International global warming report should spur action in Oregon

by Doug Heiken

Press statement of Doug Heiken, Conservation and Restoration Coordinator of Oregon Wild
The Intergovernmental Panel on Climate Change (IPCC), an international scientific body made up of hundreds of the worldâ€™s leading scientists, will formally release its latest report on global warming tomorrow, February 2nd. Though the full report has not yet been made public, key portions of it have, including the finding that it is â€œvery likelyâ€•' that human activities are the main cause of the warming the earthâ€™s climate has undergone in the past 50 years. In the IPCCâ€™s cautious language, â€œvery likely'â€• means at least 90 percent probability. This is the strongest link between global warming and human activities since the IPCC was formed in 1988. The new report highlights need for action today to address this extremely serious environmental problem. This latest report of IPCC collects and affirms the already strong evidence that human activities are in fact changing the composition of our atmosphere with potentially significant implications for our climate, ecosystems, and society. While specific climate changes at any given place and time are highly uncertain, scientists can confidently predict a few large-scale trends, such as general climate warming, altered patterns of precipitation, rising sea level, and significant disruptions of ecosystems, both on land and in the oceans. More than any other issue, humanityâ€™s response to climate change will define our times. To preserve options for future generations the prudent approach is to mitigate impacts and adapt to anticipated changes. This will require us to dramatically reduce fossil energy use, reform land use and transportation polices, and protect native ecosystems best suited to store carbon and adapt to a changing climate. Forests are the most significant terrestrial stores of living carbon and their mismanagement over the last century has contributed significantly to the CO2 pollution that threatens our climate. In the future, we need to manage forest to (a) make forests more resilient to the anticipated changes wrought by climate change, and (b) manage forests to help mitigate climate change by allowing forests to fulfill their full potential for storing carbon in living systems. To make forests more resilient to climate change we need to protect the full diversity life in our forests. Each species and each plant community is a record of successful adaptation to past changes. Even though the future may not mirror the past, the diversity of life that exists now is the full catalog of successful adaptations we have to work with. We should not be throwing tools out of the toolbox by allowing species to go extinct. Since ecosystems are expected to shift north and toward higher elevations in response to warming climate, we need to expand our existing system of protected areas to give forest ecosystems enough room to migrate via natural processes of disturbance, dispersal, and regeneration. To help forests store more carbon we need to let them grow! Photosynthesis is the mechanism plants use to capture CO2 and convert it to plant material that feeds the base of the entire planetary food chain (which is 50% carbon). Old-growth trees store massive amounts of carbon in their trunks and in the soil. Logging stops photosynthesis and converts much of the resulting carbon back into atmospheric CO2. Forest conservation allows forests to grow large and complex which not only helps mitigate climate change, but also enhances water quality, wildlife habitat, recreation, and quality of life.