PRESERVING GIANT SEQUOIA GENETIC RESOURCES TH<u>ROUGH FOREST</u> MANAGEM<u>E</u>NT IN THE FACE OF <u>CLIMATE CHANGE (2C)</u> Glenn Lunak, Sierra Pacific Industries

Giant Sequoia (SEGI) is currently restricted to a natural range that is smaller in area than in previous epochs and potentially threatened by catastrophic wildfire and/or climate change. SEGI provenances have been planted on SPI timberlands for over 60 years. SPI evaluated 131 of its 400+ plantations in 2010 and found that SEGI appears to have successfully adapted to a broad range of forest sites. Earlier research with SEGI provenance trials in California and abroad support this finding (1981. Libby W.J. Some observations on Sequoiadendron and Calocedrus in Europe. Cal. For. & For. Products 49:1-12). SPI has begun the process of ground based seed collection in existing SEGI groves and plans to plant seedlings from these collections in a wide range of forest sites in California to assess resilience to forest stressors as well as preserve genetic material if losses from wildfire or climate change occur in existing groves. Management programs that result in the production of future SEGI groves over the long term will also be incorporated into this project.

Key words: Giant Sequoia, Genetic Conservation, Forest Management, Climate Change