Sources of Dust

Dust has been around forever.

Winds have been blowing dust off glaciers and dry river banks for eons.

We have lived with dust for thousands and thousands of years, but dust is still not healthy to breathe.

Now, in addition to windblown dust, our four wheelers, trucks, and cars throw dust into the air of our communities. Our trampled ground, construction and mining, agriculture, and vacant lands produce dust.

What are the sources of dust in rural Alaska?



• Dirt roads and traffic



• Exposed riverbeds or shoreline



Un-vegetated lots



Unpaved airfields



Gravel pits and stockpiles



Glacial river dust- Copper River

Rising from the Copper Glacier, Alaska's Copper River flows through a glacier carved landscape of steep mountains and fields of sand dunes before emptying into the Gulf of Alaska. The river is choked with silt and lined with sand. It is also prone to high winds. The combination results in spectacular dust storms, such as the one observed by the Moderate Resolution Imaging Spectroradiometer (MODIS) on NASA's Terra satellite on October 30, 2009.

In this image, the wind is blowing from the snow-covered mountains to the Gulf of Alaska. The wind picked up fine sediment from the riverbank and carried it over the ocean. The pale brown plume of airborne dust contrasts sharply with the dark ocean beneath it.

A November, 2009 satellite image released by NASA's Earth Observatory

Image credit NASA / Earth Observatory