The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

YEAR:
2012

STATUS:
Laureate

Organization:
Mojave Desert Ecosystem Program

Organization URL:
www.mojavedata.gov

Project Name:
Mojave Desert Ecosystem Program

What social/humanitarian issue was the project designed to address? What specific metrics did you use to measure the project's success?

The Mojave Desert Ecosystem Program (MDEP) was designed to coordinate GIS data and electronic reports between federal, state and local agencies in the Mojave Desert Ecoregion. The program was designed in 1995 and started in 1996. The DoD and DoI partnered on this data sharing exercise to build a collaborative effort focused on environmental data to help manage this fragile environment. Over the programs sixteen years, it has been involved in supporting local, state and federal agencies to share data on a vast amount of endangered species and environmental data so that agencies can make the best management decisions possible. The program also has supported various agencies in their outreach efforts through technology over the years, starting through the Internet. Some of the measures for the success of the program were the number of data requests annually, number of programs MDEP is involved in each year and the overall cost stability of the program as the amount of data increased.

Please describe the technologies used and how those technologies were deployed in an innovative way. Also, please include any technical or other challenges that were overcome for the successful implementation of the project.

MDEP over the years has had to focus on stable but leading technology solutions to stay relevant for the agencies it serves. MDEP's first major technology challenge understood GIS solutions in the mid-1990s, when this technology was really starting to grow. The goal, which MDEP

achieved, was to collect, consolidate and publish the most complete set of data on an ecoregion anyone had seen, which was achieved in 1999 with a team of agencies and a university. The next step was to take this product and make it available over the Internet for both the public and agencies to access information through that method in 2000. The project in the mid-2000s pushed MDEP into new technologies, such as supporting radio tracking of species while creating web-enabled data review solutions for scientist to work with data remotely. Since then, MDEP has moved into hosting cloud servers for agencies, development of mobile apps for the public to use and collaboration on developing various IT solutions to look at data in new ways with local educational institutions and students.

Please list the specific humanitarian benefits the project has yielded so far.

Vast amount of data support and efforts in the protection of the Desert Tortoise. Support of the Mohave Ground Squirrel study efforts in the region. Publishing and making available online the various maps of the Mojave Ecoregion for both the public and agencies to use.

Please provide the best example of how the project has benefited a specific individual, enterprise or organization. Feel free to include personal quotes from individuals who have directly benefited from the work.

One current example has been the alternative energy development efforts in the California deserts. The state is in the process of developing the largest Habitat Conservation Plans (HCP) known to take place in the United States in support of alternative energy development efforts in the Southwest. MDEP is the data repository for all the GIS data for the Desert Renewable Energy Conservation Plan (DRECP), which comes from various sources to allow both the agencies involved and the public to work on this issue with as clear a picture as possible.