

By Email

November 24, 2020

Hal Hart, Director and Michael Cerbone, Assistant Director
Skagit County Planning and Development Services
1800 Continental Place
Mount Vernon, WA 98273

RE: Proposed Grip Road Gravel Mine #PL16-0097—Comments on SEPA Review

Dear Mr. Hart and Mr. Cerbone:

We are writing on behalf of the local community group Central Samish Valley Neighbors (CSVN) to comment on the large new gravel mine along the Samish River proposed by Miles Sand and Gravel/Concrete Nor'West (CNW) in their application for a mining Special Use Permit (SUP) #PL16-0097. Our comments identify information that the County still needs to obtain in order to conduct an adequate review of the impacts that the proposed mine would cause. This information involves the need for both project details and the evaluation of environmental impacts. We are submitting this letter in advance of the renewed public process that Skagit County has committed to conducting¹ with the goal of informing your decision as you restart that process.

As you know, we have been expecting a decision from Skagit County Planning and Development Services (PDS) regarding next steps with this application for many months. Given the uncertainty about the timing of the new public process, we are taking this opportunity to provide you with our concerns. This also allows some of our members who were excluded from the initial State Environmental Policy Act (SEPA) process due to notification flaws to address the project impacts before more time passes. We anticipate following up with additional comments when the PDS issues the revised SEPA determination promised on its website.² As the County reopens SEPA and public review for the application, we respectfully request that you respond to community concerns, withdraw the 2016 MDNS, and require a full environmental impact statement (EIS) for the project that takes into consideration all of the environmental impacts.

¹ We are referring to the Skagit County Prosecuting Attorney's representation in a brief last year that "[o]nce the County receives a complete application, the County will conduct further analysis of potential project impacts, re-issue public notice, publish a new staff report with recommendations on the Special Use Permit conditions, issue a revised SEPA determination, and another public comment period and public hearing will follow." Skagit County's Response to Renewed Motion to Intervene, PL 18-0200, at 2-3 ((Oct. 4, 2019).

² Statement regarding PDS's intent to issue a revised SEPA determination located on the County's website: <https://www.skagitcounty.net/Departments/PlanningAndPermit/gravelmine.htm>.

Over the last four years, the County has gone to considerable effort to clarify this proposal by requesting additional information from the applicant. Nonetheless, the application remains incomplete and inconsistent, and the applicant has still not provided all of the information necessary to evaluate the environmental impacts of the project. The submitted application materials are substantively inaccurate and inconsistent, and the scale of the project is consistently under-represented. Rather than clarifying the proposal, the additional submittals from the applicant have added more layers of confusing and contradictory information. And, the applicant has still not proposed or evaluated appropriate mitigation or project alternatives. For these reasons, the County's MDNS both was premature and failed to meet the environmental review requirements of SEPA and Skagit County Code. Based on our own review and consultation with our attorney, the project impacts identified in the application are significant and warrant additional analysis through an EIS that fully evaluates them and identifies appropriate alternatives and mitigation measures.

Summary of necessary information and environmental review omitted from the application materials. Based on our review of the March 7, 2016 SEPA Checklist, the August 2, 2019 Supplemental SEPA Checklist Information, the documents referenced in those materials, and the other documents posted to the County's project website, the application continues to suffer from the SEPA inadequacies listed below.

1) Project scale is under-represented: The application minimizes and under-represents the scale of the mining activity by avoiding many details and using vague descriptors such as "extracting relatively low volumes of aggregate".

2) Full footprint of project is not included in the environmental review: The application does not evaluate environmental impacts within the full footprint of the project. Instead, the project description is limited to just the 68 acre area where the actual mine would be. None of the project documents evaluate the use or impact of a two-mile long private haul road that transects the applicant's larger contiguous ownership, even though industrial scale use of this private haul road is a crucial element of the project.

3) Off-site and cumulative impacts are omitted and ignored: The application omits and/or minimizes descriptions of off-site and cumulative impacts of the project, especially off-site impacts related to truck traffic.

4) Future plans not disclosed: The application omits plans for future on-site processing despite the suggestion in the application materials that the applicant may seek to operate on-site processing in the future. This omission prevents a complete evaluation of the impacts and identification of appropriate mitigation.

5) Impacts on Environmental Elements inadequately reviewed: Defects in application materials result in a failure to fully disclose impacts for all of the “Environmental Elements” required by SEPA.

6) Mitigation measures and project alternatives not considered: Consequently, the application does not identify or evaluate appropriate mitigation measures or alternatives.

We discuss all of these issues further below, in the order listed.

1) Project scale is under-represented. The SEPA Checklist, Supplement and Special Use Narrative minimized and under-represented the scale of the proposed mining development by avoiding detail and using vague descriptors such as “extracting relatively low volumes of aggregate”. The mining activity was described using generalities, and omitting many details. This approach obscured important information and it is unclear whether key details were used by the County in its SEPA review. Other examples of misleading application materials include the characterization of the site as “very remote” and the proposed mining as a “temporary” activity. The SEPA Checklist states, “traffic generated by the project will be typical of mining operations,” but does not state any actual numbers. To the extent the submitted documents actually provide this information, many of those details are buried in the referenced studies and drawings.

The truth is that this is a proposal for a 50-acre open pit mine that will eventually be ninety feet deep. This is a hole in the ground about the area of 38 football fields and ten stories deep. The Checklist states that there will be “4.28 million cubic yards of excavation”. If 4 million cubic yards are hauled off site (assuming 1 yard equals 3,000 pounds), this would be approximately 6 million tons of sand and gravel removed from the site over a twenty-five year-period, or 240,000 tons per year. We do not see this scale of land disturbance and trucking at this location as “low volume”. Furthermore, although the application characterizes the mining operation as a “temporary activity,” its proposed daily operations over 25 years will feel permanent to the community, as will the long-term alterations to the landscape. The “very remote” characterization likewise ignores the actual setting--the site is located in an area where no prior industrial scale mining has occurred, and it would operate amidst a rural residential neighborhood with more than 100 homes within a mile of the site and 750 homes within three miles. And, an investigation into the DN Traffic memo (June 2019) reveals that the “typical” gravel truck traffic referenced in the SEPA Checklist is actually an estimated 11,765 tandem gravel truck trips per year on narrow substandard County roads.³

³ Contrary to the volume of gravel stated in the SEPA checklist, the DN traffic memo assumes that 200,000 tons of material per year will be removed from the site. Using DN’s math, and assuming the larger volume stated in the SEPA checklist, the number of truck trips per year would be actually be closer to 14,118 (240,000 tons/34

By avoiding details in the main project documents, the application appears complete, but does not actually address the full impacts of the project, nor does it explore less damaging alternatives or identify mitigation measures.

- 2) Full footprint of project is not included in the environmental review.** The SEPA Checklist's description of the project site (Section A. #11) as only a 68-acre parcel of land precludes review of the full scope of the project; it fails to clearly identify the two-mile-long haul road across the applicant's 726-acre property, which is required to get the gravel to Grip Road. The applicant's SEPA narrative, as well as the updated narrative for the Special Use Permit application, describes the mine occurring on a 68-acre parcel of land and mentions the access point with Grip Road. It does not clearly explain that the mine site is located two miles from the access point on Grip Road. Therefore, hauling the mined material off site involves use of a private haul road that transects the applicant's larger 726-acre ownership.

Industrial scale use of this private haul road is integral to the project, and yet the land area that the road crosses is not included in the project description. The application materials do not even identify the parcels the road crosses as part of the project. This is misleading and misrepresents both the size of the project and the extent of the environmental impacts. The private haul road, all of which is on the applicant's larger ownership, is adjacent to wetlands and crosses Swede Creek, a fish-bearing stream. This private haul road has been significantly upgraded in the past two years, without County oversight, under the auspices of the former landowner's Forest Management Plan (Trillium, 2009), filed with the state Department of Natural Resources. There are potentially significant impacts to surface water quality and hydrology as well as to Critical Areas, not only from the recent road upgrading, but also from the planned industrial scale use of this road by heavy trucks. Yet, this two-mile stretch of land has not been afforded environmental review.

In the course of the permit review, and in response to public comments, the County requested that the applicant describe how this private haul road meets the County's private road standards. In response, the applicant submitted a request for Alternatives to County Road Standards (June 2019), and an "as built" drawing of the road. It is unclear if there was any formal decision issued by the County regarding this request, but regardless this does not address potential impacts from the heavy industrial use of the private haul road to surface water quality and quantity and to fish and wildlife habitat. The footprint of the entire project, including the areas adjacent to the haul road, must be included in the

tons/truck*2), or an average of 54 truck trips per day (not 46 per day as stated in the DN memo). This is one of many examples of inconsistent and confusing information provided in the application materials.

environmental review of the project. It is not possible to evaluate the full project impacts or the necessary remediation measures without this information.

3) Off-site and cumulative impacts omitted and ignored. One of the most significant components of this proposal is the plan to haul approximately 4 million cubic yards of sand and gravel from the site to be processed at another facility. The material would be moved by truck along more than five miles of County roads over a period of 25 years. This trucking activity is a crucial part of the project that will cause significant environmental harm, yet the project description in the SEPA Checklist (Section A. #11), as well as the updated narrative for the Special Use Permit application, omit details of this aspect. The only mention of truck traffic is by reference – listing several “traffic memos” submitted by the applicant separately, together with piecemeal supplemental information and addenda. The County’s pursuit of additional information on traffic impacts eventually led to a third-party desktop review by a consulting traffic engineer engaged by the County (HDR), and most recently (September 2020) a longer Traffic Impact Analysis (TIA) that was prepared by DN Traffic Consultants on behalf of CNW. However, all of the documents that look at the traffic impacts appear as a kind of postscript. This has the effect of concealing the severity of the truck traffic impacts and it considers only those impacts related to a narrow set of criteria regarding County road standards and “level of service”. In reality, the off-site impacts from a heavy and sustained volume of truck traffic over a twenty-five year period are many-pronged and cumulative. These impacts include carbon emissions and air pollution, noise, vibration, public safety, and damage to public infrastructure. A full SEPA review needs to evaluate and identify mitigation measures for all of these impacts, not just those that fall under the narrowly defined criteria in County Code for triggering Traffic Impact Analyses. Furthermore, the applicant’s TIA fails to meet some of the basic requirements for such documents included in Skagit County Road Standards, 2000, as incorporated by reference in the Skagit County Code.

To illustrate the scale of this proposal (using the conservative figures in the DN traffic studies) approximately 294,000 truck trips over a 25-year period are required to haul the amount of material the applicant proposes to excavate from the mine. The shortest haul route to CNW’s Belleville Pit site on County roads is approximately 11.5 miles round trip, plus an additional 4 miles round trip on the private haul road. Cumulatively, this is more than 4,600,000 miles over 25 years, or more than 184,000 miles per year. This is equivalent to almost 800 round trips between Seattle and New York City.⁴ Furthermore, one fully

⁴ Different application documents identify conflicting amounts of material to be excavated and hauled from the site, as well as different haul routes and mileage and load weights. Using the higher extraction figures in the SEPA checklist (assuming 4 million cubic yards of excavation), 356,666 truck trips would be required over a 25-year period cumulatively more than 5,528,300 miles (220,000 miles per year), equivalent to 970 round trips between New York City and Seattle.

loaded standard gravel truck with pup trailer weighs more than 80,000 pounds. Very few of the off-site impacts associated with this hauling have been addressed in the application materials. Finally, the number of truck trips and cumulative mileage may actually be considerably higher than stated above depending on several factors, including weight limits on the bridge over the Samish River on Highway Old 99 and the extent of third-party sales.

Other off-site impacts that were minimized or inadequately described in the application documents include potential impacts to surface water; impacts of noise from mining equipment and hauling; and potential impacts to fish and wildlife. We address these concerns elsewhere in this letter under the specific environmental elements, in the order they appear in the SEPA Checklist.

- 4) Future plans not disclosed.** The SEPA checklist asks specifically if there are any plans for future additions, expansion, or further activity related to or connected with this proposal (Section A. #7). The applicant answered ‘no’ to this question on the SEPA Checklist but implies elsewhere that they may conduct onsite processing at a future date. The applicant was asked to clarify this point, and in a letter to the County on May 15, 2017, states only that no processing was proposed “in this application” – implying that future on-site processing is contemplated. And, the revised “Special Use Narrative,” dated Aug. 2, 2018, states in the third paragraph that “No processing is proposed onsite at this time” (*emphasis ours*). SEPA guidelines require that all parts of a proposal be disclosed, even if the applicant plans to do them “over a period of time or on different parcels of land.” We find the inconsistency on this topic troubling. Given the cost of hauling raw materials 184,000 miles/year, we find it unlikely that CNW will not apply for an additional permit in the future to allow on-site gravel processing. Furthermore, the disclosure of future plans is essential here because the project buffers would need to be larger to accommodate on-site gravel processing, and because the project would be subject to even more rigorous scrutiny. On-site processing would trigger a significantly larger buffer (200 feet—double the 100 feet currently proposed) on the northern and western borders to reduce noise and vibration impacts to the neighboring private properties (SCC 14.16.440(10)). This would reduce the amount of gravel available for extraction, but it is an important mitigation measure for reducing impact to adjacent landowners. It is also reasonable to assume that the applicant plans to expand the mine itself over time to cover more of the large property holding there. There have been many examples of Skagit County approving similar expansions and scope changes through the permitting process. Dividing the planned activities into separate development applications is a way to piecemeal SEPA review and thus under-evaluate project impacts. Under SEPA, the full scope of the proposed project must be considered in order to prevent inappropriate phased or piecemeal review (WAC 197-11-060(5)(d)(ii)). Given that the applicant has expressly reserved the right to pursue processing at this site in the future, the project must be reviewed on the basis of what has been reserved as a

potential future activity—that such processing would occur on the site. Therefore, the conditions on the permit need to anticipate potential future expansion with larger buffers and additional measures to reduce likely future impacts. Alternately, restrictions need to be put in place to prevent such changes to on-site activities in the future.

- 5) Impacts on Environmental Elements inadequately reviewed.** As addressed below, defects in the application materials result in the lack of adequate review of the project’s impacts to earth, air, water, and environmental health are minimized or not completely disclosed in the SEPA Checklist and supporting documents.

Earth (SEPA Checklist, Section B. #1): Although question #1.e. of the SEPA Checklist requests a description of any project filling, excavation and grading, the applicant limits its response to the 51-acre open-pit mine footprint. The Checklist does not describe essential project elements such as storage and management of excavated and side-cast materials. In fact, there is no description of what, if any, site preparation will occur outside of the footprint of actual mine.

The “Site Management Plan, Sand and Gravel Permit” document that the applicant submitted (also a requirement for WA Department of Ecology’s NPDES permit) does not cure the Checklist defect. It is almost entirely generic, and simply lists typical Best Management Practices (BMPs) to prevent erosion and manage buffers. It is not site-specific and does not actually explain how the side-cast materials, or “overburden”, will be handled or how buffers along property lines will be managed. It is unclear in this plan which BMP’s listed will actually be implemented or when or where they will be used. This omitted information is essential for verifying that the project would protect water quality, minimize disturbance to wildlife habitat, and reduce noise, dust and vibration impacts on neighboring properties.

Numerous relatively small private parcels lie to the west and north of the proposed mine site. Noise, dust and vibration from the mine will impact these properties. An appropriately-scaled, undisturbed vegetated buffer must be established to protect these properties. It is unclear in the application materials if the buffers between the mine and adjacent properties will be left undisturbed. In addition, there are repeated assertions in project documents that all runoff from the site will drain into the open pit and infiltrate into groundwater. This does not address any surface water runoff and contamination from side-cast material that may be stockpiled outside of the footprint of the mine itself for use in reclamation when mining operations are completed. There is no way to evaluate the impact of this earth moving activity when it is not fully explained and described.

Question #1.g. asks if any impervious surfaces are proposed. The applicant states that no permanent, impervious surfaces are proposed, despite the two-mile private haul road and

the apparent need for on-site staging areas at the mine site for dozens of trucks and equipment. A site-specific surface water drainage plan that includes measures for protecting waterways from sediment and other contaminants from these impervious surfaces needs to be prepared and implemented.

Air (SEPA Checklist, Section B. #2): The applicant’s response to question #2.a., which requests disclosure of the project’s air emissions, avoids identifying the substantial amount of emissions to be expected over the project’s 25-year lifespan. Instead, the answer characterizes air quality impacts as “temporary.” Mining is an ongoing activity. It is not temporary construction. There will be earthmoving equipment generating emissions constantly during operating hours for decades. Additionally, there is no mention of the significant cumulative carbon and particulate emissions from 25 years of diesel truck traffic. This omission alone is fatal to SEPA review.

Question #2.b. The applicant states incredulously that there are no off-site sources of emissions or odor. This answer simply ignores emissions from diesel truck hauling. As stated above, the cumulative mileage of tandem diesel trucks hauling material from this mine is more than 4,600,000 miles, or more than 184,000 miles per year.⁵ The diesel emissions from this hauling activity will be concentrated in a small area, day after day, year after year. Diesel emissions include both particulates that create localized health hazards and greenhouse gasses that contribute to global climate change. The type of diesel fuel used, maintenance and age of vehicles, speed and driving patterns, idling activities, etc. all influence the intensity of emissions. The applicant must disclose the true nature and quantity of these emissions and identify measures to reduce the impact to air quality. A simplistic calculation of the carbon emissions from just the hauling component of this project is more than 17,200 metric tons over 25 years, or around 690 metric tons per year⁶. The actual amount of carbon emissions will probably be considerably higher because, as discussed above, the mileage is under-represented. This is a very carbon-intensive proposal. The applicant needs to provide realistic estimates of the cumulative emissions from all of the truck hauling and on-site mining activities, as well as propose an adequate mitigation plan for them.

Water (SEPA Checklist, Section B. #3): Question #3.a. involves disclosing impacts to surface water. The Checklist does not fully disclose surface water impacts from the project’s proposed undersized buffer. The applicant proposes a 200-foot vegetative buffer between

⁵ Assumptions: round trip of 15.4 miles between the mine and Belleville Pit, 46 round trips per day, 260 days per year, for 25 years.

⁶ Carbon emissions estimation based on the per ton/mile truck emissions estimates and sample calculations included in the EDF publication produced to assist industry in reducing carbon emissions, “A Green Freight Handbook”, Chapter 2, Establish Metrics, we estimate that depending again on which of the two proposed main haul routes is followed, annual (total) truck CO₂ emissions will be between 271 (6,768) and 403 (10,064) metric tons.

the mine and the adjacent Samish River, but a 200-foot buffer is not adequate and is inconsistent with Skagit County Critical Areas Ordinance (SCC 14.24.230) requirements for the intensity of this land use. Additionally, when slopes of 25% or more are present, buffers are generally required to extend 25 feet beyond the top of the slope. We address this further in the section on “animals” below, and in the attached memo titled: “Fish and Wildlife, and Water Quality (Regulated Critical Areas) Review ” (Wiggins, November 2020).

In response to these concerns, PDS asked the applicant to submit drawings showing a 300 foot buffer, which they did. This drawing is labeled “Alternate 300 foot buffer” (dated July 2018). To date, however, this “alternate” buffer has not been required as a condition of the permit.

In addition, mine site plans identify an unnamed tributary to the Samish River on the southeast corner of the site. The supplement to the SEPA checklist references the Site Management Plan to explain how surface water will be protected. Again, as discussed above in the “Earth” section, this Site Management Plan is not site-specific and simply lists a number of BMPs without explaining where or how they may be implemented; except that Appendix B (“Site Map”) of the plan identifies one “monitoring point” near the tributary stream. There is not enough information provided to determine if surface water will be adequately protected from sediment and other contaminants or if the minimal monitoring proposed will be adequate to detect such pollution. In addition, it is unclear from the project documents where all the surface water in the areas around the mine site may drain after the site is disturbed. The mine site is perched above the river and it is unclear if the proposed buffers encompass the entire slope edge between the mine and the river. There is not enough detail in the drawings and application materials to ensure that erosion and contaminated run-off will be prevented from making its way downslope to the river.

Question #3.b. involves disclosing impacts to groundwater. The applicant states that no waste discharge will occur into groundwater. The Supplement to the SEPA Checklist again references the Site Management Plan, and states that mining runoff will infiltrate into the bottom of the mine. However, the project description states that the intention is to mine within ten feet of the groundwater level. Given the pervious nature of the sand and gravel floor of the mine, we question if this method of preventing groundwater contamination is sufficient. This is especially concerning as the groundwater in this location will essentially flow directly into the Samish River and into designated critical habitat for the endangered Oregon Spotted Frog (discussed further below in the section about animals). Protection of groundwater requires further evaluation, especially in terms of the potential for fuel and other toxic material spills from heavy equipment in the mine (this issue is further discussed below under the section about environmental health and hazardous chemicals.)

In addition, the application does not explain how operators will ensure that they remain at least ten feet above groundwater during seasonal fluctuations. To avoid the risk of the mining activity penetrating into groundwater, the applicant must identify a method for determining the highest groundwater level and establish a monitoring plan to ensure compliance.

Question #3.c. involves describing impacts from water runoff, including stormwater. In addition to the concerns related to runoff from the mining site described above in the 'earth' section, the impact of runoff from the haul road to surface water was not identified as a concern and has not been addressed. This involves impacts to both water quality and quantity -- to the wetlands on site, to Swede Creek and to the greater Samish watershed. There is the potential for sedimentation in Swede Creek, a fish-bearing stream, and for increased overland flows and downstream flooding. There are already significant flooding issues associated with Swede Creek. The ditch adjacent to Grip Road east of the bridge over the Samish River is an overflow channel of Swede Creek. The Public Works Department and local residents are well aware that this ditch routinely spills over its banks and floods the roadway during high rainfall events. In addition, the edge of the roadbed itself at this location has required repeated hardening and repair due to erosion caused by the high volume of water flowing through this ditch. The impacts to hydrology and the potential for exacerbating sedimentation and flooding problems from the increased impervious surface and heavy use of the haul road, especially in the gorge where the road crosses Swede Creek, needs to be evaluated and appropriate mitigation measures required. A stormwater management plan for the haul road needs to be prepared and implemented.

Plants (SEPA Checklist Section B. #4): Notwithstanding that the mine would completely strip native vegetation from more than fifty acres of land, the Checklist omits any discussion of ways to minimize this impact. A one-sheet survey drawing titled "Reclamation Plan and Mine Sequence" (May 2015) shows the proposed mine area divided into four quadrants labeled "1" through "4". These labeled quadrants presumably explain the "sequencing" of the mining activity, but there appears to be no narrative explaining how or when this sequencing may occur. Phasing the mining so that portions of the site remain forested until it is needed, and/or reclaiming sections over time while other sections are being mined would significantly reduce the impact to native vegetation. Simply reducing the scale of the proposed mine would be even more appropriate. Measures and alternatives that reduce the impact to the native vegetation must be evaluated.

Animals (SEPA Checklist Section B. #5): The Checklist omits significant animal species and potential project impacts on them. First, the Checklist states that no threatened or endangered species are known to be on or near the site. In fact, the US Fish and Wildlife Service and WA Department of Fish and Wildlife have designated Critical Habitat for the Oregon Spotted Frog (*Rana pretiosa*) along the Samish River directly adjacent to the site. In

addition, there is designated Bull Trout (*Salvelinus confluentus*) Critical Habitat a few hundred feet downstream from the northeast corner of the mine site. The Oregon Spotted Frog was believed to be extirpated from this area until breeding sites were discovered in 2011-2012 in the upper Samish River. The Samish River system is the only place in Skagit County that the Oregon Spotted Frog has been found. It is listed as Endangered in Washington State, and Threatened federally. Bull Trout is a Candidate species for listing in Washington State and is listed as Threatened federally. The presence of designated critical habitat for species listed under the Endangered Species Act (ESA) was not disclosed in the SEPA Checklist nor in the accompanying Fish and Wildlife Assessment (GBA/August 2015). These are serious omissions.

At the request of the County, an Addendum to the Fish and Wildlife Assessment was submitted by the applicant to address the presence of the Oregon Spotted Frog habitat adjacent to the site (GBA/April 2017). However, the addendum simply states that in the consultant's opinion, their recommended 200-foot buffer is adequate to protect this designated critical habitat without citing any clear science or expert biological opinion to back up the statements. In fact, a note in the Addendum states:

"Our original assessment and this addendum are not intended to constitute a biological evaluation pursuant to the requirements of the Endangered Species Act. The documents are intended solely to demonstrate compliance with the Skagit County Critical Areas Ordinance (SCC 14.24)."

Further evaluation of the impact from the proposed mining to the Oregon Spotted Frog, Bull Trout, and their designated critical habitat, needs to be conducted, consistent with State requirements and the Federal ESA. As discussed in sections elsewhere in this letter (in "earth", "water" and "toxics"), measures are not clearly described that will protect the water quality of the Samish River, its tributaries, and the groundwater that flows to the river. This is a serious concern that must be addressed to ensure that the Oregon Spotted Frog, Bull Trout, and Puget Sound Steelhead habitat is adequately protected according to law.

In addition, the SEPA Checklist and Supplement do not acknowledge a number of large mammals that are known to frequent this area. These include bear, cougar and bobcat. Furthermore, the Checklist states that the property is not an animal migration route even though local residents regularly observe the use of this area as a wildlife corridor between Butler Hill to the south and the Samish River Valley and Anderson Mountain to the north. Surrounding landowners have seen cougar, bobcat, and bear traveling across their properties on numerous occasions, and at least one resident located south of the subject property has captured many photos of these animals on remote trail cameras. These animals require large territories and are sensitive to disturbance. The subject property is the last large undeveloped property linking a larger landscape between Butler Hill to the

south, and the Samish River to the north. The applicant's Fish and Wildlife Assessment does not address the impacts to this wildlife corridor. Measures could be taken to protect a swath of land and maintain intact vegetative buffers surrounding the mine on the applicant's larger ownership. This would help reduce this impact.

Finally, the applicant's Fish and Wildlife Assessment is more than five years old (August 2015), and its limited scope does not address the current data regarding Threatened and Endangered Species (ESA). A new complete Fish and Wildlife Assessment needs to be prepared that considers the full footprint of the project, including the land area impacted by the private haul road, as well as all ESA species that may be impacted by the proposal. These concerns are further discussed in the attached memorandum: "Fish and Wildlife, and Water Quality (regulated Critical Areas) review" (Wiggins, November 2020).

Energy (SEPA Checklist Section B. #6): This is a very fossil fuel and carbon intensive project, both on and off site. As stated previously, just to haul the proposed volume of gravel to the applicant's processing site would require diesel truck/trailer combinations to drive more than 4,600,000 miles over 25 years, or more than 184,000 miles per year. This does not include the on-site energy consumption from the heavy equipment required for the mining activity. In addition, there is no electrical power supply to the site. There is no mention of power supply in the application materials, but presumably the applicant plans to run generators to provide light and power to the site. This will create even more fossil fuel consumption (and noise pollution that has not been disclosed). The applicant has made no attempt to estimate the amount of energy required, nor the impacts to the environment from it. There are no proposed energy conservation measures. The applicant should be required to evaluate alternatives to such high rates of energy consumption, and a carbon budget should be calculated with mitigation identified to offset the effects of carbon emissions to the atmosphere.

Environmental Health (SEPA Checklist Section B. #7): Question #7a. Toxics: The Supplement to the SEPA Checklist states that "mobile fueling vehicles" and "mobile maintenance vehicles" will be used and that "if fueling stations or other storage of these materials occurs on site, it will be in compliance with the NPDES Permit filed with the WA Department of Ecology". These vague and inconsistent statements fail to confirm whether fueling stations and fuel storage are planned or not. Furthermore, the application does not define "mobile fueling" or "mobile maintenance" or measures to control or respond to spills from them in different locations across the site. The applicant must explain how they will monitor this and provide specific management practices for use with mobile fueling and maintenance units.

Although the Site Management Plan purports to address spill prevention, it merely recites generic BMPs. It does not state what specific measures will be used on this site, nor does it

show any locations for fueling, fuel storage, etc. The applicant needs to disclose what the nature and location of the fuel storage and vehicle refueling and maintenance process will actually be, and what measures will be taken to prevent spills and toxins from entering surface and groundwater. As discussed previously, there is a real danger of surface water contamination and or groundwater contamination through the bottom of the mine floor if this issue is not properly addressed.

Question #7.b. Noise: This section requires disclosure of health impacts related to noise generated from the project on-site and off-site. The applicant submitted an “Updated Noise and Vibration Study” (November 2018), which concludes through modeling that the noise generated from the mine, and from off-site trucking, is within the limits set forth in Skagit County Code. There are several major flaws in this study that call into question its thoroughness and validity:

- Concerning the computer modeling of mine operation noise levels, the November 2018 noise study states “A front-end loader, dozer, and excavator were assumed to operate concurrently in the mine”, with noise levels at 100 feet from each shown as 75, 75, and 76, dBA respectively. The study does not cite the source for these numbers. Presumably, different sizes and models of heavy equipment generate different levels of noise, and are not interchangeable for noise level modeling purposes.
- Furthermore, the noise study appears to address only “typical” mine production levels, not the “extended hours” production scenario of up to 5,000 tons per day described in the September 2020 DN Traffic Consultants Traffic Impact Analysis. Presumably, the latter would require more pieces of heavy equipment to accomplish, as well as more trucks. Based on the seasonal nature of sand and gravel demand, it seems likely that the mine would exceed “typical” or “average” production levels for extended periods during late spring, summer, and early fall. For a noise study to be valid, it must address the maximum production level.
- The computer modeled noise level receptor labeled “R3” is located approximately 900 feet north of the receiving property boundary, not at the receiving property boundary as required under WAC 173.58-020(11) and 173-60-040(1).
- The study does not address the significant noise fully loaded truck/trailer combinations will generate using their compression brakes while descending the Grip Road hill. Adding an “average” of 46 diesel trucks a day (or 30 trucks an hour, as under the “extreme” scenario from the DN Traffic Impact Analysis) onto Grip and Prairie Road will be a major change to the soundscape for residents along the haul route for the next 25 years regardless of whether the trucks exceed legal noise limits.

There are 100 homes within a mile radius of the proposed mine, and 375 homes within a 2 mile radius. Even if the applicant's consultant can somehow create a model that shows that the noise generated from the mine and truck traffic is below the thresholds set out in the WAC and Skagit County Code, the ambient noise from the mine and the trucks will become a constant backdrop for the residents in the surrounding area. This noise will have a lasting impact on public health, on the quality of life in this quiet rural neighborhood, and on wildlife. Per an article titled "The Adverse Effects of Environmental Noise Exposure on Oxidative Stress and Cardiovascular Risk" in the National Institute of Health's online National Medical Library, "Epidemiological studies have provided evidence that traffic noise exposure is linked to cardiovascular diseases such as arterial hypertension, myocardial infarction, and stroke."

The SEPA checklist and accompanying documents contain no discussion of ways to reduce or mitigate noise impacts, instead the focus is simply on proving that this new unprecedented level of industrial scale noise pollution will somehow meet legal standards. What is "legal" and what is "acceptable" are not interchangeable.

Light and glare (SEPA Checklist Section B. #11. The applicant apparently intends to operate the mine during dark hours, however the application does not describe the type of lighting that will be used on site. Nor does the application identify whether, or what, lighting would be installed for security purposes. The 700 acres owned by the applicant is currently used only for forestry, and it is dark at night. The type of lighting used for heavy construction tends to be very bright and penetrates into the night sky. Measures need to be taken to minimize light pollution from the site. Impacts on migrating birds from even small amounts of outdoor lighting is well-documented.⁷ The applicant needs to describe the type and extent of the lighting systems that are planned, and appropriate mitigation measures need to be required, including down-shielding of all lights, and installing motion sensors and controls where constant lighting is unnecessary.

Recreation (SEPA Checklist Section B. #12: This section requires disclosing "designated and informal recreational opportunities" in the vicinity. The applicant's response mentions only hunting and fishing. In fact, local residents walk on Grip and Prairie Roads, and the haul route along Grip and Prairie Roads is a popular recreational bicycling route. The route is included in a "Skagit County Bike Map" produced by Skagit Council of Governments, and distributed by Skagit County Parks Department. This same bike map is also included in Skagit County's 2016 Comprehensive Plan, as the "Bicycle Network Map"; it includes Grip and Prairie Roads as part of the inventory of the County's non-motorized transportation system. This important recreational activity was not disclosed in the SEPA checklist; nor were impacts to it evaluated. As discussed elsewhere in this letter, Grip and Prairie Roads

⁷ <https://www.fws.gov/news/blog/index.cfm/2020/4/22/Lights-Out-for-Migrating-Birds>

are narrow and substandard with soft or nonexistent shoulders. There are many parts of this route where there is literally no option for a cyclist to move to the right to make room for a passing vehicle. The recent addition of guardrails on portions of Prairie Road have had the effect of eliminating options for a shoulder and narrowing the roadbed even further (guardrails were apparently installed more to protect power poles from vehicle collision than for public safety).

The introduction of an average of five tandem gravel trucks an hour (much less the 30 trucks an hour under the “extreme” scenario) to this route will render recreational cycling not only unpleasant, but very dangerous. Mitigation and alternatives could be identified for reducing the impact of trucking on these important recreational uses, such as widening and hardening road shoulders, limiting the number of trucks allowed per day on the road and designating ‘safe passage’ times during each day, when trucks are not allowed to haul from the site.

The omission in the SEPA checklist and project documents of the impact on pedestrians and bicyclists along the haul route is just one more example of the serious inadequacies in the application materials, and the disregard for public safety shown by the applicant. Issues regarding public safety related to truck traffic and the condition of County roads along the haul route are further discussed below under traffic.

Transportation/Traffic (SEPA Checklist Section B. #14): The SEPA Checklist and Supplement asserts that that no improvements to existing roads are necessary and that traffic generated will be “typical” of mining operations. The Checklist and Supplement then reference studies conducted by their traffic consultant DN Traffic Consultants without providing further details. However, a review of those documents reveals that “typical” traffic is a stunning 11,765 truck trips per year. The SEPA documents do not identify this number. DN Traffic goes on to calculate that this will “average” 46 truck trips per day. However, given the seasonal nature of gravel mining, this “average” is meaningless. The number of trucks that the applicant intends to deploy on a daily or weekly basis has never been clearly defined. This makes it impossible to evaluate the actual intensity of use and potential threats to public safety.

DN Traffic Consultants’ more recent “Traffic Impact Analysis” (TIA), submitted in September 2020, seems intended to address the basic requirement that a TIA be done for this project (we have been requesting a TIA since we first learned about the permit application in 2016). It also seems intended to address at least some of the issues we have raised in the many comment letters we have submitted since that time. However, the document fails on both counts. While we intend to submit a detailed comment letter to the county on the entire TIA in the future, we provide below a summary of some of our main concerns.

- It does not meet the requirements and format for a Level II TIA as set out in Skagit County Road Standards, 2000 (SCRS) (SCRS 4.01-4.02 and Appendix A).
- It does not state whether the information included in the TIA supersedes previous inconsistent and/or contradictory information submitted by the consultant and the applicant regarding critical aspects of the project, including hours of operation and numbers of truck trips. This adds to the overall lack of definition for the project rather than clarifying it.
- It proposes that if the applicant needs to exceed a limit of 46 truck trips per day to meet demand (up to a limit of 29.4 trips each way per hour, or 294 trips per 10-hour operating period), they will first request permission from the County, and then Public Works will be responsible for determining temporary safety measures to mitigate for the increased risks. This is problematic in several regards:
 - It does not state how often and for how long this “extended hours operation” could occur.
 - It seems to imply, without ever stating clearly, that hauling under this scenario would take place for only 10 hours per day, while mining would happen for unspecified “extended hours.” Since the applicant has repeatedly asserted their right to operate up to 24 hours per day, seven days per week, we must assume that both accelerated mining and hauling could take place during those hours. The actual number of round trips per 24-hour period under this scenario would be 706, meaning there would be 1,412 one-way truck trips every 24 hours, and 60 one way truck trips every hour. Mine traffic impacts must be evaluated on this basis.
 - Without specifying what measures would need to be implemented to ensure traffic safety under this “extended hours” scenario, the applicant defers its obligation in this regard to the County and potentially exposes the County to liability.
- It contains false statements regarding existing road conditions and uses, as well as future uses, for instance:
 - As previously noted, the statement that there are no designated bicycle routes on the roads proposed for the haul route, when in fact a map of these routes is included in the non-motorized transportation component of the County Comprehensive Plan.
 - The statement that the shoulders on Prairie Road vary from two feet to four feet wide. In actuality, recently installed guardrails on the south side of the road practically eliminate the shoulder entirely for a considerable distance along the haul route.
 - The statement that there is no significant development planned that will impact traffic levels on the proposed haul route. In fact, the County has already approved bringing Kalloch Road and North Fruitdale Road up to arterial

standards to provide better access from the north to the Sedro Woolley Innovation for Tomorrow (SWIFT) Center. The bulk of this traffic from the north will come via I-5, Bow Hill Road, Prairie Road, Grip Road, and Mosier Road. In addition, a major new residential development is planned for north of Sedro Woolley between SR9 and Fruitdale Road. This will also generate a significant amount of traffic to the north via these same roads.

- It omits key facts and conditions, such as:
 - The existence of several Burlington and Sedro-Woolley School District bus routes along the proposed haul route. It makes no mention of these bus routes; does not analyze the threats presented by mine truck traffic to the safety of schoolchildren, parents, or district employees and equipment; and proposes no mitigation actions for these risks.
 - A major roadway misalignment issue on the Grip Road Hill curves, which requires that a truck with pup trailer repeatedly encroach on both the centerline and the edge of the pavement (there is no fog line) while navigating this very narrow, steep section of the road.
 - The existing, progressive failure of the pavement and roadbed on the outside of the uphill (south side) lane of traffic in the above location. This presents both a safety hazard to the public and an ongoing maintenance liability for the county.
- It documents some of the other existing, critical road deficiencies and traffic hazards but either omits corresponding mitigating actions or proposes inadequate mitigation actions. For example:
 - It documents that a truck with pup trailer cannot navigate the two 90-degree curves on Prairie Road east of the Old Highway 99 intersection in either direction without encroaching significantly on both the fog line and centerline. It acknowledges that this constitutes a traffic safety hazard, but does not propose any mitigation actions. Instead, it states that the County is responsible for dealing with this issue.
 - It proposes a flashing yellow light warning system to mitigate for inadequate sight distance at the Prairie Road/Grip Road intersection, a measure the author of the TIA described as “temporary” in an earlier traffic memo. This is the same place where, in an email obtained via public records request, former PDS Senior Planner John Cooper described coming upon the scene of an auto accident at this intersection and being told by the attending Sheriff’s Department officer (who himself was a former commercial truck driver) that a flashing yellow warning light would be insufficient to prevent accidents in that location (John Cooper email to Dan Cox, 1/30/2017).

In addition, in the TIA fails to disclose serious impacts with regard to use of the bridge over the Samish River on Old 99. In response to information about the bridge’s weight

restrictions, the TIA proposes either to reduce load weights or to use an alternate route that involves continuing west up Bow Hill Road from Prairie Road to I-5, heading south to the Cook Road exit, and then north on Old 99. However, these options either generate more truck trips than proposed (lighter loads equals more trucks trips) or follow a considerably longer haul route. The impacts from this longer haul route have not been analyzed. There are many concerns related to dozens of gravel trucks making their way up the steep Bow Hill Rd and entering and exiting two busy freeway interchanges, and passing through additional busy intersections that are already hazardous. And of course, either way, the cumulative mileage and emissions increase. These additional impacts have simply not been evaluated.

As we stated above, the comments included here on DN Traffic's TIA are only some examples of how woefully short this document falls when it comes to addressing the true scope of road and traffic safety risks associated with this project. Until these issues are thoroughly analyzed and comprehensive mitigation measures proposed, the only valid SEPA threshold determination for the proposed mine is a determination of significance (DS) requiring a full environmental impact statement (EIS).

Finally, to our knowledge, the County's hired traffic engineer/consultant, HDR, who has been reviewing the various traffic information submitted by the applicant, has never visited the site and actually observed the condition of the roads in question. All of the third-party review has been conducted remotely using information and data provided by the applicant and County – it is simply unacceptable that the reviewers signing off on the traffic studies have not observed in-person the problems with road conditions and safety.

Public Services (SEPA Checklist Section B. #15). The applicant states that there will be no impacts to public services, but absent measures to address the road safety issues discussed above, the traffic collision rate in this area will undoubtedly increase. This will create a heavier demand on law enforcement and first responders. In addition, the need for road maintenance will increase considerably with the hauling of 200,000 tons of gravel per year on Grip and Prairie Roads.

The applicant should be required to share costs of necessary infrastructure improvements as stated in Skagit County Comprehensive Plan Policies: *Policy 4D-5-3: Roads and Bridges: New public roads and bridges accessing designated Mineral Resource Overlay Areas shall be designed to sustain the necessary traffic for mineral extraction operations. Existing roads and bridges shall be improved as needed as each new extraction operation is developed. Cost sharing for the improvement of roads and bridges shall be negotiated between the permitting authorities and the applicant.*

6) Appropriate mitigation measures or alternatives are not identified. The overriding assumption in the application documents seems to be that this project requires very little mitigation. There is no real exploration of project alternatives or other ways proposed to reduce impacts. We find this very troubling, and it supports the need for a full EIS. Since key aspects of the proposal are still not clearly defined, it is difficult to fully explore appropriate permit conditions and mitigation measures. Nonetheless, it is clear to us that there are some pathways to addressing the project impacts. A few examples of alternatives that should be explored, and mitigation measures or permit conditions that should be required are discussed in the various sections of this letter, and identified below, along with a list of additional studies that need to be completed.

- Explore alternative project scenarios that include significantly scaled back rates of extraction, a smaller mine size and limits on daily truck trips.
- Limit hours of operation and hauling to daylight hours.
- Require a larger buffer on Samish River consistent with the County's Critical Areas Ordinance and Department of Ecology's guidance for protecting river and associated wetlands and sensitive & critical habitat from industrial uses.
- Require a larger undisturbed vegetated buffer between the active mine and adjacent private property, to reduce noise, vibration and dust.
- Major road and safety upgrades along the haul route need to be included before hauling is allowed, including but not limited to:
 - Traffic lights and/or turn lanes at critical intersections including: Grip Road at the intersection with the mine access road; at intersection of Grip and Prairie Roads; at the intersection of F&S Grade and Prairie Roads, at intersection of Prairie Road and Old 99.
 - Improve site distance to the east at intersection of Prairie and Grip Roads
 - Widen Grip and Prairie roads and harden shoulders.
 - Straighten and widen curves on Grip Road hill or find an alternate access point to the mine below the 'S curves' and hill.
 - Improve the two ninety degree turns on Prairie Road so that trucks can stay in their lanes.
- Gravel trucks must be restricted to the identified haul route (presuming necessary road improvements have been made). There are numerous safety issues with other haul routes that have not been evaluated, including at least four ninety degree corners on Grip Road heading east where it is impossible for large trucks to stay in their lane.
- The above safety concerns are also applicable to sale of mined materials to private parties and independent truckers. The application materials are not consistent regarding whether CNW intends to sell directly to third parties. If this were to occur,

these third party trucks would not necessarily stay on the identified haul route. Therefore sale to private parties and independent truckers from the site must be prohibited.

Additional Assessments or Studies needed:

- Fully updated Critical Areas study and Fish and Wildlife assessment of the larger property, including the private haul road and areas adjacent to it, with appropriate mitigation measures identified for the footprint of the entire project, not just the mine itself.
- Further evaluation needs to be conducted of the impact to the listed Oregon Spotted Frog and Bull Trout consistent with State and Federal Endangered Species Act.
- The impacts to hydrology and potential for exacerbating sedimentation and flooding problems from the increased impervious surface and heavy use of the haul road, especially in the gorge where the road crosses Swede Creek, needs to be evaluated and appropriate mitigation measures required.
- Full Level II Traffic Impact Analysis.
- A realistic estimate of the cumulative emissions from all of the mining activities on-site, as well as the diesel emissions from truck hauling needs to be made, and a mitigation plan proposed.
- A revised Noise Study that corrects the serious flaws identified in this letter.

We hope that you find this letter useful as you proceed with your review of this project, and the new SEPA process. We would be happy to discuss any of it further, and look forward to hearing from you. Thank you for your time and consideration.

Sincerely,



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cc: Julie Nicholl, Skagit County Prosecuting Attorney
Kyle Loring, Attorney, Loring Advising

Encl: "Fish and Wildlife, and Water Quality (regulated Critical Areas) review" (Wiggins, November 2020