



Mojave Fire Chronosequence

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Understanding the role that disturbances play in the Mojave Desert is essential for land use planning to ensure the preservation of ecosystem services such as carbon sequestration. Utility scale energy projects in the region create a variety of construction related temporary disturbances such as access roads that are often left to revegetate naturally. The anticipated lifespan of many plants is only 25-30 years. The future potential of sites following decommission is unclear, but one possible scenario is that they must be revegetated. Current research is particularly important in the Mojave where plant invasions, habitat loss, and development are altering the structure and function of the ecosystem. As a result, long-term recovery following fire has the potential for informing land managers about the possible recovery rates following these temporary or more persistent disturbances associated with energy development. This chronosequence is represented by 282 plots distributed across 33 fires in creosote bush (*Larrea tridentata*) and blackbrush (*Coleogyne ramosissima*) communities that burned between 1980 and 2007. It will be one of the best examples of long-term disturbance response and successional patterns for vegetation at landscape scales within the Mojave Desert. It builds off of the work of Scott Abella and Cayenne Engel who monitored the same set of plots from 2008-2010. It will provide information for land managers to use when planning solar projects, mitigating impacts, or restoring degraded lands. The project will be completed by Dominic Gentilcore who is currently seeking a Ph.D. in Biological Sciences from the University of Nevada – Las Vegas under Dr. Scott. Abella. The research is funded by Nexus in Nevada, an NSF EPSCoR program.



This material is based upon work supported by the National Science Foundation under Grant No. IIA-1301726. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.