CHAPTER TWO
METHODOLOGY

Introduction

Despite the existence of multiple sovereigns and the many possible multiple relationships among them, few if any, empirical or qualitative studies have examined the nexus where American federalism and tribal governance meet. Furthermore, there is a paucity of information in the public administration literature on policy issues concerning tribes, in general.

Descriptive Method

The methodology applied in this qualitative study is descriptive in analyzing the subject matter and incorporates a number of levels of inquiry. For this study, examining processes involving conflict resolution and political cultures as they relate to solid waste management are part of the research task. The relevance of these subjects is in their collective impact on the characteristics of tribal governance and the levels of government that interact with each other across the framework of the American constitutional system of governance. Through his employment with the U.S. Department of Interior, the author had access to data, publications, special collections, and headquarters and regional personnel from federal agencies including the Bureau of Indian Affairs, the Indian Health Service, and the U.S. Environmental Protection Agency. Yet, nothing in this study implies any endorsement by or official policy position of the U.S. Department of the Interior. The research and conclusions of this study remain expressly those of the author.

Research Design

Key data for this study were obtained from many sources including documents (government and non-government); and open-ended interviews with representatives of academia, federal/state/local governments, non-profit organizations, tribal governments, and tribal organizations. Forty-five interviews were conducted during the Spring and
Summer of 1999. However, additional data were obtained and other contacts were made as a result of attendance at professional environmental conferences, meetings, and workshops held during the Fall and Winter of 1999 and the Spring of 2000. In addition to the interviews, a combined total of thirty-five tribes and tribal organizations were contacted and requested to provide information about their solid waste management programs.

The range of interview subjects included tribal environmental officials, inter-tribal organization officials, officials of local, state, and federal agencies, the private sector, university law professors, and the Congress. A list of interviewees by title and employer is provided in Appendix A. Their names have been withheld in order to preserve confidentiality.

Interview subjects were selected using a networking strategy, which the author believes is potentially more effective for identifying interview subjects than the more traditional random sampling technique. A networking strategy takes a more collegial approach to identifying helpful interview subjects and thereby improves the chances of producing meaningful information. In using such a strategy, many interviewees suggested additional sources of information including other potential interviewees.

Methodology of Interviewing

Interviews are opportunities for researcher and respondent to engage in interaction. In the book *Becoming Qualitative Researchers*, Corrine Glesne notes that the nature of interviewing requires mutual participation by both interviewer and interviewee and is one of mutual participation. In their book *Research Methods for Public Administrators*, authors Elizabethann O'Sullivan and Gary Rassel note that interviews provide access to rich sources of data by providing an opportunity to learn about the background of programs, objectives, processes, accomplishments, and failures. Also, research psychologist John Chirban includes the emotions, motivations and needs of interviewees. Educational researcher Steiner Kvale notes that an interview is literally an interchange of ideas between two persons conversing about a theme of mutual interest.
Furthermore, he points out that questions should be easy to understand, devoid of academic language, and should promote a positive interaction. 

Rosanna Hertz and Jonathan Ember note that what distinguishes the most interesting scholarly work is the use of "street sense" by researchers in order to collect the data they need. Also, researcher Susan Ostrander argues that in regard to interviewing elites, making acquaintances in and developing ongoing trust and respect, as well as taking advantage of chance meetings or of one's own social contacts, may be as important as careful planning. In summary, open-ended interviews facilitate depth, detail, and meaning at a very personal level of experience for the research participant.

Data Collection

Interview subjects were contacted prior to the interview by telephone and told the general aims of the study. An interview time was then arranged and subjects were told to expect a total interview time of approximately sixty minutes. The majority of interviews were conducted by telephone. However, in several instances, face-to-face interviews were held by way of site visits. Prior to the actual interview, each interview subject was promised confidentiality in an effort to promote frank discussion. Questions were framed according to the interview situation in terms of available time and the willingness of the interviewee to divulge information. Detailed notes were taken during the interviews, and interview notes were entered and saved as separate files in Microsoft Word.

The following questions illustrate the types of information requested during the course of the interviews:

1. What is your position and responsibility?
2. What does your organization do?
3. In your opinion, where are tribes within our federal system of governance?
4. How do you view tribal sovereignty?
5. How do you see tribes meeting federal environmental requirements within the context of tribal sovereignty?
6. In your opinion, what is the state of solid waste management in Indian country?
7. In your opinion, how does solid waste management rank in importance to tribes?
8. In terms of solid waste management, what do you see as the relationship between federal, state, local governments and tribes?
9. Do you know of any examples where such relationships have worked or not worked?
10. Do you see solid waste management improving or regressing in Indian country?
11. Do you have comments or recommendations?

Using the methods of interviewing discussed in the previous section, each interview consisted of a conversational interaction between the interviewer and the interview subject, with the interviewer facilitating rather than directing the discussion. It was necessary to establish a free-flow process, where the relationship was built to allow the interviewee to feel at ease. As interview subjects were drawn into the interview, they were encouraged to reflect about their personal experiences with government and tribes. This allowed for a more open exchange and encouraged the interview subject to be as expansive as possible. Also, these open-ended interviews allow corroboration of information received from document analysis. Information obtained was also corroborated from other sources such as congressional testimony, journals, and speeches.

Detailed notes of each interview were taken, but the interviews were not tape-recorded since the use of a tape recorder can often inhibit interview subjects. Particular care was exercised in interviews involving tribal members since former anthropological and ethnographic studies of tribes have not always been sensitive to the cultural and social mores of tribes. In Natives and Academics, Devon Mihesuah has raised the issue that Indians do not see themselves as objects of study and that they do not appreciate those who have made lucrative careers examining their cultures and histories. Tribal social structures vary, as with any other group, and it is important for the researcher to be knowledgeable in this area.

In addition to the interviews, information about tribal solid waste management programs was obtained from tribes, tribal organizations, and other sources. Interviews and other contacts spanned sixteen states and the District of Columbia. Those states were
Alaska, Arizona, California, Colorado, Idaho, Massachusetts, Minnesota, Montana, Nebraska, New Mexico, New York, North Carolina, Oklahoma, Oregon, Washington, and Wisconsin. Site visits were conducted in Anchorage, Alaska, Phoenix, Arizona, and Washington, D. C. A representation of the types of organizational entities contacted is shown below.

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>18</td>
</tr>
<tr>
<td>Tribes</td>
<td>35</td>
</tr>
<tr>
<td>States</td>
<td>8</td>
</tr>
<tr>
<td>County/Local</td>
<td>2</td>
</tr>
<tr>
<td>Tribal Organizations</td>
<td>10</td>
</tr>
<tr>
<td>Private Sector</td>
<td>1</td>
</tr>
<tr>
<td>University</td>
<td>5</td>
</tr>
</tbody>
</table>

State entities included environmental regulatory enforcement agencies, community and rural development agencies, and state commissions of Indian affairs. County and local entities included solid waste management and metropolitan planning agencies. Generally, tribal organizations represented consortiums of several tribes. Some tribal organizations represented a large number of tribes in a particular state and their concerns encompassed many issues affecting tribes such as employment and health care.

Other tribal organizations represented only a few tribes and were more focused on a narrow range of issues such as environmental and natural resource concerns. The entities within universities included law schools and departments of political science and public policy. Supplementary data included documentary sources from congressional hearings, environmental impact statements, notices and rules printed in the Federal Register, federal and state agency administrative manuals, and other information obtained from outside sources. Information concerning grants received by tribes and tribal organizations was obtained from the Grants Information and Control Database System of the U. S. Environmental Protection Agency (EPA), EPA regional offices, and from the
Data Analysis

Documentary data were analyzed to corroborate interview data. This was assisted by the use of Q.S.R. NUD*IST 4 (Non numerical Unstructured Data Indexing Searching and Theorizing) software. This is a multi-functional software system for the development, support and management of qualitative data analysis projects. The software offers sophisticated coding, theory building, and searching capabilities and is suited to handling different data types.

In addition to using Q.S.R. NUD*IST 4.0, other qualitative data analysis software were examined. Ethnograph v5.0 was found to be a good tool for managing project data files and documents. It has many of the coding and data management features similar to Q.S.R. NUD*IST 4.0. Another software program, Atlas.ti, provides good modeling features for visual qualitative analysis and allows one to visualize emerging concepts and examine their relationships.

All the software programs mentioned, however, have their downside. First, they are all relatively expensive. Second, they all take time to learn in terms of manipulating the data. Third, despite all the accolades and merits of qualitative data analysis software, nothing beats the tried and true method of “jumping into the trenches” and “mucking around your data.” This means spending time with the data, developing a sense of “seeing” the data holistically and capturing its very essence. This differs from coding which is essentially mechanical analysis.

The notes obtained from the interviews were imported as text files into NUD*IST for coding and analysis. The NUD*IST software allowed for the creation of a documentary system where text was stored, and words and phrases were automatically indexed. Information about the data, as well as emerging thoughts, were organized according to a tree branching structure that is an excellent feature of this software program. This tree branching capability enabled the data to be viewed from top-down or...
bottom-up. Furthermore, the software enabled data elements to be moved around to view
different emerging patterns that proved valuable in bringing meaning to the data and
subsequent analysis. The software also provided counts of words and phrases that
assisted in initial data patterning that proved valuable in providing opportunities to reflect
on and to reflex with the data in order to interpret the data from the perception of the
interviewees, as well as those of the researcher.

Data were coded using NUD*IST’s sophisticated coding capabilities according to
the questions asked and a search was made to examine patterns that emerged from the
raw data. Codes were used to organize “chunks” of data. After initial coding, the codes
were refined to include the patterns that emerged. Coding was concluded when the
analysis appeared to run its course. The codes, in relation to each other, became a
governing structure and from this structure the codes were transferred into conceptual
patterns or variables, as recommended by Miles and Huberman.13

Summary

The methodology of this study incorporates a number of levels of inquiry, which
were achieved through contacts, open-ended interviews and source documentation.
Three patterns of relationships emerged from the data as well as three overarching
themes. The next chapter provides a historical discussion of tribal governance and
American federalism.
NOTES


