

Laura Smith-Johnson

My comments are listed in the attached PDF document.

Is a silicon smelter a good fit for Newport?

"Many communities are finding success cultivating a competitive advantage by using their unique assets to attract new investment and support existing businesses. These place-based assets might include residents and their skills; local architecture and infrastructure; academic, technical, and medical institutions; local and regional business and employment concentrations; cultural, natural, and artistic resources; and general quality of life. What distinguishes smart growth economic development from conventional economic development is the emphasis on building on these existing community assets, rather than pursuing jobs or tax base growth without particular regard for location or synergies among existing assets." (Ref.: [https://www.epa.gov/sites/production/files/2016-01/documents/small\\_town\\_econ\\_dev\\_tool\\_010516.pdf](https://www.epa.gov/sites/production/files/2016-01/documents/small_town_econ_dev_tool_010516.pdf))

Pend Oreille County's Comprehensive Plan states the following. "We realize the benefits of the open spaces maintained by agriculture and the timber industry, and value the quality of life that results from being in close proximity to the County's mountains, valleys, lakes, rivers, and wildlife. We appreciate the clean water in the area's streams, rivers, and lakes, the clear air quality, and the abundant wildlife habitat.

As our population increases, we want to ensure that new development is compatible with the surrounding uses, sensitive to the surrounding natural areas, and retains the rural character of the community.

The quality life in Pend Oreille County would be sadly diminished if sights (and sounds) like the flight of tundra swans and bald eagles over Calispell Lake were lost. Wildlife is also an economic asset, attracting fishermen, hunters, photographers, and visitors who simply enjoy seeing wild animals." (Ref: <https://pendoreilleco.org/wp-content/uploads/2015/08/Comp-Plan-Update-Adopted-06-09-2015.pdf>)

Your agency and PacWest agreed that significant adverse impacts from their project are likely. Using information in the EPA article along with the values stated in Pend Oreille County's Comprehensive Plan, would a silicon smelter in Newport be considered conventional economic development or smart growth economic development?

Our water, farmland, ranch land, forests, wetlands and wildlife habitats are the natural resources in Pend Oreille County which includes Newport south to the county border. You can see our natural resources as soon as you cross over the

county line from the South on Spring Valley Road or as you head north on Highway 2. The calmness of nature fills the area as the streams and ponds become visible surrounded by lush forests filled with ponderosa pine, western larch, white pine, western red cedar, Douglas fir, western hemlock, grand fir, Englemann spruce, and many more. Stop and breathe in the cool, calming air our forests naturally provide. On your way north, you pass fields of pasture for grazing animals, lakes, hills and mountains, and the headwaters of the Little Spokane River before reaching the Pend Oreille River. Natural serenity draws both wildlife and people. Does a silicon smelter fit with the natural surroundings? Is it consistent with the County's Comprehensive Plan? Is it smart growth?

According to the Northern Research Station of the USDA Forest Service, air pollution has been a serious problem for the forests of the Northeast (especially those at high altitudes), which are downwind from industrial facilities. They state that the "chief agent of environmental damage is acid deposition [acid rain]." They go on to say, "this phenomenon occurs when emissions of sulfur dioxide (SO<sub>2</sub>) and oxides of nitrogen (NO<sub>x</sub>) react in the atmosphere with water, oxygen, and oxidants to form various acidic compounds. These compounds then fall to the earth in either dry form (such as gas and particles) or wet form (such as rain, snow, and fog). Thus, polluted air can damage trees directly in the dry form or indirectly through its effects on the chemistry of water and soils and by making trees more vulnerable to other biological and environmental stressors [such as wildfire, insects, and disease]. More specifically, acid rain weakens trees, limiting the nutrients available to them, or exposing them to toxic substances slowly released from the soil. Acid rain that flows into streams, lakes, and marshes also has serious ecological effects. In watersheds where soils do not have a buffering capacity, [such as sandy soils found in the Newport, Washington region], acid rain releases aluminum, which is highly toxic to many species of aquatic organisms, from soils into lakes and streams." (Ref: <https://www.nrs.fs.fed.us/disturbance/pollution/>)

Prevailing winds typically flow to the East and North. Ranges of mountains in this section of the State are separated by narrow north-south valleys. A principal tributary of the Columbia River in Washington is the Pend Oreille River. (Ref: <https://wrcc.dri.edu/narratives/WASHINGTON.htm>)

What will be the environmental damage from acid deposition caused by pollutants from the silicon smelter to our forests, lakes, rivers and streams, wildlife habitat, nearby homes and gardens, ranch lands used for grazing livestock, recreational sites, etc.? How will both the economic and health impact from environmental damage be mitigated? Is there a more suited location for the silicon smelter other than in Pend Oreille County?

We have many **air stagnation events** and inversions in the Newport area. During April to October, over the last two years, Newport has experienced daily air stagnation events ranging from 9 to 19 days with October being the lowest at 9 days and August the highest at 19 days. (NOAA: <https://www.ncdc.noaa.gov/societal-impacts/air-stagnation/>) In the summer, wildfire smoke from fires as far away as California, Oregon, Montana, and Canada reach Newport, and due to air stagnation in the narrow valleys the smoke gets trapped where we all suffer from it. If the smoke from these wildfires can reach southern Pend Oreille County, what affects will pollution from a smelter that's located less than a mile from Newport have on the areas residents, wildlife and environment on a daily basis? Also, what is the average and most common altitude of inversion layers here? What are the health impacts from pollutants from the smelter on children and the elderly during air stagnation events?

Newport is in a valley surrounded by hills and mountains creating a cradle for pollutants to settle. Is a silicon smelter a responsible choice for Newport?

Broad-scale climate change assumptions and potential effects should be studied. According to a recent report in the Colville National Forest Land Management Plan, continued warming in the Pacific Northwest, which is likely to result in increased water use by vegetation, reduced water available for forest vegetation, wildlife, and humans, increased stress on water supplies and water storage facilities throughout the Pacific Northwest, are factors to consider. (Ref: <https://www.fs.usda.gov/detail/colville/landmanagement/planning/?cid=stelprd3824594>)

The Kaniksu National Forest, which is part of the Colville National Forest Land Management Plan, is approximately 1.5 miles north of the property line of the proposed smelter. Due to the normal direction of prevailing winds and many air stagnation events, how will the silicon smelter affect it and other areas covered in the plan? What is the reach of pollution from the smelter? How will water requirements of the silicon smelter further affect the outcome of reduced water availability due to climate change? In addition, how will the combination of damage from acid rain caused by the smelter and reduced water availability from climate change affect the potential for catastrophic wildfires? Can it be mitigated? How will it be mitigated?

What are the food sources of endangered species living in or migrating through the region, which also encompasses the Salmo-Priest Wilderness area? Will acid rain caused by pollution from the silicon smelter, and other potential water pollutants from the smelter, damage the delicate ecosystems that support endangered species? Will the silicon smelter either contribute to or cause harm to the recovery areas protected under the Endangered Species Act?

What impact will a silicon smelter have on the Little Spokane watershed in restoration, protection, and maintenance, and aquatic habitat and function?

Pend Oreille County provides renewable forest products such as timber, firewood, forage, huckleberries, mushrooms, material for floral arrangements, Christmas trees, native plants and seed, and medicinal plants. What impact will pollution from the silicon smelter have on these renewable resources? Will it degrade the quality of products? Will it impact the revenue generated from them?

The emissions of a silicon smelter change based on certain planned and unplanned conditions. What are the types and quantities of pollutants emitted during each of these events: furnace startup (warm-up period); peak efficiency; and furnace shutdown (cool down period)? How long does it take a furnace to reach peak efficiency? How long does it take a furnace to completely cool down? Which pollution mitigation devices don't work efficiently, or at all, when a furnace is either in start-up (warm-up) mode or in shut-down (cool down) mode and what are the changes to emissions during that time including quantities? At times, a furnace gets too hot and the emergency chimney is opened. What types and quantities of pollutants are emitted then?

A County's Comprehensive Plan sets consistent expectations for the types of activities permissible in the area. Many residents who live here helped create the plan. Others moved here feeling protected by it. The City of Newport's southern boundary is less than one-half mile from the proposed smelter site. PacWest claims "the [smelter] site is surrounded by undeveloped or previously logged/forested land, except for the two existing farms/residences south of the site." The two residences south of the site, that PacWest referred to, are approximately 100 and 200 feet respectively from its border. There are more residences within a few hundred feet to a few thousand feet to the north of the site before reaching the city limits. There are approximately 1,000 homes within Newport's city limits with over 2,100 residents and approximately 6,000 more throughout the southern part of the county. (Ref: <http://www.city-data.com/city/Newport-Washington.html> and [http://tricountyedd.com/wp-content/uploads/2013/03/CEDS-2018-2022\\_FINAL.pdf](http://tricountyedd.com/wp-content/uploads/2013/03/CEDS-2018-2022_FINAL.pdf)) Many more residences are within a few hundred to a few thousand feet just across the border in Idaho. Several schools are in the area as well as an assisted living center for the elderly in Newport.

Parents of children who live farther away, possibly feeling protected by distance from the proposed location of the smelter, will be sending their children to schools that are less than a mile from the proposed site. The American Lung Association, pediatricians and other doctors caution about the detrimental affects of air pollution on childrens' lungs and respiratory systems. (Ref: <https://www.lung.org/our-initiatives/healthy-air/outdoor/air-pollution/children-and-air-pollution.html>)

and [https://www.cdapress.com/local\\_news/20181019/no\\_smelter\\_doctors\\_orders](https://www.cdapress.com/local_news/20181019/no_smelter_doctors_orders))

Would the emissions from the proposed smelter coupled with geographic surroundings, weather events, and location cause harm to children attending school nearby? Would it harm children playing in Newport City Park or outside their residences?

The air is clean in Newport compared to other areas in the Inland Northwest. Many residents live here to enjoy the surroundings, fresh air, and nature. Many live here to get away from the pollution of a larger city, yet they're still close enough to commute to work and some work remotely from their home offices. Parents of children with asthma live here to give their children relief from pollution which aggravates their symptoms. Retirees live here to get some relief from the effects of heavy industry that they once worked in. Grown children moved their elderly parents here to give them relief from the symptoms of aging. People live here to get away from pollution of heavy industry. How will pollution, noise, traffic and congestion from a silicon smelter affect the quality of life of all of these people? Where will they move to should the effects of the smelter prove to be too much? Can they afford to move? What other areas could they move to that aren't already contaminated by industrial pollution, past or present? Why should they be put into a situation where they feel forced to move? Is a silicon smelter the only industry there is?

Pend Oreille County touts that it is the recreational backyard for communities of northeast Washington and the greater Spokane area. People travel here to enjoy hiking, bicycling, horseback riding, nature viewing, water sports and winter sports.

PacWest claims that their "facility would not create or displace any recreation opportunities or activities in the area." However, they would displace hiking, bicycling, and nature viewing. The area where their facility is proposed is known for hiking and mountain-bicycling. It is also a place for nature viewing. The Townsend's Big-Eared Bat is a Species of Concern in Washington State. The area surrounding Newport including the land where the smelter is proposed is listed as a Communal Roost which is a Priority habitat for the bats and they are a species for nature-viewing enthusiasts to watch. PacWest confirmed its presence by stating in its project description that "a Townsend's big-eared bat communal roost site was documented south of the property during the survey." They also stated that "vehicular and rail traffic to and from the site, as well as on-site equipment and processes, are expected to introduce new noise sources to the surrounding environment." Townsend's Big-Eared bats are sensitive to disturbances, and nature viewing opportunities at the site would be displaced by the construction and operation of a smelter. How will their Priority Area be protected?

PacWest states that "a proposed rail spur and loop to the west of the site would connect the facility with existing tracks." To the best of my knowledge there are no rail tracks anywhere near the proposed site. There is not enough information here to scope. It's incomplete. How does that impact the public comment period of the scoping process?

PacWest states that "The new facility would require fire protection, police protection and emergency services. To mitigate the need for police protection, the facility property would be fenced and would have security personnel on the premises at all times. The need for fire protection would be mitigated by the presence of an on-site fire suppression system." The proposed location of the smelter isn't protected by a fire department or district. It's in no-man's land. The majority of Pend Oreille County's firefighters are volunteer, people who work at other businesses, which could reduce response times and availability during the work week. If the volunteers are working another fire in their own district or in a mutual aid district, response time could be reduced even further. Who will PacWest hire to fight fires at their facility?

Thank you for the opportunity to provide input regarding this study.

Laura Smith-Johnson  
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