

RANDELL WIESENMAYER: Good afternoon. I'm Dr. Randell Wiesenmayer, professor at West Virginia University, and I'm here representing the organization 350.org and Citizens Climate Lobby. I thank the members of the board, members of the panel, for the opportunity to express my serious concerns related to coal extraction on public lands. As indicated in the power point at the beginning of the session, a significant amount of coal is being extracted from our public lands. This means that a significant amount of carbon dioxide, mercury, lead and other toxic materials are being spewed into the atmosphere at a cost of about \$300 billion estimated. That's far more than the \$68 billion that was shown up there as income generated from the extraction of coal. Today the carbon dioxide levels are 460 parts per million. That's up from 180 parts per million. The ice is melting. Greenland's ice caps, glaciers are melting. Antarctica's glaciers are melting. Alpine's glaciers are melting. And according to James Hanson, the current rate of melting, sea level rise expected to go up or rise by 12 feet by the end of this century. That's 12 feet by the end of this century. It's estimated that 2 billion people are going to be displaced by the sea level rises. That's far more extensive in terms of the losses there than the short term gains by the extraction of fossil fuels. The oceans are dying. The carbon dioxide levels have caused the oceans to warm and acidify. This acidification is ruining our reefs, which are an ecological indicator of the tropical rain forest in terms of its reduction of ecosystems, and at the same time that plankton is being destroyed in the oceans as well. Plankton, by the way, is a source of 70 percent of our oxygen that we breathe. In addition to this, this warming is causing the melting of permafrost and we see methane being released. Methane levels have been recorded at that exceeding 3,000 parts per billion. That's the highest rate of methane that has been recorded. Methane is 80 times more potent than greenhouse gas than carbon dioxide is, according to Michael Mann in his book "Dire Predictions." For the sake of future generations, we must transition from fossil fuels to renewable sources of energy. For the sake of our eternity of Earth's ecosystems that support human life on this planet, we must transition from fossil fuels to renewable energy sources. Keeping the coal and all fossil fuels in the ground on public lands will play an important role in the restriction of the carbon dioxide being emitted into the atmosphere. Thank you for your time.