

PRESENTATION PROPOSAL

MORE THAN A MAP: HOW GOVERNMENT AGENCIES ARE COLLABORATING ON GEOGRAPHIC INFORMATION FOR BETTER PUBLIC SERVICES

Email to Ruth Anne Harbison (HarbisonR@cityofmerced.org)

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Your Name: Lourdes V. Abellera, Ph.D.
Email Address: lvabellera@gmail.com
Position/Job Title: Civil and Environmental Engineer
Organization: MWH Americas, Inc.
Policy Theme: A Growing California
Morning or Afternoon: Afternoon
Presentation Title: GIS Analysis to Determine Optimum Sites for Building an Aqueduct

Abstract:

The Coachella Valley Water District initiated a study to identify environmental and engineering constraints to building a water aqueduct in the Riverside and San Bernardino counties in Southern California. Four alternative alignments were proposed whose lengths varied from 40 miles to 90 miles. A five-mile wide buffer area was designated along each of these alignments, and the resulting corridors were investigated. The proposed aqueduct was being considered as a response to projected population growth. We gathered information from various sources to analyze the parameters that would possibly affect the location of the proposed aqueduct. Some of the parameters considered were lakes, sensitive species habitats, natural gas pipelines, and wastewater treatment plants. Using GIS tools, we mapped these natural and man-made features to find out the locations of these features relative to the proposed alignments. In building and maintaining the proposed aqueduct, it would be best to minimize environmental impacts, optimize costs, and uphold environmental justice. GIS mapping and analysis enabled us to determine which of these anticipated corridors would meet these criteria.