

1 WHATCOM COUNTY COUNCIL
2 **Natural Resources Committee**

3
4 December 7, 2004

5
6 Committee Chair Sharon Roy called the meeting to order at 9:34 a.m. in the
7 Council Chambers, 311 Grand Avenue, Bellingham, Washington.

8
9 Present:

10 Seth Fleetwood
11 Laurie Caskey-Schreiber

Absent:

None

12
13 Also Present:

14 Sam Crawford
15 L. Ward Nelson
16 Dan McShane

17
18
19 **COMMITTEE DISCUSSION AND RECOMMENDATION TO COUNCIL –**
20 **COMPREHENSIVE PLAN**

21
22 **1. ORDINANCE ADOPTING AMENDMENTS TO THE WHATCOM COUNTY**
23 **COMPREHENSIVE PLAN, CHAPTER 8, MINERAL RESOURCE LANDS**
24 **(AB2004-400)**

25
26 Roger Ellingson, attorney for City of Sumas, stated the City is concerned
27 about protecting the aquifer recharge area for the May Road well field, which is
28 overlaid with Kickerville loam soils. The Surface Mining Advisory Committee
29 (SMAC) identified it as a wish list of where they'd like to mine next.

30
31 The Agricultural Advisory Committee endorsed language prohibiting new
32 mineral resource land (MRL) in agricultural land. Kraig Olason indicated to him that
33 the Agricultural Advisory Committee considered this for a long time and is working
34 on mitigation for mining in agricultural land. The committee consensus is of no
35 mining in Kickerville loam soils, which is the best soil in the county, because there
36 are only 5,700 acres left of that soil in the county. It retains moisture and still
37 allows precipitation to flow through it. It is the most valuable soil in the county.
38 One can grow anything in it. The marginal agricultural land in the county is used
39 up.

40
41 The City of Sumas, Department of Ecology (DOE), and Department of Health
42 (DOH) recommend staying out of ten-year zone of contribution instead of five-year
43 zone of contribution.

44
45 Last, because of limitations on seeing into the future, revise the planning
46 horizon to 20 years instead of 50 years. It is impossible to see aggregate use and
47 technology. They need something in the text about the importation of mineral

1 resources in the county. Even if this Kickerville loam soil can be mined, the
2 aggregate will go to Canada, not Whatcom County, because of its location.

3
4 Linda Franz, Ferndale, stated she has new information. There are proposals
5 with mitigation that will allow mining anywhere. Mitigation doesn't work. The
6 proposals encourage spot mining, not a comprehensive plan. Wait for the State
7 Department of Natural Resources (DNR) study, which encompasses water,
8 transportation, and quality of life.

9
10 Berms, which are noise walls, work the best for people nearest the wall.
11 However, the berm's effects are barely perceptible at 500 feet. Noise has effects
12 on human health, including raising heart rate. Sounds effect people physically.
13 She submitted and read from studies on noise (*on file*). The noise still affects her
14 house. The berms are not effective.

15
16 Another problem is dust. The traffic from the mines creates dust storms.
17 Dust can have negative health effects also. Her information also includes
18 information on dust.

19
20 She asked what her mitigation will be. She will pay the same property taxes,
21 but can't enjoy her property, which will be devalued. This is a nuisance next door.
22 If this is for the benefit of the county, she asked the benefit to her. This is an
23 increasing problem that the County will hear about. Most amendments will only
24 enhance the problem because they encourage ad hoc spot mining. The
25 Comprehensive Plan should identify MRL areas now, place the designation in those
26 areas, and do mitigation for the people affected, which may include compensation.
27 A cost to the business owner of doing business includes purchasing a protective
28 area around the mine. Montana requires a buffer of 3,000 feet. Before adopting
29 mitigation, the County had better find out if the mitigation works. Berms and walls
30 do not stop low frequency noises. Mitigation should be effective for at least 3,000
31 feet.

32
33 Lesa Starkenburg-Kroontje, 115 Front Street, Lynden, stated the County
34 does not have a 50-year supply, but don't cut the planning horizon short to a 20-
35 year planning horizon to allow additional land use conflicts to occur. If they don't
36 identify the areas now that they can protect, they won't be able to get into those
37 areas later. Protect the commercially significant deposits. The supply of sand and
38 gravel they have is not quantified between sand product and gravel product. If the
39 horizon is 20 years, the County would need to analyze the deposits they've
40 protected. That work hasn't been done because the planning horizon was higher.
41 The County needs to do that work before reducing the planning horizon.

42
43 Regarding the agricultural land language, the language from the SMAC did
44 not allow gravel extraction within the agricultural areas, but it set up a program by
45 which it would be considered and allowed if certain parameters are met. The City
46 of Sumas and Agricultural Advisory Committee believe certain areas are not
47 appropriate. By adopting the language from the SMAC, they are not saying
48 Kickerville soils will be disturbed. The language says they will look at areas in the

1 agricultural district to see if any areas can be disturbed. Areas of marginal
2 agricultural resource may allow expansion of the mineral reserve without impact to
3 agriculture. By adopting an outright prohibition, the Council is not allowing those
4 opportunities.
5

6 The goal to protect 100,000 acres for agriculture is not inconsistent with the
7 SMAC proposal. It's possible to do a trade-off. If agricultural land is used for
8 mineral resource, then the owner needs to come up with other lands to be rezoned
9 for agricultural use.
10

11 Regarding site-specific mitigation, language is to address certain situations
12 where the Council may determine it is appropriate to place an MRL because of
13 mitigation, with that specific site. Staff, then the Planning Commission, then the
14 County Council will review site-specific mitigation. Once permits are applied for,
15 mitigation would again be addressed. When a permit is requested, the DNR and
16 County can request noise studies. Those are issues addressed through designation
17 criteria and operational controls. Leave the County the flexibility of site-specific
18 mitigation.
19

20 Crawford asked the Planning Commission reasoning for not allowing planning
21 for any mineral extraction in the agricultural reasons. It seems obvious they would
22 want to plan. Starckenburg-Kroontje stated the debate was on whether reclamation
23 could occur. The discussion was on the actual mining in the agricultural zone
24 rather than the process that is laid out. The process says they will look at whether
25 there are appropriate places for mining.
26

27 Crawford asked if the Planning Commission said why they wouldn't look at a
28 process. Starckenburg-Kroontje stated one Planning Commission member who is
29 also on the Agricultural Advisory Committee said the Agricultural Advisory
30 Committee wasn't interested in looking at the process, but it hadn't been brought
31 forward.
32

33 Crawford asked if the wellhead protection areas are harmed by gravel
34 operations. He asked if the County would also have to eliminate agricultural uses
35 in wellhead protection area if the County outright prohibits mining operations.
36

37 Roy stated that is a question the Council must debate.
38

39 David Davidson, City of Sumas Administrator, stated the ordinance from
40 Thurston County was passed, and the publication date of the study was after that.
41 It's also true that after the study came out, Thurston County created a special
42 protection area where gravel mining was prohibited on the basis that a lot of people
43 lived over that area and used it as their sole source of water.
44

45 On page two of the chapter, goal 8 of the Growth Management Act (GMA)
46 doesn't mention minerals specifically. On page three of the chapter, in the GMA
47 Requirements section, the first two sentences are wrong. The correct language
48 begins at, "In addition, the Act mandates..."

1
2 Roy stated the committee would begin on packet page 23, chapter page 18.

3
4 Caskey-Schreiber stated she wanted to talk about the ten-year wellhead
5 protection zone. Councilmember McShane wanted to work with the Health
6 Department on language, which the Council received a copy of (*yellow cover*
7 *version*).

8
9 Roy read the proposed change from the Health Department into the record.

10
11 McShane asked if the main rationale for a ten-year protection zone is the
12 potential risk from after-mining activities.

13
14 Chris Miller, Environmental Health Specialist II, stated that's correct.

15
16 McShane asked if there is a way to mine above the ten-year travel time if a
17 gravel deposit is separated by a clay layer from an aquifer. Miller stated it depends
18 on the case. The language tries to address all water systems and wellhead
19 protection areas. The language can try to address it. The second portion of this
20 language is straight out of the zoning code. The only change is he clarified who is
21 responsible for the systems. The Council needs to decide whether or not to allow
22 surface mining in ten-year wellhead protection areas. The calculated fix radius ten-
23 year area can over-compensate or under-compensate. They need to be looked at
24 more closely.

25
26 McShane stated it could narrow the area where mining would be excluded.
27 Miller agreed. Each situation is different. They could add language that further
28 study could be done if an MRL occurs in an higher model ten-year area to show
29 whether or not the mine will affect the water system.

30
31 McShane stated they require that evaluation for a mine. Now, they are
32 considering susceptibility. He asked if there is language they should include on
33 susceptibility.

34
35 Doug Goldthorp, Senior Planner - Geology, stated he is not aware of any
36 examples where it has been a problem in the past. However, given the public
37 sensitivity and the value of the water resources, extra language may be useful.

38
39 Roy asked if an analysis by a hydro-geologist would discover susceptible
40 problems. Miller stated the language says that if there is a higher model, there is
41 no MRL in the ten-year protection zone. It allows challenge of the fixed radius
42 model. If they want to go further, a higher model could be challenged by an even
43 higher model, which is a particular study on that one water system, to show that
44 the MRL will not impact the water system water quality or quantity.

45
46 Crawford asked how much area is between five-year and ten-year protection
47 zones.

1 Matt Aamot, Senior Planner, stated he has a map with that information.

2
3 McShane stated applicants should be given the opportunity to show a mine
4 isn't in a zone of protection.

5
6 Roy stated the actual scientific analysis may show that the geology of the
7 area is different from a five-year protection zone.

8
9 Aamot stated 2,760 acres would be eliminated if the Council increases from a
10 five-year to a ten-year zone of protection.

11
12 Crawford asked what that would accomplish, or if it's general protection.
13 Aamot stated the Health Department recommends a ten-year zone of protection.
14 Mr. Davidson brought a variety of information on wellhead protection in a ten-year
15 zone of protection.

16
17 Crawford asked if a five-year zone of protection is ineffective. Aamot stated
18 it's a matter of degree.

19
20 Nelson asked how they determine five-year and ten-year zones of protection.
21 Miller stated there are four methods approved by the State Department of Health
22 for delineating wellhead protection areas. The first is the calculated fixed radius,
23 which looks like a bulls eye. The next method is the analytical model, then the
24 hydro-geologic model, then the numeric model. Each method requires more
25 analysis, data, and information. The method depends on the water system's
26 ability, time, and money to produce a map. The models change as the method get
27 higher and higher.

28
29 Nelson asked who decides on the five- or ten-year zone delineation. Miller
30 stated most have been done through State Department of Health susceptibility
31 assessment.

32
33 Nelson asked if someone who disagrees would have to bring forward his or
34 her own analysis. Miller stated that is correct. Higher models are done by a
35 licensed engineer or hydro-geologist. A wellhead protection plan is written also.

36
37 Caskey-Schreiber stated Peter Willing convinced her this is the right thing to
38 do. There used to be a 15-year protection zone. There is little they can do to
39 protect water quality in the county. This is one of those things. The water systems
40 are very expensive and run by independent community associations. The
41 associations don't have other options for a water source. This is the least the
42 County can do. The language from Mr. Miller provides some flexibility. She can
43 support it. However, look out for the current water systems in the rural areas.
44 There aren't any more water rights if these go afoul.

45
46 **Fleetwood moved** to amend item eight on packet page 23, chapter page 18
47 to the language presented by the Health Department.

1 Crawford asked if the intent is to allow encroachment in a ten-year area if it's
2 not harmful, and that the ten-year area is different than a fixed radius. Aamot
3 stated that's correct.

4
5 *(Clerk's Note: End of tape one, side A.)*
6

7 Nelson asked the timeframe to do one of these studies.
8

9 Miller stated a local engineer said it was \$2,500 to \$3,500 in cost, and can be
10 done quickly. Also, Evergreen Rural Water of Washington is a nonprofit agency
11 that does wellhead protection plans for free for water systems across the state. It
12 can do analytical models relatively quickly, depending on the characteristics of the
13 water system. There are templates for writing the plan. The higher models will
14 take more time.
15

16 Nelson asked if the studies that can be done quickly are the ones that are
17 allowed, according to this amendment. Miller stated that is correct.
18

19 Roy stated the plan needs to be accepted by the State Department of Health
20 for group A systems, and the County for group B systems. There is not a
21 guarantee that the plan would be accepted. The plan needs to be evaluated for
22 protecting the water source.
23

24 McShane stated the proposed language beefs up what was in the code
25 before. It protects the County from getting in a fight between the well user and the
26 mining company. Miller stated language in the zoning code is for existing MRL's
27 and surface mining applications. This language is for new MRL's and the applicant.
28

29 McShane stated that this way, the issue is looked at in the beginning of the
30 process.
31

32 Crawford asked Mr. Miller's experience on gravel operation and
33 contamination. Miller stated his research focused on the areas that they capture
34 and how basic models compare to higher models. He didn't look at all the potential
35 contaminants that can occur, which are endless. Someone can do that. He
36 provided documents on specific examples to the committee two weeks ago, which
37 he found rather quickly. Mining removes a layer that may decrease water quantity
38 or quality over time.
39

40 Caskey-Schreiber stated there are many cases across the nation showing
41 how mining is detrimental to water systems. Many people say the State
42 Department of Ecology (DOE) issues water permits, however only one person is
43 working at 40 percent to monitor 275 gravel mines in seven counties. It would
44 take that person two years to visit every mine just once. Protect the water quality
45 and availability in the county.
46

47 Crawford stated they have the same goals in mind, which is water quality
48 protection. They differ in understanding what a reasonable amount of protection is,

1 given the demand for resources in the county. They're talking about taking out
2 2,700 acres of resource. There are constraints on the area available. Current MRL
3 designations will need to expand a little over a decade at the current rate of gravel
4 use, which doesn't account for new developments. Much of the stuff that has
5 occurred in the past has been to level ground. Now, they have to look at more use
6 of mineral resource products to accomplish what they have in the past.
7

8 Crawford asked how Ms. Starkenburg feels about the change to the ten-year
9 window. Starkenburg-Kroontje stated the language already exists and the
10 opportunity is already available, through the zoning code. Now, the language just
11 spells out that someone with a new MRL proposal will do the increased analysis
12 first. This language doesn't deal with the ten-year time of travel and how fast the
13 water travels to the well. It doesn't deal with the protective layer or determining
14 the source of the actual impact. Everything has risk. Surface mining is something
15 they're singling out as unacceptable and prohibited.
16

17 Crawford stated they do this analysis to plan for the future needs of the
18 county. One of the things that keeps getting brought up is that the industry is not
19 necessarily working on the basis of Whatcom County's needs, and the gravel keeps
20 going out of Whatcom County. He asked if gravel is being shipped out of the
21 county, the quantity, and how much they can be sympathetic to. Starkenburg-
22 Kroontje stated Whatcom County cannot say that certain commodities do not leave
23 the county. There is also not a prohibition to allow gravel into the county. The
24 amount going out is extremely small. One company that operates on both sides of
25 the border indicated less than four percent of its supply is traded between its
26 locations. Now, the material available in Canada is more economical.
27

28 Nelson asked if anyone has done an economic analysis of taking out the
29 2,700 acres. Starkenburg-Kroontje stated they have not.
30

31 Caskey-Schreiber asked if people who are concerned have any ideas for
32 amending it.
33

34 McShane stated he's fine with one possible addition to the first sentence,
35 "...for susceptible aquifers as approved by the State Department of Health..." The
36 intent is to avoid creating greater susceptibility during and after the mining.
37

38 Roy asked if there is a definition of a susceptible aquifers. Goldthorp stated
39 there is a definition for the term from the Department of Ecology.
40

41 Peter Willing, Hydrologist, stated susceptibility has been defined. It is
42 defined as a critically sensitive aquifer recharge area. He looked at the basic
43 geologic map of the county from Don Easterbrook. He also looked at well logs, well
44 completion reports, and soil information. They can make a determination, but
45 there are fuzzy areas. Well log information does not come from hydro-geologists.
46 It's difficult to look at those well log descriptions and say they are accurate. It's
47 difficult to say if there is a protective zone between the surface and water table.
48 There is a great value to administrative simplicity.

1
2 McShane asked if the Sumas aquifer is a susceptible aquifer. Willing stated it
3 is.

4
5 Fleetwood asked if Willing supports the language change from the Health
6 Department. Willing stated he's just seen it. He hasn't had time to think about it.

7
8 McShane stated they can also borrow from the State solid waste rules, which
9 the County Health Department enforces on landfills.

10
11 Nelson asked how many areas in the county are critically sensitive recharge
12 areas. He asked for a percentage of MRL's in the County that fall into that
13 category. Willing stated he doesn't know.

14
15 Goldthorp stated the percentage is probably around less than ten percent.

16
17 Nelson stated he is concerned about a carte blanche ten-year zone of
18 protection on areas that aren't critically sensitive. He asked if there is evidence
19 that five-year zones in non-critically sensitive areas are detrimental. Willing stated
20 five years is a short planning area in either a critical or non-critical area.

21
22 Nelson asked if there is evidence where problems have occurred in a five-
23 year area in Whatcom County. Willing stated Whatcom County has been lucky so
24 far. That doesn't mean anyone has looked in a lot of these zones or looked
25 elsewhere. As the operator of a water system, he looks at the risk.

26
27 Nelson stated anything they do has some risk. He asked what they used for
28 a definition of a critically sensitive recharge area. Willing stated the definition is
29 included in the zoning ordinance.

30
31 Nelson stated ten-year zones should be in place without the extra language
32 for a critically sensitive area. On the other hand, a five-year zone is enough to
33 protect non-sensitive areas that won't impact wellhead protection areas.

34
35 Roy stated they are only concerned about the wellhead protection areas
36 themselves. There is evidence about the risk and issues in other areas. The
37 Department of Ecology and City of Sumas have provided a lot of testimony about
38 the risk. They're only talking about wellheads where people get their drinking
39 water, not any aquifer anywhere in the county.

40
41 Miller stated that regarding susceptibility, group A systems have gone
42 through susceptibility analysis and have been ranked.

43
44 Ellingson stated the committee does not have the information before it on
45 the impact of the change to the ten-year zone of contribution on the amount of MRL
46 available. The 2,700 acreage includes agricultural land.

47
48 Roy asked if that's true. Aamot stated it is true.

1
2 Roy stated the 2,700 acres includes land they won't mine anyway.

3
4 Fleetwood stated the concern from the committee now is that it doesn't have
5 a definition and criteria for susceptibility.

6
7 McShane stated the Planning Commission recommendation was to extend to
8 ten years. There is discomfort about that for some. There has been no debate
9 ever that five years is appropriate. Leave it as five years. He will look at language
10 about susceptible aquifers for ten years. That way, there is assurance within a
11 five-year zone that there won't be mining. The susceptibility issue is gone. That's
12 how it's been since this Comprehensive Plan designation was put into place. The
13 only change is whether they go out to ten years, including all aquifers or
14 susceptible aquifers. He believes there is already criteria for susceptibility in the
15 State solid waste rules.

16
17 **Fleetwood withdrew his motion** to incorporate the Health Department's
18 recommended language for item eight.

19
20 Caskey-Schreiber stated she preferred to stay with the ten-year zone of
21 protection, which used to be 15 years.

22
23 **Fleetwood moved** to amend Finding of Fact 11, "The Growth Management
24 Act (GMA) requires counties, **where appropriate**, to designate mineral resource
25 lands..." to be consistent with the Revised Code of Washington (RCW).

26
27 **Motion carried unanimously.**

28
29
30 **OTHER BUSINESS**

31
32 There was no other business.

33
34
35 **ADJOURN**

36
37 The meeting adjourned at 11:00 a.m.

38
39
40 _____
41 Jill Nixon, Minutes Transcription

42
43 ATTEST:

44 WHATCOM COUNTY COUNCIL
45 WHATCOM COUNTY, WASHINGTON

46
47
48 _____
49 Dana Brown-Davis, Council Clerk

50 _____
51 Sharon Roy, Committee Chair