long as conflicts with other land uses can be mitigated.

Policy 8N-3: Allow commercial surface mining operations in the forest zones when appropriate as long as conflicts with other land use zones can be mitigated.

Policy 8N-4: Carefully consider the siting of asphalt and concrete batch plants due to possible adverse impacts.

Riverine Areas

Proponents of river bar scalping support it for both economic and flood control purposes. River bar aggregate supplies high quality rock material (although it produces poor quality sand due to excessive organic material). In addition, if done properly, bar scalping can stabilize a section of the river channel and decrease flood damage immediately downstream.

Although the public believes river bar scalping will significantly reduce flooding along the entire river, in fact its benefits are local and it may have negative effects in areas surrounding the mining site. For example, if done improperly gravel removal can destabilize the river channel locally and increase, rather than decrease, flood damage downstream. After intensive bar scalping, floodwater that is normally stored on the floodplain of the mined reach can be concentrated and dumped on the reach immediately downstream. If gravel mining exceeds the rate of replenishment from upstream, the river bed may lower both upstream and downstream; this bed degradation can undermine bridge supports and other structures, cause adjacent banks to erode (or stabilize, depending on how much and where gravel is removed), lower groundwater tables adjacent to the river, and damage riparian vegetation.

Improper mining methods in fish spawning reaches can de-stabilize spawning gravel or clog it with silt, remove cover vegetation or trap smolts during out-migration. Over harvesting of gravel can erode the river bed and expose the underlying substrate, reducing or eliminating pool and riffle habitat for fish and other aquatic animals. Finally, petroleum spills from mining equipment can degrade local surface water quality if not responded to properly.

While river gravel is a renewable resource that could extend the life of other Whatcom County gravel resources, river bars are not a reliable source from year to year. The amount of gravel that can be mined varies with seasonal and yearly rates of gravel deposition; high and low water levels and timing; and fish migration, spawning and out-migration timing. Various costs raise the price of river bar gravel. For example, there are several streams (e.g. Boulder Creek, Porter Creek, Glacier Creek, etc.) which may offer significant quantities of sand and gravel, but which are not currently being mined due to
prohibitive transportation costs. Other factors include the cost and limited availability of access easements to the river, the repeated handling that is necessary for extraction and processing of the material, and the cost of complying with regulations.

Finally, many state and federal regulations restrict scalping locations and practices. The cost and time delay of duplicate regulation, environmental restrictions, royalty charges and the regulatory process are deterrents to river bar mining.

**GOAL 80:** Support the extraction of gravel from river bars and stream channels in Whatcom County for flood control purposes and market demands where adverse hydrologic and other environmental effects are avoided or minimized.

**Policy 80-1:** Designate river gravel as a supplemental source to upland reserves.

**Policy 80-2:** Allow, when appropriate, the stockpiling, screening, and washing of river gravel in all zone districts when associated with river gravel extraction as close to the extraction site as possible to keep handling and transportation costs to a minimum.

**Policy 80-3:** Design river gravel extraction to work with natural river processes so that no adverse flood, erosion, or degradation impacts occur either upstream or downstream of extraction sites. Base mining extraction amounts, rates, timing, and locations on a scientifically determined sediment budget adjusted periodically according to data provided by a regular monitoring plan.

**Policy 80-4:** Locate and operate river gravel extraction to provide long-term protection of water quality and quantity, fish and wildlife populations and habitat, and riparian vegetation.

**Policy 80-5:** Plan and conduct operations on rivers and streams so that short- and long-term impacts and hazardous conditions are either prevented or held to minimum levels which are not harmful to the general public. Create as little adverse impact on the environment and surrounding uses as possible.

**Policy 80-6:** Fully consider the recommendations of the Flood Hazard Management Committee to encourage gravel bar scalping that decreases the likelihood of flooding and lowers the costs of flood damage and repair, flood management, and emergency services.

**Policy 80-7:** Support the use of gravel from tributary streams for flood hazard control, provided environmental impacts are fully addressed.

**Policy 80-8:** Support the use of public access easements that exist to allow gravel removal.
Policy 8O-9: Work with other jurisdictions and related agencies to reduce or eliminate redundant regulations, streamline the permitting process, and provide greater opportunities for appropriate river gravel extraction to enhance other important resources, specifically agricultural.

Mineral Designations

Whatcom County's interim designation work, accomplished in 1992, was based upon the following statutory direction:

"On or before September 1, 1991, each county [required to plan under the Act] shall designate where appropriate: ... Mineral resource lands that are not already characterized by urban growth and that have long-term significance for the extraction of minerals ..." (RCW 36.70A.170).

""Minerals" include gravel, sand, and valuable metallic substances" [RCW 36.70A.030(11)].

The Growth Management Act also directed counties to:

"adopt development regulations ...to assure the conservation of... [designated] mineral resource lands..." [RCW 36.70A.060(1)].

Whatcom County responded to the above mandates as follows:

- By adopting interim Mineral Resource Lands (MRL) designations covering 1,250 acres of lowland sand and gravel deposits. All of these areas had existing reclamation permits from the Washington State DNR covering at least twenty acres.

- By restricting density to one unit per twenty acres within MRL designations and, more recently, by requiring disclosure notices on property and development within three five hundred feet of the MRLs.

Rationale for proposed amendment: The Growth Management Act, at RCW 36.70A.060, was amended in 1998 to require the disclosure within 500' of MRLs instead of 300'. This 500' distance was incorporated into chapter 14.06 of the Whatcom County Code under Ordinance 2003-061.

The GMA goes on to state that counties:

"shall review these designations...when adopting their comprehensive plans ...and may alter such designations...to insure consistency" [36.70A.060(3)].

This is the most pertinent part of the Act in terms of plan direction.

The Washington State Department of Community Development was required to produce "Procedural Criteria," (Chapter 365-195 WAC), to further assist interpretation of the act by
counties and cities. This helped to further elucidate the link between mineral designations and the GMA comprehensive plan. The "Procedural Criteria" provides guidance in Section 400, Natural Resource Lands, as follows:

Prior to the development of comprehensive plans, cities and counties planning under the Act ought to have designated natural resource lands of long-term commercial significance and adopted development regulations to assure their conservation. Such lands include agricultural lands, forest lands and mineral resource lands. The previous designations and development regulations shall be reviewed in connection with the comprehensive plan adoption process and where necessary be altered to ensure consistency.

Generally, natural resource lands should be located in rural areas beyond the boundaries of urban growth areas. In most cases, the designated purposes of such lands are incompatible with urban densities.

The review of existing designations should, in most cases, be limited to the question of consistency with the comprehensive plan, rather than revisiting the entire prior designation and regulation process. However, to the extent that new information is available or errors have been discovered, the review process should take this information into account.

Review for consistency in this context should include whether the planned use of lands adjacent to agriculture, forest or mineral resource lands will interfere with the continued use in an accustomed manner and in accordance with the best management practices of the designated lands for the production of food, agricultural products, timber, or for the extraction of minerals.

*Rationale for proposed amendment: The phrase “in rural areas” does not appear in WAC 365-195-400.*

If these guidelines are followed, then the comprehensive plan should address mineral designations by asking the following questions: Is there new information that might lead to different designations at this point and have errors been made?

Interim designations, as discussed above, were based upon minimal criteria. A more complete set of designation criteria is necessary in order to better define which areas in the county are appropriate for mineral designations. These designations should also include quarry rock and valuable metallic mineral sites because interim designations did not include these resources.

The interim designations were also based more upon a twenty-year planning horizon than a fifty-year planning horizon. The Minimum Guidelines to Classify Agriculture, Forest, and Mineral Lands (Chapter 365-190 WAC) state that "the Department of Natural Resources has a detailed minerals classification system counties and cities may choose to use" (section 070(b)). This classification system recommends a fifty-year planning horizon. The Surface Mining Advisory Committee also has recommended planning for a fifty-year
supply. Implementing this goal would require the adoption of criteria allowing for additional mineral resource areas.

Additional MRLs were, in fact, designated when the Comprehensive Plan was adopted in 1997 in an attempt to plan for a fifty-year supply of mineral resources. However, in 2004, the Surface Mining Advisory Committee concluded that the existing MRLs do not contain a fifty-year supply of mineral resources. The Surface Mining Advisory Committee estimated that, as of 2005, there will be a supply of approximately 60.7 million cubic yards of sand and gravel and 8.7 million cubic yards of bedrock in existing MRLs that will be available for future use.

Since interim designations were made, planning staff has estimated that 57 million cubic yards of sand and gravel and 34.5 million cubic yards of quarry stone are currently under permit for extraction. In addition, 8.5 million cubic yards of river gravel is estimated to be available for extraction over the next 50 years. However, the availability of river gravel for extraction is in a state of flux based upon regulatory uncertainty. Quantification of the extractable amount is unknown at this time. Adjustment to the projected extraction amount must take place at such time as the regulatory conditions are stabilized. Total reserves for construction aggregate then is estimated at 100 million cubic yards. This is, however, an estimate of total quantities of construction aggregate permitted for mining and does not provide an analysis of material quality, transport and environmental costs, and higher processing costs for quarried stone (refer to the Mineral Resources Background Document).

**Rationale for proposed amendment:** The planning staff estimates referenced in this paragraph from the 1997 version of the Comprehensive Plan have been replaced by the Surface Mining Advisory Committee’s estimates made in 2004, which were formulated after considering the mineral resource study completed by Geo-Engineers in Sept. 2003.

The fifty-year demand for minerals in Whatcom County is also difficult to project estimate and requires many assumptions. Based upon Whatcom County’s 1993 estimated per capita rate of consumption of 12.2 cubic yards of sand & gravel and 1.3 cubic yards of bedrock that is being utilized for official planning purposes, approximately 174.4 145 million cubic yards would be required over the next fifty years planning period from 2005-2054. The Washington State Department of Natural Resources, however, has recommended a per capita rate that would result in a fifty-year demand of approximately 129 445 million cubic yards in Whatcom County. This estimate assumes that conservation, recycling, increased cost, high density development (which requires less rock per person), and political decisions will result in reduced demand despite continued population growth. Conversely, some factors may increase demand for aggregate such as the construction of mass transportation systems, the possible substitution of masonry materials for wood products, and increased exports to Canada or other United States counties.

**Rationale for proposed amendment:** Although the per capita mineral resource use is assumed to be the same as in the 1997 Comprehensive Plan, projected population growth will be greater in 50-year planning period from 2005-2054 than
in the 50-year planning period established 7 years ago. Therefore, the amount of mineral resources needed over the 50-year planning period has increased.

Meeting the demand for construction aggregate in Whatcom County goal to designate a 50-year construction aggregate supply requires expansion of the interim mineral resource land designations and the consideration of the importation of aggregates. The policies and criteria below are meant to guide meeting the demand for construction aggregate this expansion. Implemented, it is estimated that this would yield an amount greater than the 45 million cubic yards of additional construction aggregate pursued by the 50-year goal.

GOAL 8P: Designate Mineral Resource Lands (MRLs) containing commercially significant deposits throughout the county in proximity to markets in order to avoid construction aggregate shortages, higher transport costs, future land use conflicts and environmental degradation. Balance MRL designations with other competing land uses and resources.

Policy 8P-1: Seek to designate a 50-year supply of commercially significant construction aggregate supply, to the extent compatible with protection of water resources, agricultural lands, and forest lands.

Policy 8P-2: Ensure that at least 50% of the total areas designated for construction aggregate is within ten miles from cities and urban growth areas where feasible.

Policy 8P-3: Ensure that designations of urban growth boundaries are consistent with mineral designations by considering existing and planned uses for the designated areas and adjacent properties. Intergovernmental agreements should demonstrate how future land uses of mined areas will protect underlying aquifers, given the increased groundwater vulnerability to contamination.

Policy 8P-4: Allow mining within designated MRLs through an zoning and a discretionary and administrative approval use permit process, requiring:
(1) on-site environmental review, with county as lead agency, and
(2) application of appropriate site specific conditions, and
(3) notification to neighboring property owners within 1,000 feet to insure opportunity for written input and/or appeal, and
(4) access to de novo review by the Hearing Examiner if administrative approval or denial is appealed.

Rationale for proposed amendment: The MRA (mineral resource area) system was developed by the DNR and adapted & mapped by Whatcom County in the "Whatcom County Natural Resources Report: Mineral Resources Background Document" (1994). Since this time, an additional report by GeoEngineers was completed in 2003. The GeoEngineers' report included a more in-depth analysis of mineral resources in Whatcom County and should be utilized instead of the 1994 study.

Policy 8P-6: Work with the Port of Bellingham, the City of Bellingham, or waterfront property owners to facilitate the importation of mineral resources necessary to provide County citizens with adequate mineral resources at reasonable prices.

Fish and Wildlife

Utilization of mineral resource lands can impact habitat, including riparian areas, stream flows, channel habitat structure and water quality.

Goal 8Q: Ensure that mining avoids adverse impacts to the habitat of threatened and endangered fish and wildlife species.

Policy 8Q-1: Ensure that adequate riparian buffers are maintained along rivers and streams.

Policy 8Q-2: Ensure proper treatment of wastewater prior to discharge.

Policy 8Q-3 Provide and maintain best management practices for erosion control to prevent sedimentation.

Policy 8Q-4 Provide proper storage and containment of hazardous materials, and provide for appropriate on-site spill response and clean-up materials and personnel.

Policy 8Q-5 Avoid surface mining in the floodplain.

Policy 8Q-6 Allow river bar scalping, except where it would adversely affect spawning or critical habitat areas.

Policy 8Q-7 Work with state and federal agencies to develop policies and regulations regarding in-stream gravel extraction to ensure that spawning or critical habitat is not adversely impacted and that flooding or erosion in surrounding areas is not increased.
MINERAL RESOURCE LANDS (MRL) - DESIGNATION CRITERIA

Note: Criteria 3 through 11 in the existing Comprehensive Plan have been renumbered to criteria 4 through 12 because there is a new criterion 3. Criterion 12 in the existing Comprehensive Plan has been deleted in its entirety. Therefore, the numbering for criteria 13-17 are the same in the proposal below as in the existing Comprehensive Plan.

I. Non-Metallic Mineral Deposits

General Criteria

1. Non-metallic deposits must contain at least one million cubic yards of proven and extractable sand, gravel, or rock material per new MRL Designation.

2. Minimum MRL Designation size is twenty acres.

3. Expansion of an existing MRL does not need to meet criteria 1 or 2.
   
   Rationale for proposed amendment: The SMAC is projecting a shortage of mineral resources over the 50-year planning period. It is important to protect smaller mineral resource deposits before development near or over them makes it difficult or impossible to extract these minerals. Extraction of mineral deposits near existing mining operations will generally reduce impacts when compared to starting up a new mining operation where mining has not occurred before.

4. MRL Designation status does not apply to surface mines permitted as an accessory or conditional use for the purpose of enhancing agriculture or facilitating forestry resource operations.

5. All pre-existing legal permitted sites meeting the above criteria may will be designated.

6. Greater than 75% of the site must be classified as MRA-2 (see Map 21) and have proven resource, or meet the following criteria: The site shall have a proven resource that meets the following criteria:
   
   • Construction material must meet WSDOT Standard Specifications for common borrow criteria for road, bridge and municipal construction, or Whatcom County standards for other uses.

   • Sand and gravel deposits must have a net to gross ratio greater than 80% (1290 cy/acre/foot).

   Rationale for proposed amendment: The MRA-2 areas were largely based upon surficial mapping. In order for a site to be designated as an MRL an applicant should prove that it has quality mineral resources through excavation
(or drilling) and lab testing. If such testing is performed, it should not matter whether the site was on the MRA-2 map. The purpose of this criterion is to confirm that the site has quality mineral resources, and sampling materials from the site is the appropriate method of determining the quality of these minerals.

7. MRL Designations must not be within nor abut or adjacent to developed residential zones or subdivisions platted at urban densities.

8. MRL Designations must not occur within the 10 5 year zone of contribution for designated wellhead protection areas, as approved by the State Department of Health for Group A systems, and by the Whatcom County Health Department for Group B systems, in accordance with source control provisions of the regulations on water system comprehensive planning Whatcom County, provided that designations within the 10 year zone of contribution shall not subsequently allow mining within 10 vertical feet of the seasonal high water table. MRL designations may be modified if a wellhead protection area delineated subsequent to MRL designation encompasses areas within a designated MRL. If a fixed radii method is used to delineate a wellhead protection area, the applicant may elect to more precisely delineate the wellhead protection boundary using an analytical model; provided, that the delineated boundary proposed by the applicant is prepared by a professional hydrogeologist; and further provided, that the delineated boundary has been reviewed and approved by the Washington State Department of Health for Group A systems, and by the Whatcom County Health Department for Group B systems. The hydrogeologist shall be selected by mutual agreement of the county, water purveyor, and applicant; provided, if agreement cannot be reached the applicant shall select a consultant from a list of no less than three qualified consultants supplied by the county and water purveyor.

**Rationale for proposed amendment:** Ground water dependent public water systems have substantial investments in their infrastructure and in many cases have no alternative water supplies available to them. They are consequently disinclined to accept any increased risk of contamination to their aquifer that may result from mineral extraction. They are mindful that surface mining opens a window to the aquifer that increases risk of groundwater contamination.

8. MRL Designation should not enclose by more than 50% non-designated parcels.

**Additional Criteria for Designated Urban and Rural Areas**

10. Abutting parcel size density must not exceed one unit per nominal five acres for more than 25% of the perimeter of the site, unless project specific mitigation is created.
Additional Criteria for Designated Forestry Areas

11. Must demonstrate higher value as mineral resource than forestry resource based upon:
   - soil conditions
   - accessibility to market
   - quality of mineral resource
   - sustainable productivity of forest resource

Additional Criteria for Designated Agricultural Areas


11. MRL Designations shall not be located within a Prime Farmland Soil Area unless the property is located adjacent to a MRL site and will align the configuration of the MRL.

Note: The criterion deleted above is #11 in the existing Comp Plan. Because a new #3 was added, the replacement for the deleted criterion #11 is labeled as criterion #12. This new criterion is a result of a public review and approval of the Comprehensive Construction Aggregate Study (CCAS) documenting the short and long-range availability of construction quality aggregate in Whatcom County. This legislation is intended to disallow mineral resource extraction in all prime farmland soils located within land designated for agricultural use. This legislation is necessary due to an overriding need to prevent further loss of farmland, which is a sustainable natural resource that provides a long term economic benefit and improves the quality of life for the County and its citizens, as opposed to the short term benefit of mining. While eventual depletion of mineral resources is imminent, importation of mineral resources is preferable to jeopardizing the critical land base that is necessary for a viable agricultural industry.

12. Additional lands which do not meet the above criteria (#11) but which contain quality mineral resources may be identified as an AG/MRL study area for no more than five years from the date of adoption of this plan. Within the five years, during the data collections and review period, the County shall budget, initiate and complete a Comprehensive Construction Aggregate Study (CCAS) documenting the short and long range availability of commercially significant construction quality aggregate resources in Whatcom County. The CCAS study shall be publicly reviewed and approved by the County Council. The County shall draft, adopt and implement all legislation necessary to allow or disallow mineral resource extraction in all or some prime farmlands, under the parameters listed below.
Upon conclusive demonstration through the CCAS study of a shortage of commercially significant quality aggregate resources in Whatcom County outside of designated agricultural areas, and an overriding need to mine aggregate in designated agricultural lands as opposed to other viable alternatives, the County shall allow site application for AG/MRL designation. Individual sites may be designated as AG/MRL if the applicant can clearly demonstrate that the estimated extraction activity would be in the best interests of the County based upon the below parameters:

a. quality of the mineral resource
b. quality of the agricultural resource
c. soil and site restoration potential
d. predominant surrounding uses
e. potential effects on nearby farming operations
f. potential effects to other natural resources and systems:
g. resource availability in the county.

Mining permit applications within designated sites approved under Criterion #12 shall be reviewed through a local discretionary permitting process that maintains local jurisdiction over reclamation, and requires restoration to productive agricultural capacities comparable to previous levels. The Whatcom Conservation District shall be consulted in the permitting process.

*Note: The criterion deleted above is # 12 in the existing Comp Plan.*

II. River and Stream Gravel

13. MRL Designation status applies to river gravel bars possessing necessary permits and containing significant quality reserves.

14. MRL Designation status may apply to those upland sites located in proximity to river gravel sources and used primarily for handling and processing significant amounts of river gravel.

III. Metallic and Industrial Mineral Deposits

15. For metallic and rare minerals, mineral designation status extends to all patented mining claims.


17. All other non-patented mineral deposits must meet the non-metallic MRL Designation criteria, numbers 6 through 12, as applicable.
MINERAL RESOURCES - SITE SELECTION METHOD

1. Sites meeting Mineral Resources Designation Criteria 1-5 1-4 (and areas enclosed by these sites greater than 50%).

2. Sites requested by owner or operator meeting designation criteria.

3. Sites that are regionally significant meeting designation criteria.

4. Sites adjacent to both roads and other proposed MRL sites meeting designation criteria.
RESOURCE LANDS - ACTION PLAN

Mineral Resources

1. Investigate the problems associated with inactive and non-permitted mining sites and work with the appropriate government agencies to resolve such problems.

2. Encourage mineral extraction operators in the county to voluntarily provide resource use information to nearby landowners, and to develop a good neighbor policy.

3. Develop a coordinated and consistent approach for the regulation and enforcement of mineral extraction and accessory uses. Eliminate unnecessary regulations and permits. Make regulatory processes more efficient and timely, while protecting the land use rights of those affected.

   Rationale for proposed amendment: Regulations and enforcement provisions relating to surface mining are on the books under sections 20.73 and 20.94 of the Official Whatcom County Zoning Ordinance. Therefore, unless an action plan item is developed to review specific issues, this item should be deleted.

4. Within six months of the adoption of this comprehensive plan, review and amend the interim MRL Special District zoning maps for consistency with the plans MRL designations. In conjunction with or prior to this action, also review and amend the Title 20 zoning regulations within the MRL Special District zone for consistency with this plans policies.

   Rationale for proposed amendment: The MRL zoning overlay maps were adopted, replacing the interim maps, on February 10, 1998 (Ordinance 98-007). The MRL Special District, section 20.73 of the Official Whatcom County Zoning Ordinance, was amended December 9, 1997 (Ordinance 97-069). Therefore, this action item has been completed.

5. Implement a surface mining regulatory program, consistent with the comprehensive plan, that addresses those areas where there is a conflict between land uses. Maintain an ongoing advisory committee consisting of representatives of diverse interests.

6. Develop and/or implement standards that optimize the life cycles of roads, bridges, and buildings, favoring durability over low, initial cost. Such standards can include improved road sub-base preparation (better compaction), thicker road bases, reinforcement, alternative materials, and concrete surfaces for some applications.

7. Encourage the use of alternative materials through educational programs.
8. Develop a program for use of alternative methods and materials in County projects.

9. The Mineral Resource Land map designations and/or designation criteria should be reviewed at least once every seven years to determine if changes are necessary to meet mineral resource goals and policies. Such review should include consideration of the removal of land from Mineral Resource Designation after mining activity is completed and the addition of new designations in order to maintain a 50-year supply of mineral resources. Review may occur through subarea plan updates provided a complete review will occur within the seven year time frame.

10. Investigate and implement methods to reduce inefficient uses of high quality gravel deposits.

11. Budget for and update the Aggregate Resource Inventory Study, initiate and complete a Comprehensive Construction Aggregate Study (CCAS) to document the short and long range availability and location of quality mineral resources, to be completed by 2010 within five years of the adoption of this comprehensive plan. Update the CCAS as needed based on the outcome of the study.

Rationale for proposed amendment: A study entitled Report Engineering Geology Evaluation Aggregate Resource Inventory Study Whatcom County, Washington was completed by GeoEngineers on Sept. 30, 2003. However, this study should be updated periodically to gauge where the County stands in relation to meeting the 50-year supply of mineral resources. Since the Growth Management Act requires updating our Comprehensive Plan every seven years, this study could also be updated every seven years to inform the Comprehensive Plan update process.

12. Support and encourage legislation streamlining regulatory processes and other actions to encourage appropriate utilization of gravel from the Nooksack drainage as a resource where appropriate and a method to stabilize and/or reduce flooding events and/or reduce the loss of agricultural land to erosion.