ABSTRACT

Long-term remedial action Superfund sites pose steep challenges for the Environmental Protection Agency (EPA) and stakeholders to remain actively engaged in cleanups that could go on essentially in perpetuity. It is essential for communities impacted by Superfund cleanups to actively participate in the cleanups so that they may be part of the decision-making process. Citizens directly affected by Superfund cleanups have unique perspectives, information, and spatial knowledge to contribute, but opportunities for participation in Superfund may be limited to the agendas, meeting spaces, and timelines of the EPA (Laurian 2004). In the City of Los Angeles, the Del Amo and Montrose Superfund sites are located adjacent to each other and directly north of an unincorporated neighborhood of approximately 300 households. Due to the extent of the commingled groundwater contamination originating from both sites, it is understood by the community that the time frame for cleaning up the groundwater will span 3,000 to 5,000 years. The primary goal of this thesis was to understand and portray the cleanup through the perspectives of local community members. Specifically, the objectives of this research were to: (1) use a community-engaged research approach to develop a Web GIS Story Map which incorporated experiential spatial narratives from the perspectives of local citizens affected by the Del Amo and Montrose cleanups; (2) ensure that a critical evaluation of the Story Map was possible on behalf of participants throughout the development of the tool; and (3) promote the Web GIS tool to stakeholder groups and other entities for feedback and evaluation. The Web GIS Story Map combined interactive Web maps and mixed media to communicate the history of the Del Amo and Montrose sites, as well as how the community has been impacted by the cleanups and the contamination over the past two decades. This project demonstrates how a community-engaged Web GIS Story Map can facilitate dialogue among various stakeholder groups invested in the cleanups. In addition, this study recognizes the potential for regulator stakeholders to assist in developing more robust geospatial visualizations of intended remedial objectives.