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Commenter: Kathleen Masis M.D.

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Initiative: Tongue River Railroad

Submission Text

My comments are in support of the testimony by Northern Cheyenne tribal members about their concerns of effects on their land and community by the proposed Tongue River Railroad. The draft Environmental Impact Study(dEIS) published in 2015, does not address the human health effects from loss of cultural resources. However, during the public hearings, community members testified about impacts on their culture and wellbeing from the proposed industrialization of the Tongue River/Otter Creek area. This shows a serious deficiency in the dEIS. I have a personal interest in the survival of the rural, pristine condition of the Tongue River Valley and its people. I love the area. I was first introduced to the valley about five years ago. Friends from the Birney area have shared with me their long battle to protect the quality of their land. I am convinced that mitigation would not be able to overcome the damage to the spirit and thus to the health of the surrounding communities. As a Board-certified Family Physician, with a Master of Arts in Culture and Spirituality, I have pertinent comments about potential impacts on human health from degradation of the traditional cultural resources available to a community. My interest is in providing an academic context with which to address the testimony already made by tribal members. Their comments on the dEIS for the TRR are evidence of the expected effects from loss of traditional cultural resources. The Surface Transportation Board is responsible for considering the effects on human health from damage to a community's physical and cultural surroundings from a new railroad line. The community members' comments need to be considered as evidence in themselves. They should be categorized and analyzed as carefully as a study of historical artifacts would be. The cultural resources of the community are not just "historical." They are current, and vital. A review of the literature on measuring environmental and cultural impacts on health was organized around these topics: Traditional Indian Medicine, Loss of Place, Social Connectedness and Health, Methodology, Human Epidemiology, American Indian Health Status, and health and Indigenous resource management. My findings were that the current literature supports the testimony of the Northern Cheyenne who say that environmental changes from the construction of a new railroad line and strip mine adjacent to their reservation will have permanent detrimental effects on the health of their community. Population health no longer looks only at demographics and individual risk factors as influences on health outcomes, because the health of residents is related to characteristics of neighborhoods. "Health-related problems are strongly associated with the social characteristics of communities and neighborhoods. We need to treat community contexts as important units of analysis in their own right..." (Sampson, 2003) Over the past twenty years, the term "ecometrics" has emerged as a valid measure of "area effects" or "neighborhood effects" on individual health outcomes. For example, in an ecometric analysis, residents of the area are asked about specific "dimensions of neighborhood environment." The changes to the environment of the Northern Cheyenne which include an influx of outside workers, noise, soot, and disruption of traditional ceremonial activities are among the characteristics included in an ecometric analysis. The Tongue River Railroad and the Otter Creek mine are proposed across the river from sacred sites, including Native American traditional healing ceremonies. These cannot take place in a site polluted by the construction of a railway and a strip mine. A railway would contaminate and desecrate the intrinsic value of the unspoiled natural surroundings necessary for ceremony. Noise, soot and diesel fumes from trains would debase the site, and prevent the connection with sacred place. Struthers and Eschiti (2005), in their original study, show that some Native people incorporate indigenous healing practices into their lives to reach the highest level of well-being, which includes the "potential for decreasing health disparities in this population." Risks to the indigenous healing practices of the Northern Cheyenne have been documented by the Surface Transportation Board. The draft EIS for the Tongue River Railroad found that "moderate" negative impacts from the railroad and mine are expected on cultural and historical resources. Health disparities in northern plains reservation communities such as Northern Cheyenne are already significant, and result in premature loss of life. (Mahoney, 1989.) Adding more risk factors to the community's health from unwanted noise, soot, and loss of cultural/historical resources, (all documented in the dEIS), is not acceptable. The record shows: "Health disparities in

AI communities have persisted since Europeans arrived in the Americas more than 500 years ago. Current health disparities reflect an interaction of socioeconomic circumstances, physical and cultural community environments, personal management of health behaviors and medical concerns, and health-care financing and delivery. Efforts to reduce disparities in northern plains AI communities will likely continue to fail unless complex causal factors are addressed by integrated programs and policies.” (Holm, 2010) The “physical and cultural community environment” is exactly what Northern Cheyennes testified will be impacted by the TRR and the Otter Creek Mine. Holm’s assessment is that efforts being made to reduce health disparities “will fail unless complex causal factors are addressed.” The Northern Cheyenne have identified one causal factor of health disparities that can be addressed by the federal government at no cost: deny the construction of the Tongue River Railroad. A researcher in mental health references the history of Euro-American suppression of tribal cultural practices and he recommends emphasis on history, identity and spirituality in cross-cultural prevention of mental health problems. He finds promise in “preventative interventions that originate locally and achieve their effects because they make sense within local frames of meaning.” (Gone, 2010) We can apply this directly to the proposed Tongue River Railroad. Northern Cheyenne traditional leaders have testified that the construction of this railroad and the associated strip mine would suppress their tribal cultural practices. Who gets to decide whether they are right? If they are “right,” then the “preventative intervention” is clear. Do not allow the Tongue River Railroad. The relationship of the land to the health of a tribal community is emphasized by Anders (1995). He says: “Our identity as human beings remains tied to our land, to our cultural practices, to our systems of authority and social control, to our intellectual traditions, to our concepts of spirit and to our systems of resource ownership and exchange. Destroy this relationship and you damage—sometimes irrevocably—individual human beings and their health.” Northern Cheyenne and other community members of the Tongue River Valley have been fighting the Tongue River Railroad for thirty years. They say that their way of life is threatened. There can be no justification for ignoring their testimony. I recommend the “no” option on the building of the Tongue River Railroad. Sincerely, Kathleen Masis M.D Attachment

References

Anders, P. 1995 "Priorities in Aboriginal Health" in Robinson G. (ed) *Aboriginal Health: Social and Cultural Transitions*. Sept, 29-31. Northern Territory University Darwin. NTU Press, Darwin.

Anderson K, Lowry R, Conner H. Risks to health among American Indian/Alaska Native high school students in the United States. *Prev Chronic Dis* 2011;8(4) http://www.cdc.gov/pcd/issues/2011/jul/10_0193.htm.

Bassett D, Tsosie U, Nannauck S. "Our culture is medicine": perspectives of Native healers on posttrauma recovery among American Indian and Alaska Native patients. *Perm J*. 2012 Winter; 16(1):19-27.

Gone J. 2010. An American Indian illustration of primary prevention. In L. Cohen, V. Chavez, & S. Chemimi (Eds.) *Prevention is primary: Strategies for community well being* (2nd ed.,pp384-385) San Francisco, CA: Jossey-Bass.

Holm J, Vogeltanz-Holm N, Poltavski D, McDonald L. Assessing Health Status, Behavioral Risks, and Health Disparities in American Indians Living on the Northern Plains of the U.S. *Public Health Rep*. 2010 Jan-Feb; 125(1): 68–78. PMID: PMC2789818

Mahoney M, Michalek A, Cummings K, Hanley J, Snyder R. Years of potential life lost among a Native American population. *Public Health Rep*. 1989 May-Jun; 104(3): 279–285. PMID: PMC1579922 S

Mujahid M, Diez Roux A, Morenoff J, Raghunath T. Assessing the Measurement Properties of Neighborhood Scales: From Psychometrics to Econometrics. *Epidemiol*. (2007) 165 (8): 858-867.

Sampson R. The neighborhood context of well-being. *Prospect Biol Med*. 2003 Summer;46 (3Suppl):S53-64.

Serra-Barragan, L. Sense of place and the provision of environmental services. in R3: Review of Environment, Energy, and Economics. www.feem-web.it/ess/ess10/files/.../SERRA-BARRAGAN_Luis.pdf

Struthers, R. and Eschiti, V. Being healed by an indigenous traditional healer: sacred healing stories of Native Americans. Part II. *Complementary Therapies in Clinical Practice*, Volume 11, Issue 2, May 2005, Pages 78-86.

