### Chapter 50

# Mapping the Hopi Landscape for Cultural Preservation

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#### **ABSTRACT**

For the Hopi people, named places on the landscape localize, commemorate, and transmit traditional knowledge within a spatial context used to reference and explain Hopi history and culture—geographic information the Hopi Tribe seeks to preserve. This paper discusses the Hopi Cultural Preservation Office's use of geospatial technologies during recent collaborative efforts to document important places and associated cultural information. It considers how GIS and other geospatial technologies have been used to produce maps and digital imagery in a manner guided by traditional landscape perspectives and native epistemologies. Mapping Hopi lands provides many benefits, foremost being the preservation of place-related knowledge for future generations of Hopis. Geospatial technologies also facilitate Hopi efforts of heritage management by providing a medium that effectively demonstrates use of traditional landscapes to non-Hopi audiences.

#### 1. INTRODUCTION

The Hopi Tusqua is our love and always will be ... Our land, our religion, and our life are one. -Village of Songòopavi petition to the Indian Claims Commission (1951)

The Hopi people have mapped their landscape since "time immemorial." For the Hopi, the land provides a canvas for situating historical events and everyday and ritual practices (Ferguson & Colwell-Chanthaphonh, 2006). Named places on the land provide spatial markers used to reference and explain

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Hopi history and culture. Connections to the land permeate life. Components of the landscape are continually remembered and commemorated through visitation, daily practice, daily and ritual discourse (e.g., stories and songs), as well as through the placement and use of what the Hopi call *itaakuku* ("our footprints")—ancestral villages, petroglyphs and pictographs, and other archaeological sites that mark ancestral homes and pathways (Ferguson, Dongoske, Yeatts, & Jenkins, 1995; Ferguson & Loma'omvaya, 2011; Kuwanwisiwma & Ferguson, 2009; Whiteley, 2011).

In this article we discuss how the Hopi Cultural Preservation Office (HCPO) has used geospatial technologies such as geographic information systems (GIS) and 3D scanning to preserve and communicate knowledge of and connections to culturally important locations on the Hopi Reservation and surrounding region in the state of Arizona (Figure 1). We summarize several collaborative research projects that employed GIS and other technological applications for community education and cultural preservation. For HCPO, innovative and informed use of geospatial technologies has augmented the preservation and dissemination of place-related knowledge. The use of these technologies has promoted positive and mutually beneficial collaboration between Hopi and non-Hopi researchers.

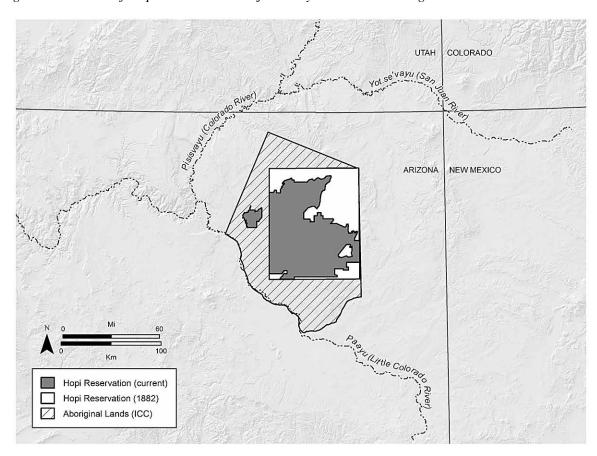


Figure 1. Location of Hopi reservation and judicially determined aboriginal lands

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