

COUNCIL OF ENERGY RESOURCE TRIBES  
Final Report for DOE Cooperative Agreement DE-FC03-95SF20807  
Period of September 1, 1995, to August 31, 1999

I. Projects funded by Department of Energy, Office of Environmental Management

There were three major projects undertaken at the outset of the DOE/EM 22 Cooperative Agreement back in September 1995. There was a project relating to Tribal oral histories. Another project of the Cooperative Agreement related to technology and Tribal values and needs. This project by analogy could apply to issues of technology, environmental cleanup and other indigenous peoples internationally. (How can Indian Tribes participate in defining the need for technology development rather than merely learning to adapt themselves and their situations and values to technology developed by others with differing needs, values and economic resources?) And the third project was the placement of a Tribal intern in EM-22.

The history of the Cooperative Agreement is not documented in this final report. But it should be noted at the outset of this report that the changes in management within CERT and the events leading up to the relocation of the administration from Oakland to Morgantown had a major impact on the course of the project. Although the goals and objectives were accomplished, they were done so not always as planned or anticipated. If the proof of the pudding is in tasting, then not only were the goals of the Cooperative Agreement between DOE and CERT achieved but the objectives of the projects as well. Perhaps of greater importance is the fact that the Cooperative Agreement became a vehicle for an even greater degree of cooperation between CERT, 50 energy Tribes, and the Department and the Administration for Native Americans.

Exploring the relatively uncharted waters of federal-Tribal relations in an era in which federal policy supports Tribal self-governance was one of the major reasons why DOE and CERT decided to enter into a Cooperative Agreement. The projects themselves have helped to map the terrain of federal-Tribal relations. But the experience of managing the Cooperative Agreement has deepened CERT's understanding of the challenges facing both parties to this unique American experiment, the challenge of intergovernmental relations in a system of shared governmental responsibility and authority.

A. History Project

1. Annotated Bibliography

a. Project Objective

To create a comprehensive bibliography that would support future research conducted by Tribes and other interested parties. Of particular importance to this project was to develop a resource that would complement the development of additional Tribal oral histories.

b. Project Methods

The methods used by the CERT historian were based upon accepted practices. To search libraries for references of Indians, Tribes, lands, lifestyles, etc., that related to the development of the nuclear weapons complex. Published, as well as unpublished sources, were identified, reviewed and summarized in the final product of the project that was completed.

c. Project Results

The completed Annotated Bibliography is an outstanding new tool for historic research. It provides a comprehensive base for a historian to find what has already been researched and written concerning the development of nuclear weapons and the impact on Indian Tribes' land, resources, and communities. The completed annotated bibliography is included in the attachments (see Attachment A).

d. Evaluation/Recommendations

The final document is evidence that the project was completed and meets the high expectations of the Department of Energy, the Council of Energy Resource Tribes and our shared Tribal constituents.

It is recommended that this project be continued in two ways. First, it is recommended that an Indian graduate school student or recent college graduate be placed with the Department's Historian. This placement would be to support and assist in the development of specific Tribal histories. It is recommended that emphasis be placed on oral histories from the communities affected by the establishment of federal nuclear weapons facilities. Second, it is recommended that a training and technical support component be implemented and maintained that would work with Tribes in the development of Tribal histories. The technical support component could be coordinated through the Historian's office by the intern. Workshops on how to organize, conduct and document oral histories, as well as a network of Tribal historians, could keep costs low and results high.

2. Video

a. Project Objective:

The video was produced as a means to document a Tribal oral history.

b. Project Methods

This project was not originally part of our history project but was suggested to us by the Wanapum Band or Tribe of the Yakama Nation. The Wanapum people historically held the lands that are now a part of the Hanford nuclear facility in southeastern Washington. The Band wanted their story recorded on video so that this important part of their history could be documented using visual media and so that it could be used as yet another method to teach their children and others about these events and their impact.

The Department concurred, approved an expanded scope of work, and provided a modest supplement to the budget. Because CERT was not expert in video production, we were not expected to supervise the project from a technical point of view. But CERT was asked to empower the Tribe to record their story by acting as a pass-through for the funding that allowed the video to be produced.

b. Project Results

It was anticipated that the video would be completed within the time frame of the Cooperative Agreement. But the technical and logistical aspects of the project caused the filmmakers to overrun the time limit imposed by the agreement. The video project tasks included the development of a script, the recording of the oral histories on-site and the editing of the entire project into an educational video. Given ideal circumstances the project might have been completed as projected. But coordinating of recording sessions for the community elders and the video crew was a complexity not foreseen and there were a number of technical problems that required a second attempt at video recording some of the informants. A substantial part of the work is done, but the video is not complete as of the end of this Cooperative Agreement.

c. Evaluation/Recommendation

The project cannot yet be evaluated on the quality of the final product. In terms of the effort to date, it might be said that by virtue of having to be carried over, the video project lacked sufficient oversight. It must be noted, however, that at no time did CERT act as a project manager by the insistence of the Wanapum Band and of the video production team and with the concurrence of the Department. CERT was designated to be the pass-through mechanism by which the costs of the videotaped oral history could be paid.

It is recommended that the project and any unused funds intended for the video be carried over into the next Cooperative Agreement. It is expected that the video will be completed within the first or second quarter of the follow-on Cooperative Agreement.

B. Internship

1. Project Objectives

- a. To provide a unique one-year professional experience in governmental operations, environmental programs and issues and policies to a recently graduated American Indian student or one enrolled in graduate school; and,
- b. To provide an opportunity for federal employees in a federal program to interact and learn about Indian communities and issues from the intern working with them.

2. Project Method

CERT would conduct a search for an intern and propose the placement for DOE concurrence. Once a candidate was selected the placement in Washington, DC, would be made. CERT would provide for the relocation costs of the intern and cover the other program costs. DOE would provide the intern with professional-level job assignments, supervision and direction.

3. Project Results

The program works well. The satisfaction of the three parties serves as the yardstick. The interns credit the program with helping them find direction for their career path while gaining invaluable experience at the higher levels of federal program and policy management (see Attachment B). They also find that the exposure to the Tribes and the issues important to the Tribal constituencies is of great value in career and personal terms. DOE reports that the CERT Intern program gives them exposure and dialogue on Indian and Tribal values and issues in a way that formal dialogue with Tribal delegates cannot. CERT's satisfaction is gained by the fact that we have identified the interns and through them we serve Tribal interests.

4. Evaluation/Recommendations

The CERT-DOE Environmental Intern program is working so well as to suggest that it could be used as a model not only for DOE's other programs with significant Indian interface, but for other federal agencies across a broad spectrum. At a minimum, we would recommend that the CERT-DOE Intern program be expanded to include the offices of Intergovernmental Affairs, Fossil Fuels, Energy Efficiency & Renewable Energy, Grants & Contracts Management, and the Department's Controllars office.

- C. Tribal Interface with DOE federal technology development initiatives.

1. Project Objective

To use CERT's facilitated participatory methods to develop an interface design between Tribes and technology development.

## 2. Project Methods

Using CERT-developed participatory methods, CERT assembled a team of Tribal representatives from a broad geographic and cultural spectrum to develop the protocols of intergovernmental and cross-cultural interface.

## 3. Project Results

The barriers that exist between Indian Tribes and the federal government were adequately exposed. Communication and understanding proved to be a continuing challenge. Words intended to convey information became suspect of intending manipulation or confusion. Nevertheless, by exposing the present inadequacies of communications methods and the unintended misunderstandings we were able to move forward. The project identified how an interface could be designed and used to bridge the communications and understanding gaps that prevent sound intergovernmental relationships from developing around such important priorities as the development of technologies for environmental mitigation and remediation.

## 4. Recommendation

It is recommended that the special subject of intergovernmental relations between federal agencies and the federally recognized Indian Tribal governments be focused upon more directly and that through a redesigned workplan a new initiative in this important area be undertaken.

## D. Special Projects

### 1. Project Objective

To use the special relationship that the Department and CERT have developed via the Cooperative Agreement to address issues between Indian Tribes and Department of Energy programs and activities.

### 2. Project Method

CERT was asked to organize a special session of instruction for managers in the Department of Energy. The session was to focus on the following: convey a sense of the depth of Tribal values; create a sense of mutual values that could be the basis for a common ground of understanding; and provide factual information on the legal and political basis of the special trust relationship between the federal government and federally recognized Indian Tribes.

### 3. Project Result

This session was provided at DOE headquarters on October 8, 1998. The special session was titled "Exploring the Frontiers of Federal/Tribal Government-to-Government Relations." The session and the subsequent discussion were enlightening to many.

### 4. Evaluation/Recommendations

The session and the dialogue that it engendered, along with the lessons learned from the aforementioned project that was to develop the interface for technology development, proved to be invaluable in developing an intergovernmental component to the next DOE-CERT Cooperative Agreement.

## II. Projects funded by the Administration for Native Americans

### A. Tribal Access to Federal Hydropower, Phase I:

#### 1. Project Objective

The goal of the Tribal Access to Federal Hydropower project is to make federal hydropower available and accessible to Indian Tribes in the Colorado River Storage Project region in a manner that supports each Tribe's social and economic priorities. Further, the desired result is that the hydropower be obtained at a fair share and at an at-cost price, with the Tribes being viewed as preference customers.

The project is conceptualized as a three-phase effort that culminates in twenty-year contracts between individual Tribes or Tribal agencies and the Western Area Power Administration, often referred to as Western or as WAPA, for the delivery of the agreed upon electricity allocation beginning on October 1, 2004.

#### a. Phase One Objective

Phase One objectives of the three-phase project, completed on April 30, 1999, were:

- (1.) To form a working coalition of all the eligible Tribes in the Colorado River Storage Project service area in conjunction with the regional Intertribal organizations; and,
- (2.) To provide accurate, timely and useful information to each Tribe and to each regional Intertribal organization with the intent of aiding each Tribe to participate in the hydropower process in a wise and informed manner.

#### b. Phase One Method

The first step of the coalition-building task was to involve the regional Intertribal organizations in the process. They could then facilitate voluntary Tribal participation in securing fair share allocation of the federal hydropower resource for the Tribes within the service area of the Colorado River Storage Project area. This was accomplished on March 19, 1998, when CERT and the executive directors of the targeted regional intertribal organizations met in Denver.

At that meeting which was held at CERT, the Executive Directors formed the ad-hoc **Intertribal Energy Network**. The participant organizations included the following: All Indian Pueblo Council representing the 19 Pueblo Tribes of New Mexico; Inter Tribal Council of Arizona representing 20 Indian Tribes;

Southern California Tribal Chairmen's Association representing 26 Tribes; Mni Sose Intertribal Water Rights Coalition representing 28 Tribes of the Missouri River Basin; and CERT representing its membership of 50 energy resource Tribes.

Each organization agreed to work together, sharing information and organizational resources to the extent each was able owing to staff, experience or budget constraints in order to accomplish the goal of informing all of the Tribes of the opportunity. Each also agreed to assist as resources so the Tribes could use the information effectively for their benefit. In addition it was agreed that the participants would work together to conduct regional electricity energy conferences with workshops for the Tribes. Further, it was decided that these conferences with workshops would be conducted in Southern California, Arizona, and New Mexico and that they would be co-sponsored by the regional organizations and CERT.

The conference agendas were designed to introduce the Tribal representatives to the structure of the electricity industry, the role of federal and state regulatory authorities, the types of business organizations within the industry and the various sources of electricity. Within the overall industry structure lie the federal water projects that produce federal hydropower and the federal power marketing administrations that market that power to preference customers. The participating organizations of the Intertribal Energy Network also decided to include in the agenda information regarding the federal and state efforts to restructure the electricity industry from government-regulated monopolies to competitive markets. The rationale for this decision was the belief that Tribes needed to see the big picture of the industry and the changes that were underway in order to make empowered decisions related to accessing federal hydropower. The final component of the agenda was a facilitated session in which the Tribal representatives collaborated in the development of regional electricity strategies. During the facilitation the Tribes also provided feedback on the conference, workshops, and the overall project.

The Intertribal Energy Network declared that they would share information and views with each other on all issues concerning electricity, federal power marketing administrations and related public issues. By sharing with each other it was felt that each intertribal organization could do a better job of representing its members' interests. Copies of the comments and formal input into the process of Tribal access to federal hydropower are included in the attachments to this report (see Attachment C).

The Regional Conferences, of which an example of agenda and outcome are included in the attachments (see Attachment D) to this report, were held according to the following schedule:

Arizona:	Camp Verde	March 1998
	Prescott	August 1998
New Mexico:	Santa Fe	May 1997
	Albuquerque	June 1998
	Albuquerque	July 1998
	Albuquerque	April 1999
Southern California:	San Diego	September 1998

c. Phase One Results

The objectives for Phase One of this three-phase project were met. This is true not only in the sense that the activities were completed but in the sense that the activities had the intended effect of influencing the decision-making process for both the Department of Energy and the Western Area Power Administration. The decision-making processes of the Indian Tribes and their regional Intertribal organizations were affected as well.

Western originally proposed an electricity resource pool of 4% of the total amount available to be marketed from the federal water projects in the Colorado River Storage Project area to be allocated to the Tribes. In addition, Western proposed that the Tribes accept one of two ways to receive the allocation. One was to form a Tribal electric cooperative. The other was for the Tribe to accept a credit for the value of the federal allocation on the bill from their current electricity provider.

The collective Tribal response to Western's plan that was made possible by the formation of the Intertribal Energy Network, a major objective of the project, resulted in significant changes in Western's decision-making.

On the basis of the comments received from CERT, individual Tribes, and regional Intertribal organizations, Western increased the resource pool allocation from 4% of the total available to 7% of the total available. This is that Indian Tribes would receive from 50 to 65% of their total 1998 electrical load from the federal hydropower resource base. The impact of this means that Tribes will be able to save from 15 to 30% in electricity rates charged in 1998 beginning in 2004. In monetary terms it means a value of over \$300 million based on 1998 electricity prices paid by the Tribes.

Western's original proposal regarding the formation of a Tribal electric cooperative as an alternative in order to receive a hydropower allocation was too big a job for most Tribes to undertake in the time frames of the power allocation process, especially when no technical assistance and training is available. This alternative was therefore not viable, although perhaps an electric cooperative would be a good longer term developmental goal.

The second alternative of accepting a “bill crediting” solution places the Tribe in a passive and dependent role, unable to manage or control their own electricity future. Tribal control of their electricity future made little sense when the industry consisted of government-sponsored and -regulated monopolies. But with a competitive and deregulated market place in the process of coming into being, the ability to manage energy and control the Tribes future become critical for social and economic well being. Therefore, locking Tribes into a 20-year “bill crediting” arrangement between Western and the Tribe’s current provider was not a viable alternative.

The upshot of Tribal input into Western’s decision-making altered the allocation plan to such a degree that presently it will allow Tribes to evolve over the life of the contracts from simpler administrative forms to more complex management structures and operations. Therefore, a Tribe can start where they are on the organizational development curve and they can progress as far as their interests allow without putting the federal hydropower benefit in jeopardy.

Another outcome of Tribal input that has proved productive are the working groups involved in state electricity issues, as well as those groups that serve as sounding boards on specific federal hydropower issues and larger issues that arise. These working groups evolved when each of the regional intertribal organizations formed energy committees of interested member Tribes.

The organization and maintenance of an Intertribal Energy Network is a unique accomplishment. This is particularly so when participation is voluntary, when it is neither induced by funding nor mandated by law or major political crisis. In addition to the direct contributions to this project, the Intertribal Energy Network was successful in convincing two federal agencies, the Administration for Native Americans (ANA) and the Department of Energy (DOE), to focus attention on electricity as a foundation for future Tribal social and economic growth and development. Both agencies are developing programs and requesting appropriations for their FY 2001 budgets that will provide support for Tribal energy policy, planning and management, as well as funding for Tribal energy conservation, electricity generation and for infrastructure to allow for improved service reliability.

#### d. Evaluation/Recommendations

The objectives of Phase One were met. The intertribal coalition was formed. Tribes and their regional intertribal organizations became active volunteer participants in the project. And, individual Tribes and their intertribal organizations were able to use the information and the analysis of the process to effectively work with Western to produce more desirable and useful end results.

In retrospect, the project suffered from the fact that not enough emphasis was placed on organizing a strong, technology-based information and communications component. At the end of each workshop and conference CERT and the host regional intertribal organization conducted a facilitated session asking for feedback from the Tribes. At every session, both in formal and in informal conversation, Tribal representatives asked if there was information available on the Internet or if there was an interactive web page that they could access.

Since this was not a planned component in Phase One activities it is recommended that it be included in Phase Two.

B. Energy Interns (1<sup>st</sup> Year of a three-year project)

1. 1<sup>st</sup> Year Project Objective

The objective was to initiate the energy internship program and to place as many interns as may be possible within the limits of the budget.

2. 1<sup>st</sup> Year Project Method

Because the project budget year began in the spring, May 1, 1999, students and prospective hosts for the summer internships would prove difficult to recruit.

In order to overcome the problem of insufficient time to find hosts for the intern program, we developed agreements with entities with which we had an extensive past working relationship. To recruit interns, we contacted students from our own student database that comprises former CERT interns and former participants in our summer Tribal Resource Institute for Business, Engineering and Science.

3. 1<sup>st</sup> Year Project Results

Kansas Pipeline Operating Company

Lenexa, Kansas

(913) 962-9999

Contact: Tracey LeBeau

Interns: Vicente Fuentes Mescalero

Brandon Glenn Crow

Maria Perez Taos Pueblo

University of New Mexico

Anderson Schools of Management

Albuquerque, New Mexico

(505) 277-6471

Contact: Dean Howard Smith

Anderson Schools of Management

Interns:	Colin Ben	Navajo
	Patricia Browne	Navajo
	LaMaia Cramer	Navajo
	Rebekah Horsechief	Pawnee
	Elvira Jake	Navajo
	Elisa James	Cherokee
	Steve Sexton	Pawnee
	Mario Swampy	Cree
	Alisha Thompson	Navajo

#### 4. Evaluation/Recommendations

Given the time constraints, it is remarkable that the intern program could actually have begun in a timely manner and that we were able to place so many interns.

For the coming year, better planning and more staff coordination will result in greater diversity of placement.

**Attachment A**

**HANDBOOK FOR CONDUCTING ORAL HISTORY INTERVIEWS RELATED TO  
TRIBAL AND INDIAN PARTICIPATION IN THE CONSTRUCTION, OPERATION  
AND CLEANUP OF THE NUCLEAR WEAPONS COMPLEX**

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## **PREFACE**

The Handbook for Conducting Oral History Interviews Related to Tribal and Indian Participation in the Construction, Operation and Cleanup of the Nuclear Weapons Complex was prepared under Cooperative Agreement DE-FC26-95SF20807 between the U.S. Department of Energy and the Council of Energy Resource Tribes. The Handbook is designed primarily to be a resource to the researchers, Indian and non-Indian, who will be conducting oral history interviews related to tribal and Indian participation in the construction, operation and cleanup of the U.S. nuclear weapons complex. The sample questions, equipment checklists, release forms and especially the annotated bibliography are important and useful tools for the tribal researcher.

Yet the Handbook also serves to illustrate how a federal agency, like the U.S. Department of Energy can work with a tribal organization, like the Council of Energy Resource Tribes to help build or enhance the tribal management, educational and technical systems and institutions in a manner consistent with DOE's trust and policy obligations and with CERT's mandate to support, and not supplant tribal development. The CERT Board of Directors and management are pleased with both the results of this project and with the way it was accomplished.

A. David Lester  
Executive Director

**HANDBOOK FOR CONDUCTING ORAL HISTORY  
INTERVIEWS RELATED TO TRIBAL AND INDIAN  
PARTICIPATION IN THE CONSTRUCTION, OPERATION AND  
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# CHAPTER ONE

## WHAT IS ORAL HISTORY?

Indian people tell stories. The storyteller holds an honored place in tribal societies. Our past, our homeland, glorious and brave deeds, and genealogies are all passed from one generation to another through our stories.

The modern oral history is not entirely dissimilar to the oral traditions of indigenous societies. However, there are some differences. Good oral history isn't just taping someone talking; it takes conscientious research and careful planning at several levels: in deciding the project focus; in selecting persons to be interviewed; in developing appropriate questions to be asked; and in learning to become a good interviewer.

Oral history interviews are distinguished from other types of storytelling and taped interviews in that the purpose is to create a historical record for the future. Ideally, the contents are copyrighted and the rights belong to the speaker (interviewer and interviewee). Oral history interviews are designed to create a record where none previously existed, as well as to bring different perspectives to the existing information found in written histories. The oral historian finds out what it was like to participate in a particular event or how the interviewee felt about his or her experiences. One might want to know who else was there and what they did. The oral historian will review all written materials to establish what information is already a matter of record. Then the oral historian will formulate questions designed to uncover information that is not recorded.

Often interviewees will share information about events or situations from the past with a view to clarifying the record or shedding light on what happened. Through the oral history interview, it is often possible to find out why something happened or to obtain a fuller picture of what actually happened.

Oral history interviews, if done correctly, will be viewed by historians in the future as another primary source in the same category as letters, memoirs, diaries and journals. They are the interviewee's recollection of an event or an experience.

Oral history interviews investigate interactions, relationships, dynamics, and contexts. Among the challenges inherent in gathering oral histories and interpreting them are building trust and rapport, balancing multiple perspectives, negotiating interview-interviewee roles, managing personal bias, and maintaining the ethics of the research partnership. Oral historians seek broad-based information beyond their immediate research needs and arrange ways of sharing that information with the larger community by depositing the tapes or transcripts and related materials in archives, libraries, and other special collections and by producing publications and programs aimed toward disseminating the information gained in the oral history partnership.

## **CHAPTER TWO**

### **EQUIPMENT**

The interviews you conduct and the stories that result are the culmination of hours of research and study. These stories will become part of the traditions of the families and tribes involved. Don't let a poor quality recording ruin all your hard work.

A durable, dependable tape-recorder and a good microphone are essential to high-quality oral history interviewing. Below are some features to look for in the equipment you plan to use. If you cannot afford to purchase suitable equipment, try renting or borrowing it. Local schools, libraries, or historical societies may be willing to loan equipment in exchange for a copy of your interview tapes. Whatever equipment you use, know it well. Practice, experiment, test and play with it until its operation is second-nature to you.

#### **TAPE RECORDER**

Most oral history projects use a light, durable standard cassette recorder. Recorders should have the following features:

1. Digital tape counter.
2. Battery indicator/recorder level.
3. Jack for external microphone. Do not use the tape recorder's internal microphone as it will pick up all of the equipment's operating sounds.
4. Be sure it can be used with batteries or wall-outlet electricity--use electricity from a wall outlet whenever possible, as it is more reliable than batteries.

#### **TAPES**

Use only good quality C-60 (thirty minutes per side) cassette tapes, as the C-90 and C-120 cassettes are thinner and tend to stretch and bleed, as well as break more easily. You

may want to test the tape with the equipment you will be using to ensure that you are getting the best possible quality before purchasing all the tape you require. Higher priced music quality tape will be overkill, but the generic, bargain bin variety will probably not have the required sound and archival quality your work deserves.

Check to make sure tapes have screw casings (tiny screws holding the tape together, not heat sealed). Other factors to consider include:

1. Use the same brand of tape when duplicating cassettes. All C-60 cassettes are not the same length; buy tapes for duplicates at the same time you buy tape for original interviews.
2. To ensure that your tapes have a future, copy them onto 1.5 mil Mylar or polyester-backed, open-reel recording tape. This tape is magnetically stable and will last indefinitely.
3. Be sure to punch out the tabs on the back of the cassette after the interview so that the tape cannot accidentally be erased.
4. Store tapes in a cool, dry place. Be sure to keep them free of dust. Rewind them annually.

## **MICROPHONE**

An external microphone, not encased in the recorder itself, provides the least "hiss" or background noise or machine noise from within the recorder. Microphones mounted on stands or Lavalier microphones provide the best isolation from ambient sounds. Table microphones should be placed close to the interviewee. Table microphones can pick up sounds of writing, paper shuffling and finger tapping. Always test microphones in advance to be sure that the interviewee and interviewer can be clearly heard. Some interviewers use earphones to monitor what is being recorded.

Higher quality microphones require their own batteries. These will need periodic testing and replacement. Excellent recordings can also be obtained with Lavalier microphones for each participant, joined by an inexpensive Y-cord adapter.

## **PROCESSING THE TAPES**

1. Make sure tabs of cassettes are punched out to guard against accidental erasure.
2. As soon as the interview is over, label the tape(s): Include the names of the interviewee and interviewer, date and place of interview, project title (or institution), and numbered sequence of tapes.
3. If at all possible, duplicate your tape(s) promptly. The original tape(s) can then be stored, reducing the danger of accidental erasure or damage.
4. Make sure all the necessary releases (Informed Consent Form, Deed of Gift Form) accompany the interview. An administrative checklist should be used.

## **CHAPTER THREE**

### **THE INTERVIEW**

Conducting an oral history interview is more than merely asking the interviewee to talk about himself or herself. The interviewers should know as much as possible about the person being interviewed and the subject of the oral history session. Select and train personnel for the oral history project. A list of interview questions should be developed to assist the interviewer in the session. Start the questions with "Who, When, Where, How, and Why." Do not ask questions that require just a simple "yes" or "no" answer. Keep the list brief and be flexible enough to add other questions or delete prepared ones during the interview. The following list of questions is based on the tribal experience at Los Alamos but can be easily adapted to address the experiences of other tribes. The list of questions is not meant to be inclusive, but is provided to assist the interviewer develop other questions. These questions should never be read directly off the list.

#### **QUESTIONS ABOUT LIFE BEFORE THE MANHATTAN PROJECT**

Where were you living when the Japanese bombed Pearl Harbor?

With whom were you living? Parents? Brothers and sisters? How many? Names? Ages? Where are they living now? Spouse? Children? How many? Names? Ages? Where are they living now? Do you have photographs of your brothers and sisters when they were young?

Did your parents work? What kind of work did they do? Where did they work? How did they commute to work? Where did they buy the gasoline, tires and oil for the car? Did your parents tell you about gasoline and tire rationing? What did they say about gasoline and tire rationing? What did your parents tell you about the work they did? Do you have any photographs of your family at work?

Can you tell me a little bit about the house you lived in? How did your family cook their meals? How did your family bake? How was it constructed? Wood? Adobe? Did it have electricity? Running water? How did you get water? What were your responsibilities for cooking? Gardening?

Did your family have a garden? How big was it? What did your family grow in the garden? Who worked the garden? How did your family work the garden? How was it irrigated? What was done with the garden produce? Eat? Trade or barter? Sell?

What was your favorite food? What did you eat at breakfast? Lunch? Dinner? How did you store food? Where did your family do its grocery shopping? Do you remember what kind of groceries your parents bought? What did your parents tell you about food rationing?

What kind of clothes did your family wear? For school? For work? At home? For Feast Days and other special days? Did people sew their own clothes then? What do you remember about people sewing their own clothes? Where did you family buy the clothes they didn't make? What kind of clothes did your parents buy? For themselves? For the children?

Did people in your family hunt/fish? What did they hunt/fish? How did they prepare themselves to hunt/fish? Who did the hunting/fishing? How did they hunt/fish? Where did they hunt/fish? Did they tell stories about the hunt/fishing? About the animals they hunted/fished? What do you remember about those stories? Besides as food, how were the animals used? Hides? Hair? Antlers? Bones? In crafts? As decoration? For ceremony? Do you still have some of the items that were made with these animal parts?

Were there plants your family used as food or medicine? Did you learn about those foods and medicines? Who taught you? What did he/she tell you about the plants? Did people tell stories about the foods and medicines? What do you remember about those stories? Where did you gather those foods and medicines? Did someone write the stories down? If so, do you know where the written stories are?

Did you or your family members visit doctors when you were young? What do you remember about these visits? For what reason did you visit the doctor? Where was the doctor's office located? How did you travel to the doctor's office? Did doctors or nurses visit your home? What do you remember about these visits?

Where did you go to school? How did you travel to school? Who were your favorite friends in school? Do you know where they are now? Were there non-Indian students at your school? Did you have non-Indian friends? Who were they? What can you tell me about them? Do you know where they are now? What kind of recreational activities or hobbies did you engage in? Sports? Art? With whom did you do these activities? Who were your favorite teachers? Why? Were they Indian? What were your favorite classes? Why were these your favorite classes? Did you have homework? Where did you do your homework?

When? Did anyone help you with your homework? Who? Do you have any photographs of you or your school friends and teachers? Do you have any of your report cards, diplomas or other school records?

What do you remember about the Feast Days before Los Alamos? What did you do to prepare for them? Did non-Indians attend?

Was anyone in your family a potter or weaver? What do you remember about their work? Where did they get the clay/wool? What do you remember about how they prepared the clay/wool? What did they tell you about the designs they used? Did they tell you stories about making pots or weaving? What do you remember about those stories?

Did any of your family members join the military? Did your family do anything special when someone in the family joined the military? What did they do? Did the servicemen or servicewomen write to you? Do you still have the letters? Did they send you any photographs? Do you still have those photographs? What can you tell me about your family members who joined the military? What did he/she do after the war? Where is he or she now?

#### **QUESTIONS ABOUT APPLYING FOR THE JOB**

How did you first hear about employment opportunities at Los Alamos?

How old were you when you first heard about employment opportunities at Los Alamos?

What were you doing before you worked at Los Alamos?

What were the reasons you applied for work at Los Alamos?

What did your parents think about you working there?

What did your husband/wife think about you working there?

What did your children think about you working at Los Alamos?

What did your friends think about you working there?

Where did you apply for work at Los Alamos?

How did you get there?

With whom did you travel to apply for work?

How did you hear that you could work at Los Alamos?

What did you do when you heard that you could work at Los Alamos?

What do you remember about applying for work at Los Alamos?

Did you have to take a physical examination to work at Los Alamos? Where did you take the physical examination?

### **QUESTIONS ABOUT THE JOB**

How did you travel to Los Alamos? Did any of your friends travel with you? Who were they? Do you know where they are now? At what time did you have to get up in the morning to get to work? Did you know everyone on the bus? Did you make friends with other people on the bus? Where were they from? Did you keep in touch with them after you stopped working at Los Alamos? Where are they now? What do you remember about the ride? How long was the ride? How many stops did the bus make? Where did the bus stop? How many people were on the bus?

What happened when the bus got to Los Alamos? Did you have to get a pass to get into Los Alamos? What do you remember about applying for the pass? What do you remember about the guards checking your pass? What happened if you forgot your pass?

What did you do at Los Alamos? For what families did you work? Can you describe your workday? What did you bring for your lunch? Who made your lunch? Where did you eat your lunch? With whom did you eat your lunch? What kind of food did the Los Alamos families eat for lunch? Were there children in the families? What do you remember about the children? What did the women do during the time you were working at their homes? Did they speak to you? What did they talk with you about? Did they ever visit you at the Pueblo? How often did they visit you? What do you remember of their visits? Do you have any photos that were taken during the time you were working at Los Alamos? Did you write to the families you worked for after you stopped working at Los Alamos? Did they write to you? Do you still have those letters?

How often did you get paid? How did you get paid? Did you have to sign for your paycheck? Were there shops or stores on the base where you could purchase food or clothing? Did you shop at those places? What kind of merchandise did they sell? What did you usually buy at those shops? Do you remember how much you were paid?

Did you get hurt or sick while you were working at Los Alamos? Did you know anyone who got hurt or sick while they were working at Los Alamos? What happened when people got hurt or sick at Los Alamos? Did you go to a clinic or see a doctor on the base? Did you fill out any forms at the clinic or the doctor's office?

Before beginning the interview, record a brief introductory statement that states who you are, who you are talking with, the date, location, and subject of the interview. As you set up your equipment try to make it as unobtrusive as possible and put the interviewee at ease. Bring some photographs, newspaper clippings, or a scrapbook for the interviewee to look through as you are getting your equipment ready. Try to minimize distracting noises such as air conditioners, appliances, fans, radios, televisions, etc. as the recording equipment will amplify sounds you might not normally notice.

During the interview the interviewer should be attentive, courteous and responsive in a non-verbal way (such as nodding your head and other gestures to let the interviewee know you are listening to what is being said). Make notes as you go along so you can follow up with clarifying questions later. Write down names or words you are not sure of so you can obtain correct spelling or explanation after the session. Allow the interviewee opportunity to think and allow for periods of silence before rushing on to the next question. Remember researchers want to know interviewee viewpoints, not the interviewer's.

Keep track of time during the interview. You don't want to tire the interviewee. Keep the interview to 90 minutes or less. Schedule additional interviews before you leave the session if you feel you don't get all the information the interviewee can provide on the subject.

After the interview, carefully label the tape(s) with interviewee and interviewer names, date, location, and topics covered. Be sure you have the signed oral history donor and release form and thank the interviewee for his/her time and participation.

Make sure the tape will be transcribed. Have a finding aid constructed and ensure that preparations are made for the preservation and duplication of the tape.

Make sure the tapes are properly stored and the playback equipment is functioning the way it should before allowing access to the tapes for research.

## **CHAPTER FOUR**

### **ETHICAL AND LEGAL CONSIDERATIONS**

(From the Oral History Evaluation Guidelines of the Oral History Association, 1992)

#### **ETHICAL CONCERNS**

1. Each oral history interviewer should commit herself/himself to producing the highest quality interview possible. The interviewer should realize that the life of the tape extends far beyond the immediate use and should strive to gather information that will be relevant to future users.
2. The interviewee should be informed of her/his rights and interests, the purposes of the program/project, interview and transcribing procedures, final location of tapes and transcripts, and potential use of the memoir.
3. Interviewers should guard against any possible exploitation of interviewees and be sensitive to ways in which interviews might be used.
4. Interviewers should be sensitive to the communities from which they have collected their oral histories, taking care not to reinforce thoughtless stereotypes or to bring undue notoriety to the communities. The resulting interviews should be made accessible to the communities.
5. Interviewees should be given the opportunity to respond to questions as freely as possible and not be subjected to stereotyped assumptions.
6. Interviewers should make every effort to place completed interviews in an archives or repository where they can be used by other interested researchers.

#### **LEGAL CONCERNS**

1. Oral history interviews are subject to U.S. copyright law.

2. For public use of tapes/transcripts, both the interviewee and the interviewer must give written permission.
3. Standardized release forms are useful; a general release and a separate form permitting restrictions or a time seal will be needed. You may adapt release forms from other projects, or consult a lawyer and create your own form. The latter may be advisable if your project has any sensitive aspects.
4. Ideally, a general release should be signed before an interview series begins. Restrictions may be added by supplemental agreement.
5. Restricted oral memoirs should have specified opening dates. It is very difficult to enforce restrictions, for instance, that are linked to the duration of someone's lifetime.
6. Oral history interviews are subject to libel and slander law. The interviewer should be sensitive to possible violations of this law and be prepared to seal this portion of the tape or edit the transcript so that the name of the person being slandered is not made public.

**COUNCIL OF ENERGY RESOURCE TRIBES  
ORAL HISTORY  
INFORMED CONSENT**

1. I hereby agree to participate in an interview in connection with the oral history project known as \_\_\_\_\_ . I understand that I will be asked about \_\_\_\_\_.

2. The interview will be audiotaped. In the interview I may be identified by name, subject to my consent. I may also be identified by name in any transcript (whether verbatim or edited) of such interview, subject to my consent.

3. I understand that the interview will take approximately \_\_\_\_ hours and that I can withdraw from the project without prejudice prior to the execution and delivery of a deed of gift, a form of which is attached hereto. In the event that I withdraw from the interview, any tape made of the interview will be either given to me or destroyed, and no transcript will be made of the interview.

4. Subject to the provisions of paragraph five below, I understand that, upon completion of the interview, the tape and content of the interview belong to the Council of Energy Resource Tribes, and that the information in the interview can be used by the Council of Energy Resource Tribes in any manner it will determine, including, but not limited to, use by researchers in presentations and publications.

5. The Council of Energy Resource Tribes agrees that: (i) it will not use or exercise any of its rights to the information in the interview prior to the signing of the deed of gift; (ii) the deed of gift will be submitted to me for my signature at completion of the interviews; and (iii) restrictions on the use of the interview can be placed in the deed of gift and will be accepted as amending the Council of Energy Resource Tribe's rights to the content of the interview. I understand that I have the right to review the tape or transcript of the interview before I sign the deed of gift.

6. Any restrictions as to use of portions of the tape will be edited out of the final copy of the transcript.

7. I understand that at the conclusion of this particular study and upon signing the deed of gift, the tape and one copy of the transcript will be kept in the archives of the Council of Energy Resource Tribes for academic use by other researchers.

8. If I have questions about the research project or procedures, I know I can contact the researcher, \_\_\_\_\_, at the Council of Energy Resource Tribes, 695 South Colorado Boulevard, Suite 10, Denver, Colorado, 80246, (303) 282-7576.

Interviewer \_\_\_\_\_

Interviewee \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Phone number \_\_\_\_\_

**COUNCIL OF ENERGY RESOURCE TRIBES  
ORAL HISTORY  
DEED OF GIFT**

(a) I, \_\_\_\_\_, hereby give to the Council of Energy Resource Tribes for scholarly and educational use the recordings of interview(s) conducted with me on \_\_\_\_\_, and I grant to the Council of Energy Resource Tribes all of the rights I possess in those recordings, including all intellectual property rights. I understand that the Council of Energy Resource Tribes grants me a nonexclusive license to make and to authorize others to make any use of the content of those recordings, and that the Council of Energy Resource Tribes will, at my request, make available a copy of those recordings for such use.

(b) If I wish to remain anonymous in any interview transcript or reference to any information contained in this interview, I will specify this restriction in paragraph (c) below.

(c) The foregoing gift and grant of rights is subject to the following restrictions:

This agreement may be revised or amended by mutual consent of the parties undersigned.

Accepted by:

\_\_\_\_\_ Date \_\_\_\_\_

Interviewer--Council of Energy Resource Tribes

\_\_\_\_\_ Date \_\_\_\_\_

Interviewee signature

\_\_\_\_\_

Interviewee address and telephone number

## Chapter Five

### ANNOTATED BIBLIOGRAPHY

#### Books

- 001 Acatos, Sylvio and Maximilien Brugman. *Pueblos: Prehistoric Indian Cultures Of The Southwest*. Facts on File, 1990.

The author of this volume is a cultural historian. The photographer is a well-known artist. The general premise of this book is that all forms of art and culture are universal in their artistic representations.

This book provides spectacular pictures of Indian art, crafts and cultural aspects. Its text is a basic primer of Pueblo culture; ceremonials, sociology, and art. Some of these photographs show how Indian life is linked to the distant past and to the universal forms of the Earth and Sky.

- 002 *The American Atom: A Documentary History Of Nuclear Policies From The Discovery Of Fission To The Present, 1939-1984*. Edited by Philip L. Cantelon and Robert C. Williams. University of Pennsylvania Press: Philadelphia, 1984.

This book is a collection of primary sources and documents organized chronologically to tell the story of atomic energy and weaponry. It starts with the discovery of fission and continues to the 1980s with several major documents regarding modern nuclear policy. The relevant sections of the book are broken up into the following periods:

- The Nuclear Age: Background and Visions.
- The Manhattan Project.
- Atomic Energy in a Postwar World.
- The Hydrogen Bomb.
- The Oppenheimer Case.
- Nuclear Testing and the Test Ban.
- Deterrence.
- Arms Control.
- Nuclear Power.

- 003 American Nuclear Society. *Historical Perspectives: Dawn Of The Nuclear Age*. American Nuclear Society, 1989.

- 004 Armine, Michael. *The Great Decision: The Secret History Of The Atomic Bomb*. New York: Putnam, 1959.

- 005 Atomic Energy Commission. *Historical Manager's Correspondence from the Hanford Site to the Atomic Energy Commission, 1946-1947* [CD-ROM].

This material is available in the DOE public reading room located at the Washington State University Library, Richland, Washington. This is a CD-ROM set of correspondence between the Hanford site and the Atomic Energy Commission for the years 1946-1967. This set is available for duplication and circulation if a copy is desired.

- 006 Axtell, Horace and Margo Aragon. *A Little Bit Of Wisdom: Conversations With A Nez Perce Elder*. Lewis-Clark State College: Confluence Press, 1997.

This memoir, in collaboration with an oral historian, is an account of an interesting life lived in remarkable times. From an Indian point of view, we see both his Indian life and his experiences in the army and later as a veteran.

In 1945, we get an eyewitness account of the Nagasaki Bombing. Axtell's company was set up in a school that had miraculously survived the bomb. He is surprised by the level of destruction and death but never expresses feelings of horror at what he saw. The author was also briefly stationed in Hiroshima, which he described simply as "a mass of rubble."

In some ways, his perceptions of the military and his place in it are more interesting. Axtell's was a generally good experience because he did not view his Indian heritage as separating him from the Anglos in his unit. This book is about his lasting relationships with the Anglos, focusing on their similarities of hardship and their common perceptions of the war. His book is the only known account of an Indian witness to the aftermath of the atomic explosions.

- 007 Badash, Lawrence, Joseph O. Hirschfelder and Herbert P. Broida, Eds. *Reminiscences Of Los Alamos, 1943-1945*. Dordrecht, Holland: D Reidel Publishing Co., 1980.

This collection of ten reminiscences was originally a public lecture series held in 1975 at the University of California at Berkeley. The contributors were John Dudley, Edwin McMillan, John Manley, Elsie McMillan, George Kistiakowsky, Joseph Hirschfelder, Laura Fermi, Richard Feynman, Bernice Brode, and Norris Bradbury. The editors provide biographical sketches of the contributors. They are enhanced by good chapter notes.

- John Dudley writes an essay on the site selection of Los Alamos. At Gen. Groves' direction, he says he covered over a thousand miles by air, rail, auto and horse. He contends that he was the first to suggest the Jemez Springs site and also pushed for Los Alamos.
- Edwin McMillan concentrates on the period from September 1942 to September 1943. He went to work for Oppenheimer at Berkeley after joining the project. He helped to plan for the lab and set up Los Alamos. He was responsible for recruiting and helping to steal away Harvard's cyclotron.

- John Manley was associated with Rabi at Columbia. He and Szilard went to the Met Lab at Chicago. Along with Oppenheimer, Manley went to Gen. Groves to propose a centralized lab.
- Elsie McMillan lived on bathtub row next door to the Oppenheimers. She states, "We had known Indians and been to their dances, but because of Pascualita, our house keeper, we had the unique experience of going down to the Pueblo and having lunch with the Penas many times . . . On our visit . . . they gave our daughter Ann a black San Ildefonso tea set and asked her to join the Indian children in the corn dance." (pg. 44). "In all her young life, we never bought a pair of shoes for her, because the Pena family, in their generosity, their love, made white shoes from deerskin for Sundays and brown shoes for her for every day." (pg. 45).
- George Kistiakowsky was brought into the Manhattan Project by Conant. At first, in the fall of 1943, he was just a consultant, but by the end of January 1944, he went on full time.
- Joseph Hirschfelder says, "At Los Alamos during WWII, there was no moral issue with respect to working on the bomb." (pg. 68). "The idea was that as each new problem developed, new experts were hired to solve that problem." (pg. 72). He also states that, ". . . very few people believed us when we predicted radiation fallout from the atom bomb." (pg. 75). He also has a small section in his essay on his colleagues, their personalities, and perceptions. He has a rather unique memory of Indians, "All through the war, the security guards left a hole in the fence so that the Indians could climb through and come to the moving pictures and also do their shopping at the PX. I always believed Oppenheimer was responsible for that hole." (pg. 79).
- Laura Fermi states that, "As for myself, I greatly enjoyed my break from physics. I loved Los Alamos though it kept me very busy." (pg. 96).
- Richard Feynman was recruited for the Manhattan Project even before he had his Ph.D. Feynman said, "All science stopped during the war except the little bit that was done at Los Alamos and that was not much science; it was mostly engineering." (pg 76).
- Bernice Brode lived in Los Alamos from September 1943 to December 1945. She writes, "The Indians were brought to the site every weekday including Saturdays . . . After I became acquainted with some of the Indians I found that they liked us on the Hill because of this working relationship. It was the first time they had known any group of Anglos who were not primarily interested in their welfare or curious about their cultural patterns. We accepted them as a part of our strange life on the mesa. We began to visit their ceremonials . . . but before long, we went to the Pueblos as their guests." (pg. 153). Brode also mentions working in the tech area with Po, the potter Maria's son. Brode also seemed surprised to find everyday Anglo objects in Indian houses she visited, such as dishes and furniture. Brode is one of the many participants that

described the Christmas party in December of 1945 at San Ildefonso Pueblo. She says that, "No one planned any deliberate association of scientists and Indians, but undoubtedly, life at Los Alamos had its effect on life at the pueblo. Electricity was put in by young scientists from the hill, as was running water. The Indians worked for wages on the Hill and bought food in the stores." (pg 157).

- Norris Bradbury took over in 1945 from Oppenheimer as director of the Manhattan Project and stayed for 25 years. After the war ended Bradbury and Gen. Groves started building permanent housing in Los Alamos and switching the focus to peacetime research and development although most of the wartime scientists left the lab between 1945-1948. Others were recruited to replace them to continue the lab's work.

- 008 Bailey, Janet. *The Good Servant: Making Peace With The Bomb At Los Alamos*. New York: Simon & Schuster, 1995.

The author is the editor of the Santa Fean Magazine. She bases her book on interviews with present employee scientists of Los Alamos. There is no bibliography or chapter notes.

This book is a story of what the end of the Cold War meant to Los Alamos. From 1942 to 1943, the scientists worked to build a better bomb. As Bailey states, "Long after WW II was over, Los Alamos remained a conclave, still on a war footing, only now the enemy was the Soviet Union." (pg. 19). Los Alamos pushed nuclear weapons technology as far as it would go. This was true, although forty percent of the Lab's budget went towards non-related research projects.

When the cold war ended, Los Alamos, the secret city, became an open campus. The research continued, but concentrated on the peaceful uses of nuclear technology.

In general, this book has a very limited scope and because of its non-scholarly treatment, is minimally useful.

- 009 Ball, Howard. *Justice Downwind: America's Atomic Testing Program In The 50s*. Oxford University Press, New York, 1986.

This book is a general compendium of the testing program at the Nevada Test Site from 1951-63. These tests were detonated above ground even though 100,000 people lived downwind from test site. The author describes how the AEC downplayed the hazards of radiation, as well as the death of animals downwind, even when faced with numerous citizen complaints. As the number of claims continued to grow and those affected persisted in demanding answers and compensation, the government resorted to holding them off at all levels of the court system.

Ball has accumulated a good set of notes and his bibliography carefully catalogues articles, special collections of documents, and source centers. The author deals in

detail with the impact of testing on social systems and the negative impacts of new technology on the environment and inhabitants.

The book is also a story of people and their medical, scientific, legal, political, and normative conflicts. It shows in detail the AEC's failure to protect downwinders initially, because of the AEC's perceived loyalty to the government and their faith in the overall safety of the test.

In all, the book describes the contradictory accounts from everyone, each with their own certainty and beliefs. This account is, finally, a catalogue of wrongful injuries and partially negotiated remedies, expressed as the long-term effects of testing and the extent and feasibility of native claims against the government.

- 010 Badelier, Adolf F.A. *Final Report Of Investigations Among The Indians Of The Southwestern United States, Two Volumes*. Cambridge, Mass: J. Wilson and Sons, 1890-1892.

- 011 Bartimus, Tad and McCartney, Scott. *Trinity's Children: Living Along America's Nuclear Highway*. New York: Harcourt, Brace and Jovanovich, 1991.

This book is a fresh approach to America's nuclear history. The authors follow Interstate 24, the nuclear highway, along which there is a booming and astounding concentration of labs, military installations, weapons factories, storage facilities and test sites. In this context, the author's methodology is to explore the lives of a handful of families over two generations and their impressions and the changes the "Atomic Age" made in their daily lives.

In describing numerous labs and test sites, Bartimus and McCarthy conclude that Rocky Flats is the worst offender of the nation's seventeen main weapons factories and labs.

Perhaps the most interesting section for this study is the interview with the Churches, the family that owned the Ranch School that General Groves chose as the site for the Y lab. The book gives a good picture of the land and the people before they invaded Church's Ranch School and turned it into one of the most secret installations in the world

Finally, this book has notes based on many overlooked documents. The extensive interviews are very detailed and useful for scholars and laymen alike.

- 012 Battelle and Pacific Northwest National Laboratory. *National Register Of Historic Places Multiple Property Documentation Form: Historic, Archaeological And Traditional Cultural Properties Of The Hanford Site, Washington*. Richland, Washington: Battelle, August 1996. DRAFT, DE-A-AC060-76RLD 1830.

This document breaks down the history of the Hanford region into five historic contexts;

- The Prehistoric Period, 10,000 B.P.-1805 AD

- The Ethnographic Period, Lewis & Clark 1805-Hanford Engineer Works 1943.
- The Euro-American Resettlement, Lewis & Clark, 1805-HEW 1943.
- The Manhattan Project and Cold War Eras, December 1942-1990
- The Manhattan Project and Cold War Eras, December 1942-1990, Architectural context.

The section on the Ethnographic/Contact Period, which concentrates on the Hanford region prior to Hanford's construction, is the most beneficial to this history project. This document itself is a summery of a much larger report.

- 013 Beaver, Virginia and Deward E. Walker, Jr. *The Way It Was: Anaku Iwaha Yakima Legends*. Franklin Press, 1974.

- 014 Bernstein, Alison R., *American Indians And World War II: Toward A New Era In Indian Affairs*, The University of Oklahoma Press, 1991.

Although there are no specific references to the Manhattan Project, Chapter 4, The Indian Home Front: a Study in Changes, is an excellent treatment of the overall economic, social, cultural and political changes among the tribes that were a direct result of World War II.

- 015 Bethe, Hans Albrecht. *The Road From Los Alamos*. New York: Simon & Schuster, 1991.

This memoir, by the head of the Theoretical Division at Los Alamos, assembles his purely scientific papers along with the author's essays from the postwar period to the present. His essays begin with the bomb's early years and end with his own ideas on the future of arms control and disarmament. He reflects on his singular contributions to Astrophysics and describes his colleagues, including Oppenheimer, in five concise essays at the end of the book. His observations are less insightful than could be expected and, at times, merely anecdotal in nature.

There is also a complete lack of notes or bibliography that link his essays or descriptions to any specific events. In many ways, it is simply an unsatisfactory compilation of lectures on theoretical physics and arms control.

- 016 Beyer, Don E. *The Manhattan Project: America Makes The First Atomic Bomb*. New York: Franklin Watts, 1991.

*The Manhattan Project* concentrates primarily on the work of the individual scientists and engineers responsible for designing the bomb. Beyer attempts to explain the historic chain of events, and the intricacies of the minds that made history. In the process, he recreates the life and times at Los Alamos.

The book contains many photographs of the period. Although interesting, the notes and bibliography are meager. Since this volume was written as a Book of Twentieth Century in American History Series, further examination of the other books in the series might also prove useful.

- 017 Blow, Michael. *The History of the Atomic Bomb*. First Ed. New York, New York: American Heritage Publishing Co., Inc., 1968.

This is a good resource for the history of the development of nuclear physics and its eventual use as a basis for an atomic weapon. Blow starts with the events that led up to the discovery of fission and then tells the story of how the Manhattan Project began. This book, written in 1968, is not a scientific account. It will, however, give the lay reader a quick and easy understanding of the nation's efforts in developing atomic weaponry.

- 018 Boyer, Paul. *By The Bomb's Early Light: American Thought And Culture At The Dawn Of The Atomic Age*. University of North Carolina Press, 1994.

This book makes extensive and innovative use of newspapers, cartoons, radio, movies, literature, interviews, magazines and private papers in several university collections. It shows how America coped and eventually changed with the use of the atomic bomb.

Boyer portrays the effects of the bomb on American thought and culture, finding that it varies erratically over time. The first cycle from 1945 to the mid 1950s is the primary focus of the book, although the author writes briefly on the changes in the late 1950s and early 1960s. He also examines the rapid spread through popular culture of jargon, products and the social mentality of the "Atomic Age." The book can be considered the best source for popular accounts of the bomb because of its eclectic and expert use of unexpected and largely unexamined sources.

- 019 Brown, Anthony Cave and Charles B. McDonald. *The Secret History Of The Atomic Bomb*. New York: The Dial Press, 1977.

This book is a summary version of the thirty-five volume official history of the Manhattan Engineering District. Included is the bulk of the Smythe report, and the summaries of the official history. There were no security restrictions on what could be included, so the history is complete. Brown and McDonald cover all the subprojects of the Manhattan Project. The book is written in narrative form for both scientists and laymen.

Their book gives the full story of the American intelligence offensive to ascertain the nuclear capabilities of other nations during the war. They also detail the instances of sabotage in the Manhattan Project and the security measures developed to prevent them. This book provides the detailed steps from science to weapon development.

Although there is no bibliography, no citations and no chapter notes, the updating of this report from recently declassified government documents is a very useful resource volume.

- 020 Burdick, Usher Lloyd. *Jacob Horner And The Indian Campaigns Of 1876 And 1877 (The Sioux And Nez Perce)*. Wirth Brothers, 1942.

- 021 Bush, Vannevar. *Pieces Of The Action*. New York: William Morrow and Co. Inc., 1970.

This autobiography by the head of the National Defense Research Committee has excellent biographical notes. Bush concentrates on the way in which science was organized during WW II. He reviews what happened as they worked weapons development in several sites. The author states that his aim in this volume is to clear up misunderstandings, clarify what happened and comment on his fellow men. Like many autobiographies this book could have benefited from extensive editing.

The initial essay of this volume wanders all over contemporary topics and similarly the rest of the chapters lack organization and concise narrative.

Bush does detail his role in the NDRC as it was constituted one year before the U.S. entered the war. The NDRC was a civil organization of scientists and engineers for the purpose of developing new weapons for military use. The committee reported directly to the president and had its own funds. The NDRC was organized as a pyramid for decision making with broad delegation downward and support for programs to move up. Bush made each man on the committee take over a division of operations. They were then responsible for recruiting their own personnel and organizing them into subgroups. Bush insisted that contracts for research were made only with universities, not individuals.

- 022 Catlin, George. *Illustrations Of Manners, Customs, And Conditions Of The North American Indians, Two Volumes*. New York, 1841.

- 023 Caldicott, Helen, *Nuclear Madness: What You Can Do*, revised edition, W.W. Norton, New York, 1994.

This extremely liberal book has only brief references to Navajo uranium miners and more recently to the tribal involvement in Monitored Retrievable Storage Studies.

- 024 Carter, Luther J. *Nuclear Imperatives And Public Trust Dealing With Radioactive Waste*. Baltimore, MD.: Washington, D.C.: Resources for the Future; (Baltimore, MD) Johns Hopkins University Press, 1987.

Carter's work is concerned with two issues: how to protect life from the hazards of radioactive waste and how to prevent existing radioactive material from falling into the wrong hands. He discusses the political and ethical dilemmas that exist as a result of these issues. The author describes how nuclear waste is produced and how the lack of planning regarding waste in the early years led to the problems decision-makers face today.

Carter mentions the Navajo people only when he describes the dam that collapsed near Churchrock, New Mexico in July of 1979.

- 025 Cartwright, W. Clarence. *TA-10 Bayo Canyon Cleanup*. Los Alamos, NM: Los Alamos Scientific Laboratory of the University of California, May, 1963.

This report documents the process of cleaning up the area of two firing pads, which are presumably experimental launch sites in the TA-10 Laboratory Facility Area. The goal was to cleanup the site in order to allow public access to the area with no environmental restrictions.

When planning the clean up process they decided to hire Indian fire fighting crews to conduct the search for undetonated explosives. Apparently local AEC officials employed Indian crews in this way in past cleanup projects. This document contains the names and procedures used in the hiring of all the Indian fire fighters. It also shows pictures from the cleanup effort. From the pictures, we see that the Pueblo workers wore minimal protective gear, only hard hats and gloves. The ZIA Company workers who also assisted in the cleanup process wore protective equipment which covers their entire bodies.

- 026 Caufield, Catherine. *Multiple Exposures: Chronicles Of The Radiation Age*. Harper and Row, New York, 1989.

*Multiple Exposures* is a study of radiation and its effects. It also traces the slow growth of scientific understanding of the effects and hazards associated with radioactivity. Caufield writes authoritatively on the way radiation and its effects were, at best, ignored or misperceived until relatively late in the development of the bomb. It wasn't until the Bikini tests that experts in the field truly understood that fallout changes the way radiation should be measured or bomb damages calculated.

Although there were safety measures instituted in the lab, Caufield states that the Manhattan Project in assessing the test detonation, "made no real effort to gather information on the behavior of fallout, or its effects on humans and animals" (pg. 61).

The author is also an excellent resource on the effects that atomic development had on the Native American population. In Chapter Nine, "Uranium Fever," she looks at the Colorado Plateau, site of 25,000 square miles of the Navajo Reservation and several smaller Indian Nations. This area was the site of a large percentage of the nation's Uranium deposits.

Caufield notes that the "Indians were such great prospectors because they new the land so well." (pg. 76). One of the first people to make a big strike was a Navajo shepherd named Paddy Martinez. Eventually, many Navajos became prospectors and miners. Because the mines and mine owners took virtually no precautions and assumed everyone was ignorant of the risks, the average age of death of those Navajos in the mines was 46.

The author's account of the Church Rock incident on July 16, 1979, when a dam burst holding radioactive uranium tailings is interesting, since its major effect was only on the Navajo land and people (pg. 240-241). The fact that this is such a little known incident in American nuclear history is very revealing.

- 027 Chambers, Marjorie Bell. *Technically Sweet Los Alamos: The Development Of A Federally Sponsored Scientific Community*. Dissertation, University of New Mexico, 1974.

The author was working for the atomic energy commission when she wrote her dissertation based on extensive archival research and interviews. Overall, it is an excellent piece of research. It also provides a comprehensive bibliography and note sections that are worth reading in and of themselves.

Her first section on site selection is interesting because it suggests that Los Alamos was selected earlier than thought at an April 1942 meeting of the planning board of the Federal Government's wartime Office of Scientific Research and Development. Percival Keith, a chemical engineer on the board, had two sons enrolled in the Los Alamos Ranch School (pg. 44). He as well as Oppenheimer proposed Los Alamos as a possible site. After Groves had approved the site, the author says that, ". . . Oppenheimer had told friends he had made the Los Alamos site a condition of his acceptance of the Laboratory Directorship" (pg. 52. P.C. Keith interview, M.E. Sundt, April 10, 1970). In truth, the remote Los Alamos site offered victory to both Groves and Oppenheimer. "It is also true that . . . most of operating troubles that faced the project . . . were foreshadowed in the pages of the site report." (pg. 58, MED, Report on Proposed Site, November 23, 1942).

The central theme of Chambers' dissertation is that the community of Los Alamos was constructed and existed only to support the lab. As the lab grew, everything else did too, leaving tremendous gaps in housing, amenities and tempers. Because of the severe shortages of construction labor, Sundt Construction, recruited Indian laborers from the Navajo and Zuni Reservations, but these Indians refused to sleep in the same bunkhouse with Pueblo Indians from the nearby Rio Grande villages (pg. 92).

Chambers also goes into great detail concerning the clash between military expectations and the scientific community's requirements. The author states that "The compartmentalization Gen. Groves was unable to obtain in the Lab occurred within the community between different employment groups, between classes among these groups, between husband and wife and between adults and children." (pg. 128). The civilians constantly pushed for improvements that the military would deny. The scientists and their families did not obey orders in the military tradition, but often ". . . the citizens of Los Alamos followed the frontier tradition of organizing their own legal institutions in the absence of constituted authority." (pg. 132.).

The final section of this book concentrates on life in Los Alamos after the war. Chambers shows the way in which Gen. Groves secured Los Alamos' future for research and stockpiling of weapons. Before Groves turned over responsibility for

Los Alamos to the Atomic Energy Commission in 1947, he had given approval for construction of new lab facilities as well as new community buildings. "All this left the AEC no alternative to maintaining Los Alamos." (pg. 163). The Bikini Tests in April of 1946, as well as further technical developments in atomic energy also led to Los Alamos being kept alive. The years between 1945-1949, despite its survival scientifically, were marked by chaos, crisis, and uncertainty. Ultimately, the bomb itself guaranteed the permanency of Los Alamos.

028 Chance, John K. *Conquest Of Sierra: Spaniards And Indians In Colonial Oaxaca*. Oklahoma: U. of Oklahoma Press, 1989.

029 Chugoku Newspaper, *Exposure: Victims Of Radiation Speak Out*. Kodansha International, Tokyo, 1992.

Three years after Chernobyl, a team of journalists from Hiroshima's leading daily paper began to document cases of radioactive contamination in twenty sites around the world. This book is made up of those articles.

The first Chapter deals with the sites found in the United States. The Hanford site is catalogued up until 1957. The team states that great quantities of radioactive material were discharged as experiments without notifying the inhabitants. As a result they enumerate a striking number of illnesses both there and in the Tri City Area.

The journalists also deal with uranium mining on the Navajo Reservation, since the late 1940s. They review the Church Rock Disaster of July 16, 1979 and the contamination of the Four Corners Area. At its peak, this area accounted for twenty percent of the uranium used in the production of nuclear weapons.

In the Navajo Village of Tsee Tah alone, twenty-seven families were involved in mining uranium and as a consequence soon the village had no other industries. The effects on their culture, economy and dependence were complete.

In the Red Valley, the Navajo Reservation to the south of Monument Valley, there was an abnormally high incidence of death of the miners by lung cancer. At the peak of the "Atomic" rush, 200 uranium mines were found in the Red Valley. By that time, 180 households in three small villages depended on the mines for their existence, with over 150 Navajo men working in the mines. By 1970 the first cases of lung and other cancers started to appear. It was found that many of the Navajo houses were also radioactive because the rocks and dust used to build them were from uranium tailing dumps.

Another health crisis began to unfold when it was found that Navajo men were also the main source of labor for uranium refineries. In the refineries, there were no cleanliness or safety precautions, no medical checkups, or monitors. There were twenty-five refineries in the Four Corners area; four refineries; Shiprock, Monument Valley, Tuba City and Mexican Hat were located on Navajo Reservations. These refineries operated in the 1950s and 60s and were finally closed down in the 1970s. Cleanup did not start until 1982.

This book has a very interesting section concerning the Navajos and their demands for assistance for victims of uranium mining. Taken together with Udall's book, *The Myths of August*, it provides a great resource for follow-on studies of this area.

While this book is very intricate and interesting, like most journalistic efforts, it lacks good footnotes and an adequate bibliography. These types of accounts must be read with other more scholarly volumes, to obtain a more complete picture of the broad impact of radiation on native lands and populations.

- 030 Church, Peggy Pond. *The House At Otowi Bridge: The Story Of Edith Warner*. Albuquerque, NM: UNM Press, 1959.

The author of this volume lived in New Mexico for over twenty years. She is a writer, poet, and daughter of the founder of the Los Alamos Ranch School. She based her book on Edith Warner's journals and her recollections of their long-time friendship. Edith once tried to write her own story, but feeling that she had not enough words, her manuscript was incomplete. It begins "This is the story of a house, a house that stood for many years beside a bridge between two worlds." (pg. 5).

Edith Warner lived for twenty years standing watch over the changes of Los Alamos. ". . . she and her Indian companion Tilano guarded for us, all the changeless essence of the land." (pg. 4). Warner came to New Mexico in the fall of 1922, at age 30. Edith came West because of her health. John Boyd, who owned and ran the guest ranch in Frijoles when Edith was staying, gave her the necessary understanding of the Pueblo people. "During her first months in the canyon, Edith came to feel that there are certain places in the Earth where the great powers that move between the earth and sky are much closer and more available than others, and that this region, this arid stretch of valley, plateau and circling mountain was one of them." (pg. 18). Edith's first trip to the Pueblo of San Ildefonso was with John Boyd. He introduced her to the Indian religious leaders and their ceremonies. Edith was shy and reserved and seemed to know by instinct that her quiet demeanor fit in well with the Indian people. In her silence, they began to tell her their stories.

Over the next four years, Edith struggled to stay in New Mexico, taking small jobs as a secretary or tutor, living with friends and trying to remain in the country she had grown to love. She was forced to return to the East for a few years, by monetary concerns; eventually her ill health forced her to return to the Southwest. By accident a conversation with the proprietor of the Los Alamos school gave Edith what she needed most desperately, a house and a job.

Three miles from San Ildefonso, across the bridge to Los Alamos was a little house that belonged to an Indian family in the Pueblo. The house stood beside a boxcar railway station owned by the Denver and Rio Grande Narrow-Gauge. Otowi became the unloading point for all the mail and supplies for the Los Alamos School from Santa Fe. Someone was needed to keep the freight safe. Mr.

McConnell, the School's Director, hired her to keep the station house with its small store and gas station.

In her joy at finding a position, Edith asked very few questions. When she took over, the house was a hovel, but as she said, "Perhaps the trouble with the little house, was that only rootless men had used it for shelter. No woman had ever tried to fill it with human warmth and make it beautiful." (pg. 34). This she did. In remodeling her house, her life began to intertwine with the San Ildefonso people. They felt a pride in being able to help her, largely because she was as they were, very poor (pg. 40). "In the beginning the Indians on the pueblo found it hard to understand how Edith could be alone." (pg. 47). It was unheard of for an Indian's life not to be bound up in community, not only with each other, but with earth, sky, plants and animals.

Edith found herself gradually becoming part of the pueblo life. They shared meals. They took care of her and she describes each of them as friends. The men of the Pueblo would look in on her. She often found that they had done small chores without asking. "The women of the pueblo have less leisure. They are mothers and potters, but nonetheless, their thought is of me." (pg. 47). They gave her many little gifts of food, inviting her to dinner, believing that borrowing and lending were part of shared lives. Often, they would lend her their children, so she would not be so alone. In this way, Edith began a friendship with Maria Martinez, the potter. Maria was Edith's personal confidant until Edith's death.

In her little house, she began to serve tea and her famous chocolate cake to locals and the occasional tourist, but she much preferred her life with the Pueblo people and her privacy. As she recalled in her journal, ". . . each year, I do less of the customary things of our civilization." (pg. 41).

Edith's life changed when she made friends with the Pueblo leader Tilano. In his youth he had been all over the world with a troop of Indian dancers. Like those who went away for military service in WWII, when he returned, he needed more than the Pueblo could provide.

When the quiet of the ranch school in Los Alamos gave way to the secret research institute on the mesa, Edith's life threatened to change completely. Fate arrived in the form of Robert Oppenheimer, a man she had known as a boy. "Edith knew Oppenheimer, she liked him. His senses were alert as a creature of the woods. He had a poet's face." (pg. 86). Oppenheimer persuaded the military authorities to let her keep the freight station to maintain the secrecy of shipments to the lab. He also persuaded the authorities to let small groups of scientists from the Hill come down to Edith's house for dinner. After the war, Edith wrote in her journal, "Conant and Compton would often come in through the kitchen door to eat Ragu and Chocolate Cake. Fermi, Allison, Teller and Parsons came many times for the simple food. Oppenheimer and his wife Kitty came at least once a week, often bringing special guests to meet her." (pg. 90). Of all of the scientists, she liked and was closest to Niels Bohr. She described him as a great man and her favorite friend. When she died, Bohr wrote a letter to Edith's sister, calling Edith a great

lady and one who had taught him much about the land, the heart and our place in life. Edith never knew what the scientists were doing on the mesa and she never asked. Kitty Oppenheimer came down to buy fresh bread and eggs and told her of the bombings of Hiroshima and Nagasaki. This too, she accepted in her calm and ordinary way.

By Christmas of 1946, Edith needed to move because of the construction of a new bridge to better access Los Alamos. By this time, Tilano was 80 and Edith was 54. She found a site half a mile away, still on Pueblo land. The Pueblo gave her permission to build a house there. No one knows how the shared thought to build her a new house started in many minds from the Pueblo and Los Alamos. Fifteen young scientists and their wives worked side by side with those from the Pueblo.

By summer, the guests started returning and her garden grew. In September, she made her last feast for the Pueblo. One hundred Pueblo people came. After living with the Pueblos as her friends and family for so long, when she died, they buried her among them according to their customs.

The appendix included in this volume is a collection of Edith's Christmas letters to family and friends, starting in 1943. From these and her journal entries, it is clear that Edith was the best author of her own story. She stood between two worlds in many ways. She seems to have been the bridge between the cultures of the Anglo and the Indian.

- 031 Clark, Ronald W. *The Birth Of The Bomb*. New York: Horizon Press, 1961.

This volume uses numerous interviews with those involved in the making of the bomb. There is, however, no bibliography or citations.

Clark's book concentrates on the advances in atomic sciences that took place in Europe and Great Britain, which assisted in the development of nuclear weaponry in the U.S.A. He writes that the efforts made by such countries as Britain and France as early as the late 1930s shaped America's atomic future. He also fully explains Britain's Maud Committee, which was established to study the possibilities of atomic weaponry and the effects this committee's report had on the American effort.

- 032 Collier, John. *On The Gleaming Way*. Chicago, Ill: The Swallow Press Inc., 1949.

John Collier was the commissioner of Indian Affairs for twelve years. He was one of the twentieth century's best spokesman for the rights of Indians and a champion of their causes.

The main part of this book was written in early 1946 and late 1949. The book provides numerous illustrations and pictures that are fairly rare. In his section on Pueblo Indians, he demonstrates the Pueblo practicality of action drawn from their religious beliefs. He also portrays the Pueblo Indian sense of the land and their attachment to it. He states, "Such is the Pueblo's land. It has been their land and they its human embodiment, for so many thousand years that no one knows the

number. And here is one of the reasons why white men find these Indians so magnetic, so exciting, so healing and regenerating to starved human natures.” (pg. 24).

Collier says that the Pueblos have stayed essentially the same over time, changing very little to incorporate conquerors, religions, and human progress. He sites as an example, the way that most Pueblo villages have incorporated Christian religion and its rituals as a secondary religion to their traditional ceremonies and beliefs. Collier also stresses that the only real change in Pueblo culture has come when the Indians are taken away from the land. His example is WWII, which took most of the young men of the Pueblo off their land for up to six years. When they returned, many had difficulty in returning to the Pueblo way of life (pg. 113).

- 033 Compton, Arthur Holly. *Atomic Quest: A Personal Narrative*. New York: Oxford University Press, 1956

This is Compton’s firsthand account of the role he played in the Manhattan Project, as head of the plutonium production project at the University of Chicago. Compton details the events that led up to the development of atomic weapons. He covers the discoveries, policies, people and events that occurred during the Manhattan Project years. This is one of the best memoirs related to the Manhattan Project, despite a lack of sources cited and any bibliography.

Compton focuses primarily on the actors in the drama, mainly the scientists. He also confines his writings to events in which he was directly involved. Ultimately, he states that “It tells how these scientists, with the President’s help, formed a team with industry and, captained by the Army, prepared the atomic explosives used in WWII.” (pg. vi). He also recounts the complex decisions that were made in deciding the use of the bomb.

- 034 Cramer, Steven P. *Assessments Of The Effects Of Spill On The Survival Of Andromous Salmonids In The Columbia Basin*. 1995.

- 035 D’Antonio, Michael. *Atomic Harvest: Hanford And The Lethal Toll Of America’s Nuclear Arsenal*. Crown, New York, 1993.

This recent book is written as an expository piece. There are no footnotes or bibliography, but it does provide a valuable narrative account of the Hanford experience.

The author writes that, “Hanford has the most irradiated people on Earth, especially the Indians who lived on the river, drank its polluted water and ate its radioactive fish.” (pg. 15). This condition came about when safety was overruled by the need for secrecy and speed in the development of nuclear weapons. He sees Hanford as a monument to the Cold War and the ensuing arms race.

In December 1942, Lt. Col. Franklin Matthias picked Hanford as the perfect match for his site requirements. By March of 1943 he moved to make farmers vacate and Indians stop fishing the river and foraging. The author says that “the Wanapum Indians vacated for the good of the war effort.” (pg. 17) The fact that

the Hanford site didn't draw from the native population for workers is very curious and never addressed.

In general, this work has some valuable facts, but the lack of good documentation remains a nagging problem for further scholarly research.

036 Davis, Nuel Pharr. *Lawrence And Oppenheimer*. New York: Simon and Schuster, 1968.

Davis is an English professor who bases his book on interviews and writes in a narrative style. Although there are lots of quotes, there are no citations, and meager notes and bibliography.

Lawrence was an experimental physicist, while Oppenheimer was a theoretical physicist. Their relationship began while they were both at Berkeley. Lawrence had made full professor in record time, putting Berkeley on the map when he invented the cyclotron. During this period, Lawrence was the most famous American physicist. He raised money privately to build a bigger cyclotron and began to experiment in medical uses. In 1939, Lawrence was awarded the Nobel Prize for his work.

In 1940, Lawrence's Rad Lab at Berkeley had isolated and analyzed the first pure samples of plutonium. When the war began, Compton moved Lawrence to Chicago to form the basis of the Met Lab for plutonium production and bomb design. Lawrence pushed hard at electromagnetic separation. In 1942, Lawrence was program chief, not only for the "calutron," but for all other electromagnetic separation processes. The calutron got first place in the allotment of funds, largely because Groves liked Lawrence. Groves also gave approval to build Lawrence's electromagnetic plants in Oak Ridge in 1943.

As director of the Manhattan Project, Oppenheimer had a hand in every phase of the project. Although Lawrence approved of Oppenheimer as director, in the spring of 1944, Oppenheimer intruded far into the affairs of the Rad Lab by taking a hard look at the electromagnetic process. By adding gas diffusion to the process, he crossed the boundaries of compartmentalism and made Lawrence's life and work miserable.

After the war, when Oppenheimer went back to work at Berkeley, he found Lawrence ever more nervous and irritable. Having taken over the department, Lawrence saw Oppenheimer his theoretical physicist. Oppenheimer was exhausted from his war work and wanted to get away. To Lawrence, this was treason. The final break came when Oppenheimer directed the AEC's stand on Lawrence's pet project, Materials Testing Accelerations. Oppenheimer gave it a negative, but not damning recommendation, but Lawrence went into a rage, feeling that Oppenheimer's decision was personal and considered him his personal enemy.

Lawrence seemed to snap. He tried to raise the Berkeley group to counter Oppenheimer's opposition of Government philosophy. For this, Lawrence became the poster-boy of the political right. Lawrence also made accusations that

helped Oppenheimer's enemies and over-zealous security forces to revoke his clearance in the AEC hearings.

In 1952, Oppenheimer and the scientific community he spoke for was on the losing side of a power struggle with Lawrence and Strauss. The issue was the development of a crash program of Teller's Super-bomb. This led to a break with Lawrence, Strauss and Teller. In the end, Oppenheimer was finished off by the military and his former friends.

- 037 Deitch, Kenneth. *The Manhattan Project: A Secret Wartime Mission*. Discovery Enterprises, Ltd., 1995.

This tiny volume contains a selection of first hand accounts regarding the Manhattan Project. Included are excerpts from Gen. Groves, Laura Fermi, Enrico Fermi, journalist William Laurence, Paul Tibbets, and Robert Oppenheimer. It is also a quick reference for Einstein's letter to Roosevelt as well as Laurence's Trinity Article and his first hand account of the bombing of Hiroshima.

- 038 Denfeld, D. Colt. *The Cold War In Alaska: A Management Plan For Cultural Resources 1994-1999*. US Army Corp. of Engineers, 1994.

- 039 Department of Energy, Richland Operations Office. *Hanford 40 Year Environmental Monitoring Reports*: DOE, 5 May, 1986 and April 7, 1987.

These two documents are bibliographies spanning 40 years of environmental data reports and studies conducted at the Hanford Site. In the first publication, the information is broken down into time periods of three-to five-year increments. There are ten of these increments starting at 1943 and going to 1985. The second document is an addendum to the first. The April document includes studies that were conducted at Hanford from 1945 to 1987. Each of these bibliographies contained photocopies of the actual studies.

- 040 DOE/EM-0266. *Closing The Circle On The Splitting Of The Atom: The Environmental Legacy Of Nuclear Weapons Production In The United States And What The Department Of Energy Is Doing About It*. 2<sup>nd</sup> Ed. DOE/EM, January, 1996.

This work discusses the responsibilities the DOE has to the public as a consequence of nuclear development. DOE believes it will encounter numerous challenges including; 1) the large amounts of radioactive material leftover from nuclear development, 2) a lack of effective technologies and solutions for handling the radioactive material, and 3) not enough knowledge to fully understand the long-term health effects of prolonged exposure to radioactive material.

This document particularly highlighted the lack of a Tribal History section. There is no mention of tribal involvement in the development of nuclear weapons. This document, however, does include some references to how tribes have been involved in the advisory portion of the cleanup effort.

- 041 DOE/EM-0319. *Linking Legacies: Connecting The Cold War Nuclear Weapons Production Processes To Their Environmental Consequences*. 1<sup>st</sup> Ed. Washington D.C.: DOE/EM, January 1997.

This document clearly shows how the environment was affected by every part of the nuclear weapons development process. According to the introduction, *Linking the Legacies* is the first complete study on the sources of waste and contaminated material. The document identifies the “four elements to the environmental legacy”: waste, contaminated environmental media (soil, groundwater, surface water, debris, etc.), surplus facilities, and materials in inventory. There are individual chapters dedicated to each of these issues detailing the process that created these elements.

- 042 Dolan, Edward F. and Margaret M. Scariano. *Nuclear Waste: The 10,000-Year Challenge*. New York: Franklin Watts, 1990.

In this book, Dolan and Scariano present the various issues concerning nuclear waste. The authors address the question of how to devise an effective and permanent storage site and then to select and build such a site. In deciding the process of selecting a feasible site to store nuclear waste, Dolan and Scariano go over the Nuclear Policy Act, which offers tribes the opportunity to become involved in DOE plans to build a repository. The act gives tribes the right to study and, if necessary, challenge DOE if a possible site is selected to be constructed on or near tribal lands. The Nuclear Policy Act gives tribes this authority based on a provision in the American Indian Religious Freedom Act of 1978, which, according to the authors, states that “American Indians must always have access to their sacred grounds and objects. Because land and nature are basic to a Native American’s religious worship, care must be taken that neither is violated by the repository planning and construction.” (pg. 87)

- 043 Dozier, Edward, P. *The Pueblo Indians Of North America*. New York: Holt, Rhinehart, And Winston Inc., 1970.

The author is a native of the Santa Clara Pueblo. His Ph.D. is from the University of California and since 1960 he has been a professor of anthropology at the University of Arizona. His book is an “insider” view of the Pueblos as a result of a lifetime among them. He states that Pueblos are great travelers and generous hosts to visitors and believe in the free exchange of cultural and social information as long as there is no threat to the individual or the village.

Dozier’s book has always been a good primary source for contemporary Pueblo issues, but it also includes a good section on the Pueblo origins, Spanish influence, and dealings with the Anglo-Americans.

In his view of the modern Pueblo society, he sites as key, the move from subsistence farming to trade, credit and finally, the cash economy. From the 1920s as wage work on the railroad and road construction grew and the tourist economy in the 1930s boomed, the road to dependence and a cash economy continued to gather speed. “WWII accelerated this process by providing jobs all

over the U.S. and dependency checks for the families of those in the armed services. After the war, the U.S. Indian Bureau assisted Indians under the Relocation Program to settle in a number of off-reservation cities . . . the purpose was to lower unemployment and poverty conditions on the reservations.” (pg. 9).

In this book, Dozier contends that religion and ceremonialism grew during the same period as a way to further solidify community, identity and unity. Because of their ties to community and religion, most Pueblo Indians continued to work locally and live in the Pueblo. The author states that, “The Pueblos cherish their isolated Pueblos and do not support efforts to establish businesses which will bring income.” (pg. 10). Dozier does show changes in the Pueblo village itself. Single family homes have replaced many of the apartment-like adobe dwellings. Most of the villages have electricity and running water. Traditional methods of food storage and preparation and even diet have changed. Virtually all income in the Pueblos now comes from crafts and wage work.

Perhaps the largest agent of change in the last half of the century has been the Pueblo contact with Hispanic and Anglo neighbors. This also has led to a more intimate inter-Pueblo relationship, evidenced by an increase in inter-Pueblo and inter-Tribal marriage. The author states that this was facilitated during the war as “Los Alamos, the “atomic city” employed large numbers of Indians from every Pueblo.” (pg 29).

Despite numerous cultural influences the author states that, “Pueblo communities are highly adaptive social organizations, adjusting to differing ecological conditions, economies and to differing social environments . . . their society and culture remain uniquely Pueblo.” (pg. 20). Dozier also states that this imperviousness to change is because of the Pueblo homogeneity. “. . . the Pueblo adult personality is remarkably uniform.” (pg. 179). This homogeneity, acute sense of community, clan and kin are enhanced by Pueblo religion expressed in ritual and ceremony. As the author points out, no white person has ever been permitted to become a member of the esoteric cults of the Rio Grande Pueblos or to see the rites of these ceremonies. By implication, this calls into account most, if not all, of the accounts of other archaeologists regarding Pueblo religion.

Dozier concludes his book with a number of good charts of Pueblo genealogy, characteristics, ceremonies and native government officials and secular government. This account is essential for any student of Pueblo life and history.

- 044 Drury, Clifford M. *Chief Lawyer Of The Nez Perce Indians, 1796-1896*. Glendale, CA: The Arthur H. Clark Co., 1979.

The author of this volume uses original sources such as the files of the Old Indian Bureau, National Archives, unpublished diaries, the records of the Presbyterian Church and the Oregon and Washington Historical Societies.

In general, it provides both a good timeline of events and an excellent source list on this subject.

This book follows the life of Chief Lawyer of the Nez Perce Indians, during the years 1830-1876. His life reflects the political, historical and cultural history of the Nez Perce Tribe. Throughout his life, the Chief was firmly convinced that the destiny of his people was best served by friendship with the whites.

The Whites imposed a system of government on the Nez Perce in 1842 that called for the appointment of a head chief and the acceptance of eleven laws. When Lawyer became head Chief in 1847, he led his people in negotiations with the U.S. Government in four treaties. The Lapwai Treaty of 1863 divided the Nez Perce nation and reduced their reservation by 95 percent. Several factions, led by Chief Joseph, refused to sign the treaty, which eventually led to the uprising of 1877 and the virtual destruction of the Nez Perce Nation.

- 045 Dutton, Bertha P. *American Indians Of The Southwest*. Albuquerque: University of New Mexico Press, 1975.

The author of this volume is an anthropologist. She uses a great deal of secondary sources although her bibliography is very extensive. Included in her book is an appendix that provides a calendar of annual Indian events.

This book is a good introduction to the study of the American Indians. It covers their basic history, contemporary tribal affairs, arts and crafts, and cultural and social characteristics of each unique Indian group in the Southwest. Dutton has written this book for the new students of this topic. It provides a basic grounding from which more expertise can be pursued. Included are many maps that help the reader to understand land and reservation policies.

- 046 Dyson, Freeman. *Disturbing the Universe*. New York: Harper & Row, 1979.

- 047 Eichstaedt, Peter H. *If You Poison Us: Uranium And Native Americans*. Red Crane Books, Santa Fe, 1994.

Between 1950 and 1980, about 7,500 Native Americans worked in the uranium mines. For three decades state and federal agencies avoided their responsibility to warn the miners or to impose realistic and enforceable safety measures. This volume specifically details the devastating physical, psychological and cultural impact uranium mining has had on the Navajo people and their lands. There is a wealth of great documentation in the appendices, notes and bibliography to support the importance of this study.

As the author states "By the start of the Manhattan Project, there was already evidence that working with uranium and radium could cause lung disease, cancer and other fatal health problems." (pg. x). The AEC maintained no responsibility for the conditions in the mines and refineries, so the large mining companies felt there was no need to do anything extra in the way of ventilation or medical supervision. In addition, many of the prospectors worked their own small claims never knowing they were in any danger, because the AEC never made any public admission of the hazards associated with uranium.

As a result of these policies, the Navajos spent the 1970s and 80s fighting in Congress and the courts for compensation for the cancer-ridden survivors and the many widows of the miners. They failed both in the courts and in Congress.

Due to the overwhelming evidence collected during the many years of litigation, in 1990 Congress finally enacted the Radiation Exposure Compensation Act. In this act, regarding the specifics of remuneration, they took no real heed of specific Indian needs or the limitations of even general health care on the reservations. The compensation program was to be administered by the Department of Justice, (the very department that had fought them for so long in court) and they set requirements for Navajo claims that were almost impossible for them to meet. The impact of the deaths of miners was especially devastating for small communities locked in conditions of extreme poverty. In the end less than 500 claims were filed because of the strict requirements and endless paperwork that most semi-literate Navajos could never hope to understand or complete satisfactorily.

Eichstaedt also details as a related issue, the general pollution of the land by the mining companies. There are over 1,000 open mines on Indian lands and no federal cleanups. (pg. xi). As a result, the Indians themselves have started reclamation and fundraising for cleanup. They know that sovereignty is conferred by occupation of the land and if tribal lands are destroyed, that threatens tribal existence.

This book is the story of how uranium mining began on Indian lands, how it was conducted and how it lingers on. There is a good map of the mines and territories that show the vast amount of land that was consumed by mining and mining enterprise.

Perhaps the strongest point of this book is that it has a great primary source section of twenty-four interviews. These interviews show that from 1941 on the intricate details of how the Navajos were duped out of leases and claims and their rightful percentage of their profits from the mines.

Using these original sources, the author traces the economics of uranium development and the involvement and conflicts between the AEC, the American Government and the Navajo Nation. Eichstaedt also makes the astounding case that the Tribe wanted more development on their land, ignoring the risks to the miners and the long-term pollution of the land. Some Navajo enterprises and developers also hired Navajo laborers knowing the risks involved. (pg.39)

- 048 Enola, Cynthia H. *The Morning After: Asexual Politics At The End Of The Cold War*. Berkeley, CA: UC Berkeley Press, 1993.
- 049 Fees, Herbert. *Japan Subdued: The Atomic Bomb And The End Of The War In The Pacific*. Princeton U. Press, 1961.
- 050 Fermi, Laura. *Atoms In The Family: My Life With Enrico Fermi*. University of Chicago, Chicago, 1961.

Laura Fermi was the wife of Enrico Fermi, In this volume she writes a fascinating biography of Fermi as well as a memoir and social history of life at Los Alamos. Her account also gives a concise version of the scientific developments and the quirky personalities of the builders of the atomic bomb.

Fermi and his family arrived in August of 1944 in Los Alamos and plunged into the chaos of life on the mesa. Laura shows through her narration the isolation of Los Alamos wives from society, their husbands and their old friends. Language barriers, academic rank and secrecy were an impossible set of conditions to overcome. One of the few comforts was having domestic help in the form of workers from the local Pueblos. As time went on more Spanish and Indian women were employed in the technical area and domestic help became scarce. In the face of all the hardships, and strict security measures, the wives were amazingly docile.

Since this volume is in the category of a firsthand account, even those rare tidbits of documented contact with the local Indians is interesting. It is also one of the very few accounts of Indians being employed as technical workers on the mesa.

- 051 Fermi, Rachel and Sara, Esther. *Picturing The Bomb: Photographs From The Secret World Of The Manhattan Project*. New York, H. H. and Abrams, 1995.

Rachel Fermi, Enrico Fermi's daughter, and photojournalist Esther Sara researched and put together this stunning photographic collection of sites X, W, and Y (Oak Ridge, Hanford, and Los Alamos). These are pictures of ordinary people at work and play and of the secret communities in which they found themselves. The photos on pages 54 and 55 are extremely rare; they show Indians and Anglos together at rituals and on more casual visits.

Their pictures also show Indians primarily as domestic servants and part of construction crews. The authors give the impression that the Indians had a minimal impact on the Anglos; primarily one of new cultures and exotic art, although some of the residents of Los Alamos occasionally attended family celebrations at the invitation of the Pueblos. They also show the greater impact of the Anglos on Pueblo culture. For instance, the San Ildefonso Pueblo had running water and electrical cables installed by some of the scientists.

Finally this volume is indispensable in putting the intensity of the war years into pictures. It is in some ways a more eloquent record of the Manhattan Project than other insider accounts or scholarly treatments. One picture is indeed worth a thousand words, especially in this case.

- 052 Feynman, Richard. *Surely You're Joking, Mr. Feynman*. New York: W.W. Norton, 1985.

This memoir details Feynman's work at Los Alamos and his part of the Manhattan Project. It is written in narrative style with anecdotal chapters. There is no bibliography or any chapter notes.

Feynman was the winner of the Nobel Prize in physics in 1965 and remains one of the world's greatest theoretical physicists. The author was also well known as a practical joker who liked to spend his time solving puzzles, picking locks, and providing a challenge for the security forces at Los Alamos. He cracked security office safes just to prove he could.

Feynman describes one of his major duties with the Manhattan Project was to check on safety issues at Oak Ridge. As a result, Feynman shuttled back and forth between Oak Ridge and Los Alamos regularly. In this volume he mentions almost nothing of his everyday life at Los Alamos beyond the physics lab. It is as if only the work mattered.

In general this book is a very good read and gives an interesting picture of the only real character with a sense of humor on the Manhattan Project.

- 053 Feynman, Richard P. *What Do You Care What Other People Think*. New York: W.W. Norton, 1988.

This second memoir of Richard Feynman was completed in early 1988. He died shortly after it was finished. Unlike his first book, this is very reflective in nature. He recounts how his father taught him how to think and his wife Arlene taught him about life. The second half of the book is a behind-the-scenes account of the investigations that followed the space shuttle Challenger's explosion in January of 1986. Again it is a very good read by a very interesting character.

- 054 Fisher, Phyllis K. *Los Alamos Experience*. Japan and New York: Japan Publications Inc., 1985.

This work is one woman's perspective on the events that occurred at the Los Alamos facilities during the Manhattan Project era. It is based on Fisher's personal diary, letters and numerous recollections recounting her experiences at Los Alamos. Like many wives of the young scientists recruited for the secret project, Fisher was well educated and had young children. She endured the regulations, hardships, and secrecy and did not know what Los Alamos was developing until Hiroshima was bombed. Her account is rich in detail, human emotion, and love of the land. Her details are invaluable as she spends a good deal of time describing her interaction with the local native pueblos, especially the San Ildefonso Pueblo.

Fisher details many examples of the differing levels of contact that occurred with the Pueblo people as workers at the Los Alamos site. These interactions range from the simple hiring of the Pueblo women as housemaids, to being invited to traditional dances and feasts at the Pueblo. Her reactions are very interesting although they tend to romanticize the Indian Culture. She began writing this book after four years in Tokyo and a visit to Hiroshima. Her son is a physicist at Los Alamos today.

- 055 Freeman, Leslie J. *Nuclear Witnesses: Insiders Speak Out*. W.W. Norton, New York, 1981.

This volume is based on the interviews of twenty-four people who worked with or around nuclear materials. The major premise of the book is the rather dubious view that if people knew the whole truth about radiation and its long-term risks they would have made very different decisions.

In Chapter Six, the author interviews four Navajo Uranium Miners and their widows. As they say, "Before 1965, the Navajos were free of lung cancer. The deaths started in 1965 and rapidly showed a tenfold increase in cancer among Navajo uranium miners in the following decade." (pg. 141).

In 1972 the AEC instituted Federal Radiation Level Standards. By these standards, uranium was found to have contaminated the water, and posed a major health hazard as an inhalable dust from uranium (tailings retain 85% of their original radioactivity for thousands of years). In addition it most certainly polluted the land, animals, people, fish, and plant life of the region when it was dispensed all over the Southwest by wind and rain.

This book is a good primary source on Navajo concerns and their growing anti-nuclear sentiment. The interviews are widely quoted and, in addition, Freeman has compiled an excellent bibliography.

- 056 French, David H. *Factionalism in Isleta, and Underhill, Ruth M, Ceremonial Patterns In The Southwest*. Monograph of the American Ethnological Society, New York: J. J. Augustine Publishers, 1948.

This volume contains two monographs concerning the Pueblos. In the first section, *Factionalism In The Isleta Pueblo*, French describes Isleta, the Tiwa Speaking Pueblo, located on the Rio Grande, thirteen miles south of Albuquerque. He shows that factionalism is caused by the inability of men of prestige and authority in the Pueblo to achieve the unanimity that is necessary for the proper functioning of the government. Although he admits that all Pueblos have been split by factionalism, the reasons have varied. In the past, relocation has often followed factionalism. Among the Hopi, Laguna and San Ildefonso Pueblos, the lack of new land stopped this as a way of resolution.

In an effort to mediate such factionalism, the All Pueblo Council was formed as a body of delegates representing the New Mexico Pueblos. The Council has met sporadically since the early 1920s and its recommendations, although not binding, have helped mediate in the disputes among the Pueblos. French describes some of the problems of serious factionalism that can be attributed to outside forces. "The influence of white culture has changed the attitudes of the leaders and common people. The identification of the village and dependence on the village has decreased." (pg. 46).

In the second monograph, Underhill details the two separate lines of religious practice in the greater southwest. The agriculturist groups tend to develop communal ceremonies, while the hunters tend to develop personal religious participation. The author states that Southwestern ceremonialism swings between the two poles of uncontrolled individual vision and standardized rituals. The

agriculturists form a compact group that standardized rituals and ceremony. In her study of the Pueblos, she sees religion as a community issue. Community binds itself together through common perceptions, rituals and ceremonies.

This monograph provides the reader a better sense of what community life in the Pueblo means for its members, tying them to each other as well as to the land. Underhill also provides the reader with a well thought out bibliography.

- 057 Fresquez, P.R., D.R. Armstrong and Salazar. *Radionuclide Concentrations in Soils and Produce from Cochiti, Jemez and San Ildefonso Gardens*, Los Alamos National Laboratories: 1995.

- 058 \_\_\_\_\_ . *Radionuclide Concentrations Collected on Fish from Jemez, Nambe and San Ildefonso Tribal Lakes*. Los Alamos, NM: Los Alamos National Laboratories, 1995.

- 059 Furman, Necah Stewart. *Sandia National Laboratories: The Postwar Decade*. Albuquerque: University of New Mexico Press, 1990.

The author of this volume has a Ph.D. in history. He provides great chapter notes, an extensive bibliography and an amazing photo collection. In addition, Furman gives numerous organizational charts for every facet of Sandia. He makes extensive use of primary sources from numerous archives, oral histories and inaccessible lab records. As the only externally published history of Sandia National Lab, his is an interesting narrative of technical events, innovations and institutional history.

The book is divided into two sections, Heritage, and Nuclear Ordinance Engineering. The book begins with Trinity and goes through the postwar years from the time AT&T took over direction of the lab in 1949 at President Truman's request. Sandia National Lab is largely responsible for designing bomb cases and components. Sandia is the center for arming, fusing, and firing nuclear devices; studying radiation effects; conducting simulations; research and development of nuclear safety; and treaty verification.

- 060 Gerber, Michele Stenehjem. *On The Home Front: The Cold War Legacy Of The Hanford Nuclear Site*. University of Nebraska Press, 1992.

Gerber begins with an historical account of the Columbia Basin region before it was selected to be the Hanford Site. In her descriptions of the region, Gerber mentions the many tribes of the Washington Territory and their eventual displacement onto reservation lands by the treaties of the 1850s. The tribes Gerber mentions include the Yakima, Umatilla, Cayuse, and the Nez Perce. Gerber briefly mentions the Wanapum people, who lived in the exact location of the Hanford Site. She states that Col. Matthias and the Wanapum made an agreement concerning fishing rights but does not specify the contents of the document. The brevity of her comments is interesting considering that the Wanapum ties to the land are more exclusively site specific than those of the other tribes she mentions, and therefore deserve a more thorough treatment.

061 \_\_\_\_\_, *Legend And Legacy: Fifty Years Of Defense Production At The Hanford Site*. US DOE Office of ERWM, Westinghouse Hanford Co., 1992.

062 Gerrard, Michael B. *Whose Backyard, Whose Risk: Fear And Fairness In Toxic And Nuclear Waste Siting*. Massachusetts: MIT Press, 1994.

This recent book outlines the inadequacies of current waste disposal site locations and why there has been failure up to this point in finding other, more acceptable locations.

Gerrard begins by describing the different types of waste that exist and how they were produced during the nuclear weapons development process. He then discusses the past and present site location criteria. Gerrard argues that mistakes have occurred in the policy-making process and that deficiencies still persist in modern policies regarding site selection. After his discussion, Gerrard offers extensive new alternatives for determining the criteria for selecting a feasible waste storage site.

063 Goin, Peter. *Nuclear Landscapes*. Maryland: John's Hopkins University Press, 1991.

064 Goldfrank, Esther Schiff. *The Social And Ceremonial Organizations Of Cochiti*. Memoirs of the American Anthropological Association no. 33, Menasha, Wisconsin: Collegiate Press, 1927.

The materials for this monograph were gathered in the fall of 1921 and the spring of 1922 when the author accompanied the famous archaeologist Franz Boas. Most of the material comes from a subject, man in his early forties, his much younger wife and a young unmarried man. The book deals well with organizational issues but is vague on ceremonial details.

The final section of the book is an extensive appendix containing a genealogy of the Pueblo by Clan and individuals, a list of house ownership and inhabitants, members of societies, membership in clans, lists of Kachinas and a list of dances.

Although this volume concentrates specifically on the Cochiti Pueblo, a Keres language Pueblo on the banks of the Rio Grande, thirty miles northwest of Santa Fe, many of the social and ceremonial organizations can be found in other Pueblos. It is useful as a general background study for understanding Pueblo organization.

065 Goodchild, Peter J. *Robert Oppenheimer: Shatterer Of Worlds*. Boston: Houghton Mifflin, 1981.

The author of this book is a BBC producer. This volume is based on a BBC series on Robert Oppenheimer. For the book, Goodchild interviewed fifty of Oppenheimer's former colleagues and friends, including Rabi, Bainbridge, Gen. Nichols, Teller, Wilson, and Kistiakowsky. Although there are numerous pictures, the book suffers from the lack of notes, citations or bibliography.

There is a small section on Oppenheimer's early years, followed by a section that describes his pied piper professorship at Berkeley, looking closely at his political

involvement and friends. The book sets out the threads of Oppenheimer's life that finally drew together in his AEC trial. There is also an interesting section on the beginning period of the bomb. The book has a very good and detailed section on security problems surrounding Oppenheimer from the beginning. Although Groves didn't think that Oppenheimer was a security risk, the Los Alamos security officers, the FBI and the Army did.

This volume goes into great detail concerning Teller and Oppenheimer's feud over the H-bomb and the hurt feelings that resulted from Oppenheimer winning his way.

1948 marked the high point in Oppenheimer's post-war career. Oppenheimer and his committee enjoyed an age of enlightenment full of money, equipment and expansionism. By June of 1949, the house committee on Un-American Activities was beginning to look at the spread of communism in America. When Russia exploded its own atomic bomb in September of 1949, everyone was incredulous. "The fact that the Russians had an atomic bomb and that in all probability they had details of the most up-to-date workings on the Super-bomb, had a profound effect on the whole fabric of American Society." (pg. 205).

In a short period in the spring of 1951, the Hydrogen bomb was put on a crash program in response to the Soviet bomb. This marked the beginning of an ever-escalating arms race between the U.S. and the USSR.

Goodchild portrays Oppenheimer's trial with the AEC in 1954 as a witch-hunt. He believes that the board selected to vote was against Oppenheimer from the first. During the four-week ordeal Teller's ambiguous statements damaged Oppenheimer, but eventually backfired on him. Teller was ostracized from the scientific community for years. Although others like Ernest Lawrence helped the board to revoke Oppenheimer's clearance, ultimately Oppenheimer was his own worst witness. In October of 1954, Oppenheimer went back to Princeton and was re-appointed Director of the Institute of Advanced Physics, but his image and life were never the same.

066 Gosling, F.G. *The Manhattan Project: Making The Atomic Bomb*. Department of Energy, January, 1999.

This Department of Energy study of the Manhattan Project provides a short history of the origins and development of the American Atomic Bomb program. It contains a Manhattan Project chart, good chapter notes and a Manhattan Project chronology. The book begins with a section on prewar scientific development. Included are basic explanations of atomic physics and specialized sections on isotope separation, gaseous diffusion, the centrifuge and the electromagnetic method.

Gosling makes clear that no single decision created the American Bomb Project. Secrecy was the watchword of the Manhattan Project. "... secrecy meant not having to account to or include political considerations ... the need for haste clarified priorities and shaped decision making." (pg. 19).

The author also includes a good section on the Y-12 electromagnetic plants and on the K-25 gaseous fusion plant. Gosling also details the role played in the Manhattan Project by many American universities and corporations, both in the design and construction of Hanford and Oak Ridge and the research at Los Alamos.

Finally, the author tackles the postwar roles of the Manhattan Project in the Bikini Test, which were the last tests conducted by the project and were the last American tests until the AEC's Sandstone Series began in Spring of 1948. In the final section, the author details the decision making on policy proposals concerning the control of atomic energy and internationalism. He concentrates on the scientists and politicians and their roles in controlling or disseminating nuclear knowledge. As he says, "The challenge confronting American policy makers in the postwar years was to enlist the forces of science in the battle to enforce the peace." (pg. 47).

- 067 Gosling, F.G. *The Manhattan Project: Science In The Second World War*. DOE, History Division, 1990.

- 068 Graf, William L. *Plutonium And The Rio Grande: Environmental Change In The Nuclear Age*. Oxford: Oxford University Press, 1994.

The author is a geo-morphologist, an earth scientist that studies Earth surface processes, and a geographer who specializes in the area of river mechanics. The basic issue of this very technical volume is to explain the distribution of plutonium in the Northern Rio Grande system of Northern New Mexico and Southwest Colorado. The appendices in this volume are a collection of very technical tables. There are also extensive chapter notes and a scholarly bibliography.

The author states that, "Between 1945 and 1952, Los Alamos . . . emptied, treated plutonium waste into the alluvium of Los Alamos Canyon . . . after 1952, they emptied very small amounts of treated plutonium waste." (pg. 3). The natural processes of erosion have resulted in the substantial movement of contaminated sediments through the canyon. Significant quantities were distributed from Lab area to the Rio Grande. "None of the data in my project suggests that plutonium exists at hazardous levels outside the lab . . . the lab operates under the legal requirements of sampling and monitoring." (pg. 237).

- 069 Greengo, Robert E. *The Prehistory Of The Priest Rapids-Wanapum Region: A Summary*. Washington State Museum: Thomas Burke Memorial, 1986.

- 070 Groueff, Stephane. *Manhattan Project: The Untold Story Of The Making Of The Atomic Bomb*. Boston: Little Brown, 1967.

Groueff is a magazine writer and therefore the general tone of the book is one of storytelling in an anecdotal method. His account gives a personal feel of the events and people, both major and minor. The author also provides involved details of how scientific as well as mechanical developments contributed to the construction of the bomb.

There is an interesting acknowledgement section in the forward, the authors say she has exclusive use of recent declassified documents and interviews but these are never quoted, cited or specified. The book was also cleared by the AEC.

Concerning site selection, the author is very specific, "Yemez Springs Valley was too narrow, and Oppenheimer found it gloomy and depressing: Groves found fault with it too. It was an Indian settlement of little farms, and "the General thought of the delicate problem of displacing such families and the unfavorable publicity that would ensue." (pg. 65).

Groueff shows that on the other hand Groves had no compunction of depriving 1,500 local families of their land in Hanford, since the local tribe did not believe in ownership of the land. "... Groves ... did not feel too bad about local reaction ... he was more concerned about how the salmon catch would be affected by radioactive water." (pg. 137).

The primary element that makes this volume stand out against other histories of that period is that it details how, why, where, and to what extent a number of American Corporations became involved in the Manhattan Project.

There is also a center section with good Project pictures.

- 071 Grinde, Donald A. and Johansen, Bruce E. *Ecocide Of Native America: Environmental Destruction Of Indian Lands And Peoples*. Clear Light Publishers, Santa Fe, New Mexico, 1995.

This recent book catalogues the victimization and ecocide of American Indians as they try to live in their natural habitat. The biggest radioactive leak, Church Rock, occurred on a Navajo Reservation in 1978, and went virtually unnoticed. This forms a major theme of the book, that those in power regard Native American life as cheap. The condescending view that their lives and lands are insignificant in the face of expanding colonization or greater common need. In this way the book traces the evolution of Native American environmental ethics.

The last half of the book examines environmental crises in Native America during the last half of the Twentieth Century. The author concentrates on coal and uranium mining among the Navajos and Lakotas and the pervasive pollution of the Mohawk.

Chapter Eight deals with the high cost of uranium – sixteen percent of all U.S. uranium reserves are on reservation lands. If added to the lands guaranteed by treaty, the Indians' share goes to up sixty percent.

In January of 1977 uranium was also found in the Black Hills. Still, half of the recoverable uranium in U.S. cities lies in New Mexico and about half of that is on Navajo reservations. There has been mining there since the 1940s and it has been mined as if it were any other non-hazardous material. There was never any official acknowledgement of the special protective requirements necessitated by radiation. In terms of long-term effects, in February of 1978, DOE reported that,

according to their studies, people living near uranium tailings had twice the risk of lung cancer.

Overall, this study is a good primer on the effects of nuclear development, mining, refining and testing, on Indians tribes and on their land.

- 072 Groves, Leslie R. *Now It Can Be Told: The Story Of The Manhattan Project*. New York: Harper & Brothers, 1962.

This is Gen. Leslie Groves' personal account of the events that occurred from 1942 to 1947 during his time as director of the Manhattan Project. Groves' memoir gives us an excellent firsthand look at overall administrative and security policies and the scientific developments that led to the bomb. He gives us a unique, if slightly "sanitized" view of the nation's best scientists and military personal as they raced to develop the ultimate weapon.

Throughout the book, there is only a fleeting reference to Indians or the Pueblos that were affected by the developments of the Manhattan Project. Groves does not mention that he ordered that the Trinity Site "should have no Indian population (pg. 289)," as he wanted to avoid any involvement by Secretary of the Interior Harold L. Ickes. Groves also indicates that one criterion for selecting the Los Alamos site was that no Indians were living there. Groves was concerned that the Army would have difficulty in dispossessing Indian land-owners quickly and quietly and that security would be difficult to maintain.

This particular volume is perhaps a good example of the caution needed when memoirs are used and quoted extensively. Conversations and critical details are often revised in light of subsequent events.

- 073 Hacker, Barton C. *The Dragon's Tail: Radiation Safety In The Manhattan Project, 1941-1946*. University of California Press, Berkley, 1987.

This study was funded by DOE in 1977 because they wanted a reliable historic account of radiological safety in weapons testing. As a result, this book contains the "documentary residue of the Manhattan Project and related programs" as well as a good list of document repositories and archives. This combines with extensive interviews of participants and eyewitnesses to make an excellent bibliography and footnotes.

The role of radiation safety has an almost unbelievable history resulting from will-full ignorance and low priority. Hacker makes it clear that "Health and safety, in fact, may well have posed some of the least baffling problems to confront the Manhattan Project."(pg. 4). Originally, important health research was limited by the war, scarce resources, limited funding and the preoccupation with racing the Germans for the bomb. Safety issues remained closely modeled on prewar theory and practice, "simply a matter of good housekeeping."

In this environment, "Protecting laboratory workers became the first task of the small Los Alamos Health Group" (pg. 5). Their first priority was to make the bomb work, then to maintain the security of the project and only after these came

the safety and protection of the test workers. Those involved with health issues thought that the only real threat to the public was either bad weather or the winds blowing the wrong way. "Radiological hazards beyond Trinity's border caused little concern until just weeks before the test. Fallout simply appeared to be a minor problem" (pg. 89). By mid June 1945, a closer study soon revealed that fallout was the real danger.

After the Japanese Bombings, military planners found the long-term effects of contamination of relatively little concern. However after the Bikini tests, the contamination was so widespread that it made the military rethink radiation as a multi-level hazard. The book also includes a good literature review of the origins of protection standards.

By 1941, the MIT studies, which measured radium painters, were the basis of setting permissible levels of radon in the body. The first handbook on radiation levels also came from the MIT studies. Safety was based largely on the concept of body or system tolerance. Later genetics studies would propose much lower standards.

The lab at Los Alamos had never planned to do health-related research; however the Health Division had to assume uranium was in some way toxic. Only further study would show how truly hazardous it was. (see Tannenbaum Study) Originally they did not consider uranium as a specific radiological hazard, so they assumed that routine screenings of workers were of little use. Since they did not know exactly how much radiation was safe for workers to be exposed to, they chose to do more research rather than apply what they already knew.

Finally, the Trinity Site meant admitting a very real hazard for those subject to fallout. In turn, this meant the development of elaborate evacuation plans that could threaten the security of the test. In view of the problem with secrecy, "Groves dismissed any thought of advanced warning to nearby ranchers and townfolk before the test at Trinity (pg. 89). Fallout was initially discounted as a minimal effect by the military authorities. The scientist's worries grew as more accurate calculations mounted.

- 074 Hales, Peter Bacon. *Atomic Spaces: Living On The Manhattan Project*. Urbana and Chicago: University of Illinois Press, 1997.

This is the most recent book on the Manhattan Project. It was written as a cultural history of three places (Hanford, Los Alamos, and Oak Ridge) and the consequences of their sudden occupation by an overwhelming wartime project. At base, it is a history of land and people and the way they changed each other, their cultures and attitudes.

Hales begins his book with the site selection issues and then details how the need for labor pushed aside cultural concerns, and personal needs, changing both Anglos and Indians in a multitude of unforeseen ways. In all, this book is a very detailed piece on site selection and construction including pictures and diagrams with excellent footnotes.

Despite Groves' "concern for Indian lands," twenty-nine Pueblo and Hispanic Farmers, sheepherders, and ranchers were displaced by site Y. The author contends that was primarily because they were non-reservation dwellers. The site assessment did not officially recognize these people as "Indian." The site also contained an identified Pueblo burial ground that was not moved but merely fenced off.

With regard to the Hanford site, Hales maintains that "Hanford's Indian Tribe wasn't settled substantially." The local tribe, the Wanapum, was initially confused with the larger Yakima Tribe. There were not enough members of either group to be used as laborers on the project. The Wanapum tribe did not believe in owning land, but had treaties specifying fishing rights. To forestall complications, Col. Matthias even agreed to ferry the Indians to their fishing spots using Government trucks. Matthias seemed to be charmed by the "good" Indians and their simple lives. (pg. 203).

At site Y, (Los Alamos) "Hispanic and Indian maids, gardeners, truck drivers, and laborers constructed and maintained the site; all were bused in daily from the surrounding Pueblos and villages. The Indians on-site were isolated as a group and individually and further limited by language barriers." (pg. 207). In the eyes of the scientists and their wives they were viewed as exotic, they were seen as figures of romance in the scientific community and considered almost mythic in nature. The Anglo's attitude was alternately reverent and condescending. The residents of Los Alamos found Pueblo art beautiful and primitive and they were often the objects of collector's mania. With the formation of the Cultural Arts Group at Los Alamos, residents of Los Alamos went to Pueblo Fox Dances, and collected art. At the same time, the scientific community was romanticizing the Indians; the white laborers told the military that they did not want to share military housing with the Indians (pg. 208).

Even with limited contact the Anglo effects on Pueblo culture were profound. The need for additional technical laborers took them out of traditional work, and their economy suddenly shifted from subsistence barter to cash. As a result they became more dependent on the outside world for survival. Eventually women's earnings outstripped the men's. This shifted traditional gender roles and relationships. Soon the mass production of pottery was evident and there was a marked alteration of traditional decoration to match Anglo tastes. This "Angloization" was also true of the rug-weavers at Chimayo; they also became tourist-based cultures. (pg. 210). Hales' is the only study that successfully delineates the changes in the Indian culture effected by Los Alamos and its residents.

- 075 Hanford Environmental Dose Reconstruction Project. *Native American Working Group: December 1990-December 1995*. TSP (Technical Steering Panel for the Hanford Environmental Dose Reconstruction Project), 1995.
- 076 Hanford Future Site Working Group, DOE, EPA. *The Future For Hanford: Uses And Cleanup*. Hanford Future Working Group, 1992.

- 077 Hawkins, David, Ralph Carlisle Smith and E. Truslow. *Manhattan District History, Project Y The Los Alamos Story*. Los Angeles: Tomash Publishers, 1961.

This book is volume II in a series of histories of Los Alamos. Part one, *Toward Trinity*, is by Davis Hawkins and part two, *Beyond Trinity*, is by Edith C. Truslow and Ralph Carlisle Smith. This book is the fortieth anniversary edition of an earlier edited version of a LAMS-2532 report written in 1946 and 1947. This updated volume has had the benefit of additional classified material and photos from LANL. The final section contains extremely specific technical tables, graphs and maps of Los Alamos and the Trinity test site. In addition, there is a large appendix section, A to G, listing numerous conference reports, letters, and specialized material.

The author, David Hawkins was selected by Oppenheimer in early 1945 to write a history of the technology, administration and policy making of the wartime Lab. Hawkins came to Los Alamos in May of 1943 as an administrative assistant to Oppenheimer. Because he knew of the intimate workings of the technology, the administration personnel and the policies of Los Alamos, his approach to a history of the lab reads as a record, not an interpretation of events. As he stated, the "book is a biography of the bomb."

Much of this historical account is a standard recounting of the history of the lab. It is very technical, includes a lot of physics and is best suited to a scholarly reader. It does include, however, a good timetable of the arming and dropping of the bomb on Japan (pg. 256-257).

The second part of the book is the history of Los Alamos from August 1945 to December 1946, when the Manhattan District gave up its control. The author states that the report is merely a chronicle of the reorganization, philosophy and achievements of the lab immediately after the war. As with part one, this is a collection of events and actions written without obvious bias.

Together, these two histories form an excellent reference area for students acquiring a basic understanding of the technology science and events behind the bomb.

- 078 Herkin, Gregg. *The Winning Weapon: The Atomic Bomb In The Cold War, 1945-1950*. New York: Vintage Books, 1981.

The author of this book is a history professor at Yale. His sources include new evidence found in formerly classified documents and the formal opening of restricted papers. This scholarly volume has both good chapter notes and bibliography. As a historian, the author tries to walk the line between revisionist and traditional histories of the Cold War. In its time, this book was very controversial, but so well documented that even those who disagreed with him could not refute his scholarship.

The dropping of the bomb had both an immediate military rationale regarding Japan and a possible diplomatic advantage concerning Russia. The role of the

atomic bomb in the Cold War is the primary subject of the book. Herkin explores the connection between foreign and domestic politics as they concern the bomb. He also discusses the role the bomb had in changing American strategic thinking and planning. America embarked on the Cold War through monopoly, secrecy and exclusion. Alternatively, the U.S. called for cooperation with Russia while rattling its sword. Herkin points out that ultimately holding out the possibility of cooperation with Russia was as powerful a weapon as the bomb itself. Herkin goes into great detail about the misperceptions and folly of the Cold War, both from the side of the U.S. and the USSR. His conclusion is that the bomb, both as a weapon and as a threat, remade foreign policy on the basis of fear and domestic policy in terms of pride. In this way the Cold War could have no winners.

- 079 Hershberg, James. *James B. Conant: Harvard To Hiroshima And The Making Of The Nuclear Age*. New York: Alfred A Knopf, 1993.

This is a huge biography that takes into account the full range of an extraordinary life. The author used previously classified information and original research. He provides a good source listing and over 140 pages of chapter notes. He also includes a number of rare photos. Having never met Conant, the author interviews his relatives and colleagues to form a better picture of the man.

Conant's own autobiography, *My Secret Lives*, was published in 1970, but as most critics and associates agree, it was 701 pages with almost no evidence of the man who wrote it. Conant remained a mystery, unwilling to pierce his tough exterior to show us what he thought or felt. This volume does just that and as such, is a definitive reference for the life of Conant, his public service and private knowledge.

Conant was president of Harvard and Science Advisor to FDR in 1941. He was given the task of assessing whether or not the atomic bomb should be built. As administrator on the Manhattan Project he made the recommendation to use weapons on a Japanese City. Unlike the scientists, he never regretted his decision publicly or privately. Conant left nuclear policy behind in 1952, when he and Oppenheimer lost the fight to prevent the building of the H bomb. Ultimately, Conant was one of the first Cold Warriors. He was an advocate of military measures and global interventionism to prevent the spread of Communism. In the 1950s, he served as Eisenhower's representative in Germany. He helped them rearm, feeling that it was the lesser of two evils.

This book is very rich in detail and citations and provides a reference for the organization and administration of the Manhattan Project.

- 080 Hewlett, Edgar L. *Handbook of Archaeological History: Pajarito Plateau And Its Ancient People*. Albuquerque, New Mexico: University of New Mexico Press, 1938.

This author is among a very elite group of anthropologists that understand that they are studying more than just the inanimate relics of the past. They know the land they study and are reverent of what the land holds both in knowledge and

artifacts. In this study, Hewlett provides numerous maps, photos and drawings as well as an extensive appendix full of relevant drawings and documents.

Hewlett draws a picture of the Pajarito Plateau as landscape and habitation for the indigenous people. He subscribes to the theory that the Pueblo Indians migrated from the cliff dwellings because of the increasing lack of water and food sources on the Pajarito Plateau. Based on Pueblo traditions and on their origin myths, he finds no evidence of a sudden exodus, but a century-long migration. As the last great communities clustered around gradually failing water supplies, their geographical isolation induced a homogeneous development. The evidence that the modern Pueblo villages were once a part of the great cliff dwelling communities of the Plateau is found in their physical type, religious order and cultural remains. Hewlett explores the migration to the Rio Grande Valley and the sharp division between Tewa and Keres stocks and communities. He cites evidence from the author's own excavations of Puye Ruins. He states that the Tewas of San Juan, Santa Clara and San Ildefonso, according to their oral traditions, did not build the cliff dwellings, but simply moved in for a short period of occupancy. From there, they moved to the Rio Grande Valley and generally to the villages they occupy today. As evidence of the Pueblo continuity he cites clan organization, religion and art as inseparable from those of the cliff dwellers.

Understanding the antiquity of Pueblo traditions and culture is essential to understanding the modern Pueblo. This excellent study also provides the researcher a ready source for comparison and reference.

- 081 Hewlett, Richard G. and Francis Duncan. *Atomic Shield: Vol. II 1947-1952: A History of The U.S. Atomic Energy Commission*. Berkeley: University of California Press, 1990.

This volume is the second in a series of official histories of the AEC. This book begins in January of 1947, when the Commission took over the nation's atomic program. It ends in 1952 with the detonation of the thermonuclear bomb. The scope of this book covers the Truman administration, the Marshall plan, the Berlin Blockade and the Korean War. Some limitations regarding classified material impact on the section concerning the design and production of nuclear weapons. The book also is a great source handbook on the AEC and the history of the period, along with the evolution of the AEC, its policies, opening salvos of the armaments race, government-industrial relations and the global role of scientists in the formulation of public policy.

The authors give us an excellent bibliographical essay on sources as well as extensive interviews sited in detail. As in the other volumes, there are excellent chapter notes. Appendix one is a table of organization for the AEC and appended committees. Appendix two is the construction and operation of facilities under the AEC from 1947 to 1952. Appendix three is a table of non-production reactors. Appendix four is a table of announced nuclear tests. Appendix five is procurement of uranium concentrates, appendix six is commissions and contractor employees from 1947 on. Appendix seven concludes the financial data.

By 1952, the AEC oversaw the nuclear arsenal, enlarged research and production facilities and had many experimental research reactors. Hundreds of scientists were getting financial support for research. Private industry was starting to develop nuclear power.

The first period was very complex, but the records concerning volume two were many times that which was available for volume one. The authors stayed with the narrative and chronological format. The central perspective of volume two is the phrase "Atomic Shield" that was used to justify expanding the U.S. arsenal. At some point, the AEC shifted its aims from the peaceful atom to security and the image of war.

- 082 Hewlett, Richard G and Jack M. Holl. *Atoms For Peace And War, 1953-1961: Eisenhower And The Atomic Energy Commission*. Berkeley: University of California Press, 1989.

Volume three of the series of AEC official and classified histories covers the period from 1952 to 1960. The book is based on unpublished sources, but unlike the others in the series, is not strictly an institutional history. It focuses on the AEC's role in the formulation of domestic and international policy in the nuclear field. The authors had access to commission archives' in fact, they were responsible for the same records after the committee dissolved. In addition, the authors were among the first historians with a security clearance to see the files contained in the Eisenhower Presidential Library. The authors obtained access before these files were closed to research. In addition, the authors had access to classified records at the Department of State. Once again, there are excellent chapter notes and it is invaluable as a source on the AEC and the Eisenhower Period. Appendix one is on personnel. Appendix two is the AEC ten-year financial data. Appendix three is the ten-year sum of employment. Appendix four is a list of announced U.S. nuclear tests from 1953 to 1958. Appendix five is the procurement of uranium concentrates. Appendix six is the agreements for Cooperation of Civil and Military Uses of Atomic Energy. Appendix seven is the AEC operation offices. Appendix eight is organizational charts. Appendix nine is reactor systems.

This volume moves way beyond a simple history of the AEC. The authors are in line with revisionist historians regarding the Eisenhower Presidency, although they do give some support to anti-revisionist themes. This book centers on the Eisenhower administration and the development of nuclear energy as well as the build-up of the Cold War Arsenal. There are also sections that deal with the Atomic Energy Act of 1954, the Oppenheimer Security Hearing, the atmospheric testing of weapons in Nevada and the Pacific, fallout issues and problems worldwide, the Euro atom Treaty and the AEC and industrial development of energy.

The book reveals Eisenhower's influence at crucial points on policy formation and gives a very detailed look at the Eisenhower presidency. The overall theme was that during this period, nuclear technology was part of the political, economic and

social conscience of the industrial nations of the west. The authors also assess the impact of nuclear strategy and tactics on national defense systems. They reveal Eisenhower as a committed and intelligent Cold Warrior, whose distrust of the Russians hampered his own efforts to end the arms race.

- 083 Hewlett, Richard G. and Oscar Anderson, Jr. *The New World, 1939-1946: A History Of The U.S. Atomic Energy Commission*. University Park, Pennsylvania: University of Pennsylvania Press, 1962.

This volume is the first of three that comprise an official history of the AEC. Volume one covers the period from the discovery of nuclear fission up to the establishment of the AEC. The authors used extensive classified documents to write an unclassified history. At the time they began this project, they were employees of the AEC, although the book is an independent study. The book is written as a narrative in chronological order of events. It is devoted to the AEC's inheritance of key production processes, the construction of physical plants, the origins of the Atomic Energy Act of 1946, and the first steps to national control of nuclear energy.

The authors carefully examine the development of the atomic bomb and nuclear policy in the U.S. and the role of scientists in policy and development. Their conclusion is that the real issues of atomic energy failed to reach the American people in the decade after the war. This was the fault of the continuing need for security and the general lack of scientific knowledge of the public. In 1954, security was liberalized and international cooperation allowed the development of civilian uses of atomic energy. The authors explain the effect of policy development at national and international levels.

The authors provide for the researcher a very extensive set of chapter notes and appendices. The most interesting documents brought to light by this volume are papers from a sealed safe containing the correspondence of Vannevar Bush and James B. Conant from 1940-1945. In addition, Appendix one contains the text of the McMahon Bill. Appendix two is the cumulative cost table of the Manhattan Engineering District as of December 31, 1945. For scientists and laymen alike, all three volumes serve as source books for students of war and peace.

- 084 Hines, Donald M. *Magic In The Mountains: The Yakima Shaman, Power And Practice*. Issaquah, WA. Great Eagle Publishing, 1993.

The author of this volume has a Ph.D. in folklore and brings his unique view to the Yakima Indians culture and life. He uses older accounts of the Yakima Shamans and edits them to make them more accessible to scholars and laymen alike. The book is full of direct statements from Shamans concerning how they acquired their powers and conducted their practices.

The two research papers that comprise the largest body of this work are Yakima Valley pioneer L.V. McWhorter's account from 1903, and George Benson Kuykendall MD's account from 1872-1882. Kuykendall was the doctor for the Yakima Agency located at Fort Simcoe, Washington Territory, who was asked by

the Smithsonian to study Indian Ethnology. His research sets forth the general principals by which Yakimas lived and died.

McWhorter's journal provides insight into the Yakima Indian practices of magic and medicine. "The Yakima Indians were superb supernaturalists. They were the very power of magic." (pg. 9). His account details Shamanic curses, visions, and out-of-body journeys.

This volume is one of the few that actually quotes numerous Yakima Indian voices.

- 085 Hill, W.W. *Ethnography Of The Santa Clara Pueblo*. NM, Albuquerque, NM UNM Press, 1981.

This superb work was based on field research done over a period of eighty years, although most of the data were gathered during the years 1940-1941. It is based in large part on the unpublished field notes of Jean Allard Jeancon, written between 1904 and 1930. This volume was edited after Hill's death by Charles H. Lange, a professor of anthropology at the University of New Mexico. Lange annotated the manuscript, adding an excellent glossary, genealogy charts, and an extensive bibliography. In addition, this book contains a series of great pictures of everyday life in the Pueblo. In all, this book presents a picture of the philosophy, daily life, traditions, dances, food, and customs of Tewa Speaking Indians in Northern New Mexico.

The book is based largely on "third party paid informants" and direct observation. Jeancon's manuscript is concerned mostly with the Santa Clara Pueblo and their ceremonial life. The text is also a good, basic Tewa language primer. In addition, because the Santa Clara were observed over many years by many different researchers, they gathered information that is no longer available to researchers. As such it is a primary source that is invaluable.

- 086 Hunn, Eugene S. *Nch'I-Wana (The Big River): Mid-Columbia Indians And Their Land*. Seattle: University of Washington Press, 1990.

This book is a result of a ten-year collaboration between the author, an anthropologist, and James Selum, a Columbia River Indian Elder. It includes numerous photographs, an excellent bibliography, an appendix of Indian terms and language and a plateau timeline. The author states that this book was written mostly for the Northwest Indians so that they would know their traditions. The breadth of the book is extensive despite the fact that the author's information on culture issues came from one extended family.

The text of this volume is dominated by ecological issues and ethnography. The author states, "The Indians of the Mid-Columbia were not a tribe. They owed allegiance to no one chief, nor did they join in the defense of their territory . . . rather they were people who cherished their individual autonomy." (pg. 4). Because of their non-tribal configuration, the Mid-Columbia Indians are little known ethnographically.

This book provides a good background on the Indians of the Northwest and provides an understanding that helps explain the Indian issues surrounding the Hanford site.

- 087 Hunter, George. *Reminiscences Of An Old-timer. A Recite Of The Actual Events, Incidents, Trials . . . Of A Pioneer, Hunter, Miner, And Scout.* Battle Creek, Michigan: Review and Herald, 1889.
- 088 *In The Matter Of J. Robert Oppenheimer: Transcript of Hearing Before Personnel Security Board And Texts Of Principal Documents And Letters.* DOE, Cambridge, Mass: MIT Press, 1954.

This is an invaluable original source for scholarly study. It shows both the tone and intent of the questioners and the witnesses before the board. With careful reading, the student can find much of the typical methodology of bureaucratic witch-hunts as well as the zealous pursuit of security issues. From this source it is clear that Oppenheimer's aloofness and intellect worked against him as effectively as did his detractors.

- 089 Johnson, Charles W. and Charles O. Jackson. *City Behind A Fence: Oak Ridge, Tennessee, 1942-1946.* Knoxville, University of Tennessee Press, 1981.

This book was written by two history professors who used previously classified material and a large number of oral interviews. Using these resources they set out to chronicle the daily life in Oak Ridge. The authors analyze the people who worked there, and the diverse impacts of stress, problems with housing, segregation, education, recreation, their interaction with surrounding communities, and security issues, on communities that didn't know what they were making.

Site X was the most complex of the three sites, the primary mission was the production of U-235 through gaseous diffusion and an electromagnetic process. The site also included an atomic pile or graphite reactor producing small quantities of plutonium. Oak Ridge had the largest population of the three and was the most intricate in community organization. The site was established first and later served as a model for Hanford.

"Secret cities built from ground up represent episodes in American social history, they chronicle the nature of human life in them" (pg. xx). "The military never believed they were building an ideal or permanent community just something necessary to the development of the bomb." (pg. xxi). Thus the authors reject the "company town" analogy because the city lacked the stability of most company towns.

The best analogy would be to compare Oak Ridge to a frontier community. The "MED officials often used this Pioneer analogy. It was an effective device for urging residents to live more cheerfully under difficult conditions" (pg. xxii). Like the frontier population, the inhabitants of the American west were generally young, and their social, economic, and municipal institutes were created anew.

Ultimately no analogy could be totally adequate for there was no historical precedent.

The size of the town increased daily with the continual need for huge numbers of laborers. The population peaked in 1945 at 75,000. There are no real figures on the ethnic composition of workers (pg. 28) or their geographical composition (pg. 41-45). Oak Ridgers kept to themselves and the army encouraged this for security reasons, outsiders could not get in without a purpose and a pass. There were always housing pressures, during the war they could not build units fast enough. There were never enough public facilities, commodities and amenities, even with outside management. Most of the residents in their interviews remember the hardships and regulations, but primarily they remark on the overall camaraderie of the workers. They recall good healthcare, spiritual life, schools, clubs and recreation.

Overall, this book provides an in depth and very specific look at Oak Ridge from the inside out. In this study there is no attempt to assess the impact on Indian land or culture.

- 090 Johnson, Leland and Daniel Schaffer. *Oak Ridge National Laboratory: The First Fifty Years*. Knoxville: University of Tennessee Press, 1994.

Both of these authors are academics, although their book was written for the non-scientific reader. There are numerous pictures of Oak Ridge National Lab, a good bibliography, extensive interviews and an impressive list of articles. The book was prepared to commemorate 50 years at Oak Ridge and was sponsored by the lab. This volume begins with the origins of the lab in 1943 and goes until the present. The book also gives a short history of the development of the Clinton Labs—two research and development laboratories at Oak Ridge and the history of management, training and alternative research development there. In addition, it's a good account of the physics and progress on experiments at ORNL.

In 1947, the AEC designated sites as National Laboratories. In 1993, ORNL is still one of the most powerful atomic and environmental labs. It is operated by Martin Marietta Systems. Much of the foundation of radiation medicine was established there in the early years of isotope development. In February 1950, ORNL merged with the research division at Y-12 and increased its staff by fifty percent. In the 1960s, the lab focused more on environmental studies and nuclear safety issues.

- 091 Jones Jr., Oakah L. *Pueblo Warriors And Spanish Conquest*. Norman: University of Oklahoma Press, 1966.

This author has a Ph.D. in history and is also an Air Force major. For this book, he has compiled a great bibliography of extensive and diverse sources. In addition, he has many illustrations throughout the text.

This book is about the role of Indian Auxiliaries in the Spanish, French, English and American Conquests of North and South America. Auxiliaries were small warrior groups of Indians fighting with the conquerors to pacify other Indians

often becoming the primary forces of these countries. Jones' book concentrates on the organization, contribution and significance of Indian Auxiliaries used by Spain against the Pueblo Indians of New Mexico. In their history, the Pueblos united rarely and then fell quickly apart. Spain, however, employed large numbers of Pueblo Auxiliaries, which were eventually replaced with Utes, Navajos, and Jicarilla Apaches, to subdue bands of warlike Apaches.

This book provides an extensive history of a relatively unknown aspect of American Indian History. As such, it is a very useful background piece.

- 092 Jones, Vincent C. *United States Army In World War II: Manhattan: The Army And The Atomic Bomb*. Washington D.C.: Center of Military History, U.S. Army, 1985.

Jones is an Army historian. In this volume he gives the reader a chronological narrative from the army perspective on their participation in the atomic program from 1939 to the end of 1946. It is also a laymen's guide to the history of atomic energy and the technical aspects of bomb development. The book is also a history of how the army organized and administered the single largest technological project of its kind.

Because of its official nature, it has a good biographical notes section on archival collections, personal papers, manuscript histories, interviews and correspondence by government departments as well as published sources. It is written as a bibliographical essay. The author also includes extensive organizational charts, maps and rare pictures. It is a volume full of hard to obtain facts and figures.

- 093 Josephy, Alvin M. Jr. *The Nez Perce And The Opening Of The Northwest*. Yale University Press, 1971.

This book tells the story of the Nez Perce people and the American migration into the Northwest. Josephy attempts to describe, in accurate historical detail, the things the Nez Perce and other northwest tribes went through in dealing with the Americans moving onto their lands. Josephy discusses the impact of the traders, missionaries, miners, and eventual settlers that forced their way onto tribal lands, eventually taking the land away from the tribes.

- 094 Jungk, Robert. *Brighter Than A Thousand Suns: A Personal History Of The Atomic Scientists*. (New York, Harcourt, Brace, and Jovanovich, 1958).

This is a reporter's in-depth account of the group of scientists who contributed to the making of the bomb. It is written in a narrative style, and is based on an impressive list of interviews with almost everyone involved. There are no secondary sources used, as well as no notes or bibliography.

Jungk starts from the European roots of nuclear science and the individuals involved. His is a very basic history of how the individual scientists and theories came together seemingly to do the impossible.

The author gives further substantiation of how Indian holy sites were part of the original Ranch School land. The owner had agreed to protect these sites and he

made Groves promise to continue this protection. (pg. 129-130). This is the author's only mention of the Indian impact on atomic history.

- 095 Kaplan, Fred. *Wizards of Armageddon*. New York: Simon & Schuster, 1983.

The author of this book is a Pulitzer Prize Winning Defense correspondent. Kaplan's study of the nuclear elite decision-making in America and the development of nuclear warfare strategy is groundbreaking in both its detail and depth. The book concentrates on the individual actors and their theories that led to the development of strategic thinking in the U.S. Kaplan supplies the reader with excellent chapter notes and interviews citations. In the bibliography, he also provides a list of interviews complete with citations.

After the bomb was dropped, the whole perception of modern warfare, the nature of international relations, the question of world order, and the function of weaponry had to be rethought. "From these ashes an entire intellectual community would create itself, a new elite would emerge . . . a small and exceptionally inbred collection of men . . . who devoted nearly every moment of their work-a-day thoughts to thinking about the bomb . . ." (pg. 10).

In the first months after Hiroshima, the International Institute at Yale became the center of political thought concerning the bomb. Bernard Brodie became the center of the movement at Yale and RAND, where the ideas came together under a contract with the Air Force. Yale, combined these intellectuals and supplied them with money from most of the nonprofit foundations and corporations in America.

Brodie expressed the conclusions of a new elite decision-making group that the atom bomb had changed not merely the destructiveness but the very nature of war. He stated that the age of defenses was probably finished. A nation must remain constantly prepared for war and this constant readiness might encourage aggression. Therefore a policy of deterrence was the only rational policy in the postwar world. "The nature of war had changed drastically. So had the conditions of peace." (pg. 32). The first task of this intellectual elite as well as people of every nation was to come to grips with everyday living with the bomb.

- 096 Kelly, Lawrence C. *The Assault On Assimilation: John Collier And The Origins Of Indian Policy Reform*. Albuquerque: University of New Mexico Press, 1983.

In this volume, Kelly provides the reader with good illustrations, appendices and notes. This book is a biography based on Collier's personal papers.

Kelly gives us an account of John Collier's career up to 1968. Collier went to New Mexico in 1920 and began a career for Indian policy reform. He first opposed the Bursum Bill, which would have deprived Pueblo Indians of their land and water rights. He also defended Pueblo ceremonials on the grounds of religious freedom and cultural survival.

As Indian Commissioner for twelve years, this is essentially his journal of civil rights strategy, as Collier became the lobbyist for the American Indians. Because of his dedication to the Indian cause and his position as commissioner, many of today's Indians owe their survival and recognition to John Collier.

- 097 Knaut, Andrew L. *The Pueblo Revolt Of 1680: Conquest And Resistance In 16<sup>th</sup> Century New Mexico*. Norman: University of Oklahoma Press, 1964.

This book is written in a largely narrative style, although it does have good chapter notes and bibliography. The focus of the book is the revolt in August of 1680 of the Pueblo Indians against the Spanish overlords. Knaut contends that their success was based on unusual unity and secrecy. Although the Spanish forces retook the land in the 1690s, this revolt is still the only successful reversal of European expansion by a native population of North America.

In addition to his description of the revolt, the author also shows the impact of European invaders on the Pueblos. Their effect was massive and lasting. Trade relations were disrupted, whole villages starved, people suffered from new diseases, and some Pueblos even disappeared altogether. Eventually, the Pueblos outlasted the conquerors because of their commitment to the land and the depth of their religious beliefs. The Pueblos incorporated what they had to to survive.

- 098 Kuletz, Valerie L. *The Tainted Desert: Environmental Ruin In The American West*. New York: Routledge, 1998.

This book was the author's dissertation. She is the daughter of a weapons scientist and grew up on a DOD Nuclear Research and Testing Center in the Mojave Desert. She provides the reader with extensive chapter notes and bibliography, comprising a wealth of ethnographic empirical data. Despite the rigors of her methodology, she is very clear about her political agenda.

The book is focused on the social and environmental impact of nuclear development from the 1940s through the Cold War to the first U.S. deep georepository for high-level nuclear waste at Yucca Mountain, Nevada, in the late 1990s. The author details the competing claims to land in the Southwest by Native Americans, anti-nuclear activists, Euro-American Scientists and the Government. She maintains that the Southwest was sacrificed to national interest. This was a form of nuclear colonialism and economic imperialism that regarded the Indians as an expendable group.

Her study is a comprehensive account of the impact of nuclear technology on Native Americans in the Southwest. The key methodology is a mapping of the nuclear landscape. This provides a unique environmental and geo-social history of the region. It shows the transformation of land and people in the Southwest. "Native people and their lands constitute an invisible presence in areas heavily occupied by the U.S. Military and the DOE." (pg. 9). As the author says, "The nuclear landscape constitutes as much social and political geography as it does an environmental region . . . the changes are most extensive in the Southwest . . . an area originally chosen for its inaccessibility and its secrecy." (pg. 9). She also

states that "Within the region stand thousands of abandoned and un-reclaimed open pit mines, underground uranium mines and mills, and two sites of deep geological nuclear waste repositories. The Government detonated more than 928 above-and below-ground nuclear devices in this region. The region also contains most of the important nuclear research and development centers in the U.S." (pg. 10). "Significantly, this region is home to the majority of land-based American Indians alive today in North America." (pg. 11).

The author gives numerous examples of how the Indians of the region, their needs and rights were either ignored or overridden in the race for nuclear supremacy. From those that lived near test sites, mines and secret centers, it is very clear that they were never told about the dangers of radiation, fallout or chemical contamination. For example, the Southern Paiute Women Elders tell how tribal members used to watch at the Nevada Test site while they were testing the bombs. No one told them of the dangers of eating plants and animals from the test sites. In fact, the Paiutes slept outside in the summer, all of their activities were outside. They drank water from the site. By 1960, the Southern Paiutes had reported an increase in cancer and birth defects above the norm. Perhaps the author sums it up best by saying, "With their greater reliance on obtaining sustenance from the land, Indian communities may have been far more exposed to the dangers than the people in nearby Las Vegas . . . we have no health records to rely on to test the vulnerability of Indians living near sites of nuclear research and testing." (pg. 4). What were undesirable wastelands to the Euro-Americans, were places of origin and survival to the Indians. They could not move or hide.

- 099 Kunetka, James W. *City Of Fire: Los Alamos And The Atomic Age, 1943-45*. Albuquerque, NM: UNM Press, 1979.

This author bases his excellent history of Los Alamos on previously classified wartime files, the records of the Manhattan Project and extensive interviews with the participants. Kunetka's is a very scholarly treatment with exceptional notes and sources. He also includes a good glossary on nuclear terms.

The first section of the book deals with a short history of the development of nuclear physics. Up to the 1930s, most research on physics had been conducted in Europe. By 1938, the Americans were only slightly behind the Europeans in making significant discoveries. When most of the great minds of Europe fled to America during the Nazi onslaught, the idea of the bomb came together very quickly. Still, much of the leadership of the fission movement was in the hands of European born scientists.

Szilard, Fermi and Einstein first proposed the idea of the bomb to Roosevelt. In response, in June of 1940, the President created the National Defense Research Committee to coordinate the scientific research that was need for defense. In late June of 1942, Roosevelt developed the office of Scientific Research and Development to absorb the NDRC, placing it directly under Roosevelt's control.

In January of 1942, Vannevar Bush moved to centralize all fission research to one location. He organized the Met Lab at the University of Chicago. By May, Bush

had control of the design of the weapon and production of nuclear materials under OSRD.

Oppenheimer recruited for the lab from some of the most influential institutes in the U.S. When the lab formally opened in April of 1943, the only things that they knew for sure was that research schedules would be determined by uranium and plutonium production and that the end product would be a bomb. Oppenheimer organized the lab on a university model with four divisions reporting to a central administration. Once Gen. Groves was given control of the Manhattan Project, he pushed through the appointment of Oppenheimer as director

After the first year, Los Alamos had more than 2,000 staff members, a huge increase over the 100 that Oppenheimer had first proposed. The author has a good section on the step-by-step arrival and processing that scientists and staff went through in Los Alamos. He also goes into some detail regarding the busing in of Indian domestics (pg. 94-95), and the employment of Indians in technological and other positions. As he says, "Hill residents were intrigued by the Indians . . . a few hill residents became serious students of Indian life and history. Most thought the Indians were colorful and quixotic, treating them pleasantly and sometimes condescendingly." (pg. 106).

In 1944, Oppenheimer reorganized the administration of the lab to enhance progress. With the arrival of Fermi, the first half of 1945 saw work at its most intense. By the time they were ready for a test of the bomb, the site selection for Trinity was narrowed down to two choices, the Alamogordo bombing range and a site near the Great Sand Dunes National Monument in Southern Colorado. The Colorado site was eliminated because, ". . . the valley was occasionally inhabited by Indians and the Secretary of the Interior, Harold Ickes, had forbidden the seizure of any land belonging to the Indians." (pg. 143).

100 \_\_\_\_\_ . *Oppenheimer: The Years Of Risk*. New Jersey: Prentice Hall Inc., 1982.

This book focuses primarily on Oppenheimer's government service from 1942-1954. The author based this volume on extensive research of previously classified documents at the Los Alamos Lab, the FBI and DOE as well as interviews with Oppenheimer's family and associates. There are good chapter notes, as well as an extensive bibliography.

Kunetka details the security issues with Oppenheimer and how they were continually pursued by Los Alamos Security Personnel and the FBI. He shows how this problem pursued Oppenheimer until his trial in 1954. The author acknowledges Oppenheimer as a remarkable administrator, creating a university atmosphere at Los Alamos. Oppenheimer was the buffer between fellow scientists, Gen. Groves, and the military. As the author details the post-bomb history of Oppenheimer as a spokesman for shared scientific knowledge, he shows us the series of events that led to Oppenheimer's revocation of clearance due to the AEC hearings.

In general, Kunetka gives a very good objective account of Oppenheimer's complex personality, naiveté, and fall from grace.

- 101 Kurzman, Dan. *Day Of The Bomb: Countdown To Hiroshima*. New York: McGraw Hill, 1986.

This book is based on hundreds of interviews in both the U.S. and Japan over a three-year time period. The author includes recently opened files from the FBI, the Truman Library, unpublished notes of Gen. Groves, and the Szilard and James F. Byrnes collections. In addition, this book has an excellent bibliography and annotated chapter notes. The story is told through the characters and reads very much like a novel. Perhaps this is one of the book's failings. It purports to be a very unvarnished account of personalities and often takes great leaps from documentation to make the author's point.

The book also incorporates many Japanese character studies and eyewitness accounts, switching back and forth between the U.S. events and those in Japan.

- 102 Lamont, Lansing. *Day Of Trinity*. New York: Athenaeum, 1965.

Lamont's book is based solely on interviews with Grove, Oppenheimer, Bainbridge, Segre, Bethe, and other key figures that were involved with the Manhattan Project. Despite these intricate interviews, the book contains no direct quotes or annotation. It is written in a clear narrative format and contains background on the progress of the bomb, the involvement of the various scientists, and many new anecdotes.

Lamont states that the "Army knew that 200 Apaches were living on an unmarked reservation to the East of Trinity on the other side of the Sierra Oscura" (pg. 128). He, like many others provides evidence that the "Secretary of the Interior Harold Ickes had insisted that no Indians be displaced" (pg. 76). Another astonishing revelation is that "Oppenheimer knew the names of most of the Mexican and Indian laborers . . . at Los Alamos" (pg. 133). Perhaps because of his interview style, the book is an often-quoted source of other authors.

- 103 Lange, Charles H. *Cochiti: A New Mexico Pueblo, Past And Present*. Austin: University Of Texas Press, 1959.

This book was originally a dissertation. It is a very scholarly treatment with a good bibliography and a rare section of photos. In addition, there are over 147 pages of detailed appendices and maps, which include Cochiti census data, home ownership and occupancy, crop acreages and yields, interrelationships among Cochiti social, political and ceremonial components, society and clan rosters, Kachinas, dances, songs and linguistic notes.

The sources for this volume were taken from unpublished material contained in the records of the Franciscan Fathers at Pena Blanca and modern economic educational and health data attained from the United Pueblo Agency. An additional and very surprising source is the unpublished journal of Adolf Badelier

for the years of 1890-1892. The author lived in the Pueblo for extensive periods in 1947-1948 and 1951.

Although he had help from paid informants, most of the information came from private interviews. The period of the study is 1946-1953. It is a communal study based in social anthropology using comparative data with other Pueblos. Since this is a more contemporary study, the author uses the earlier studies and brings them up to date. Lange also includes numerous drawings, figures, maps and plates.

Although the author presents a very detailed ancient history of the Cochiti, perhaps the greatest value of his study is the section that deals with the impact of non-Indian cultures on the Cochiti. He chronicles the impact on culture, the economy, political organization, religion and social organization as it dealt with the Spanish and the U.S. Government. The author deals not only with the impact of the Spanish and U.S. in earlier centuries, but his concentration on their impact on contemporary Pueblos is unique. Lange shows that Spanish Americans often owned and farmed agricultural tracts within Pueblo Lands. They also owned stores in the Pueblos. Because of these contacts, the Pueblos absorbed other cultural experience into their own daily lives. Lange also takes a look at the impact of increasing tourism on the Pueblo economy, concluding that this was a significant agent of change in the Pueblo economies as was the move from barter and trade to cash. He concludes that this alone has had the most impact on Pueblo daily life and culture, bringing them slowly into modern life. The author states, "Economically, the war years resulted in an appreciable increase in cash income for the Pueblo as a whole, derived from industrial wages, service pay and allotment checks sent to dependents of service men." (pg. 88).

Lange makes a very good case that although the modern Pueblos have absorbed conquerors and their cultures for hundreds of years, they are less and less immune to modern influences. In particular, the change in their economies and social organizations show the greatest influence of change. At the same time, perhaps because of these exposures to other cultures, there has been a revival of traditional ceremonies and indigenous religions. Although the author is studying only one Pueblo, many of his conclusions are seen in other Pueblos.

Both in a comparative historical and anthropological context, these areas of change form the basis for further study.

104 Lang, Daniel. *From Hiroshima To The Moon: Chronicles In The Atomic Age*. New York: Simon & Schuster, 1959.

105 LANL. *Summary Of Environmental Surveillance At Los Alamos During 1995 And 1996*. Los Alamos, NM: LANL, 1995.

This document is a summary of the environmental surveillance conducted at the LANL Site during 1995. Included with this document is the report for 1996. These reports gave detailed accounts of how operations at the LANL facilities affected the environment around the site. In addition to the environmental

surveillance, the studies include monitoring of the wildlife and potential food sources in the surrounding area. The 1996 report has a section that details how the levels of radionuclides were tested on garden lands of the Pueblo of the Cochiti, Jemez, Taos, and San Ildefonso. This material is relevant in that it shows in detail how Los Alamos affected the environment and Pueblos of the region.

- 106 LANL Historians. "*Dateline Los Alamos.*" Los Alamos National Lab, Special Edition, Monthly Magazine. July 1995, LALP-96-6 and 7.

This issue of the monthly magazine published by the Los Alamos National Lab marks the 50<sup>th</sup> anniversary of the Trinity Test. The issue is a tribute to the men and women of Project Y, that achieved the impossible in two years, three months and sixteen days of scientific research.

The first article looks at Los Alamos in the years following Trinity and its contributions to defense research. It details the breakup of the AEC and the establishment of the Department of Energy in 1977. Los Alamos is funded by the DOE and is operated by the University of California. In the 1980s the labs funding was roughly fifty percent defense and fifty percent defense research. By 1987, the balance had shifted in the favor of eighty percent defense. After the collapse of the Soviet Union in the 1990s, the budget has a much greater citizen emphasis. Because of the court decision concerning Oak Ridge in the mid-1980s, the budget for environmental restoration and waste management at Los Alamos climbed from a few million to 240 million, exceeding the budget for nuclear weapons research and development for the first time (pg. 3).

The second article in this issue is by photographer Berlyn Brixner. As the official motion picture photographer for Trinity, he built 37 high-speed motion picture cameras to photograph the test. He also designed camera bunkers of steel and lead with very thick glass windows to house the cameras. His 21 slides that detail the development of the fireball and its effect on the atmosphere and surrounding terrain have been seen by virtually all populations of the world.

In the article "Living At Los Alamos: The Mud, The Mesa, The Memories," the author shows early life on the mesa, ankle deep in mud. It catalogues the constant problems of water supply, security and travel. Perhaps the most quoted event in Pueblo and Hill contact is the Pueblo party in December of 1945. It is covered extensively in this article. In addition, several of the wives' accounts of their early lives and their contact with the natives and native crafts are also presented in great detail. As Bernice Brodie states, "Some of us had more Indian Crafts in our Army apartments than the Indians had in their homes, and then modern American conveniences such refrigerators and linoleum began cropping up in the Pueblo." (pg. 22).

The final article, entitled "Los Alamos Timeline" is a year by year account of research highlights for the first fifty years at Los Alamos.

- 107 Lanouette, William and Bela Szilard. *Genius In The Shadows: A Biography Of Leo Szilard.* New York: Charles Scribner's Sons, 1992.

The author of this biography was a former Washington correspondent for the "Bulletin of Atomic Scientists." Bela Szilard, Leo Szilard's brother, also contributed family collections and letters. The authors have included a very detailed list of chapter notes. The author states that Szilard was overlooked by most of the Manhattan Project's official histories because of his many policy disputes with Gen. Groves. The documents on his physics research and political activities remained classified military secrets for many decades, and his personal papers and letters were sheltered by his wife. In 1983, the papers became available, but needed extensive re-organization. A key source for this was Szilard's brother Bela, who added his own writings, collections of photos and family anecdotes.

Szilard was first to develop the idea of attaining energy from a nuclear chain reaction. He, along with Einstein, pressed the U.S. Government to begin Atomic Research. He also co-designed, with Enrico Fermi, the first nuclear reactor. Szilard lived on both sides of the arms race. First, to prevent, then to hasten and finally to outlaw nuclear weapons. In 1945, he led the successful lobbying for civilian control of atomic energy. In 1962, he founded the first political action committee for arms control.

The authors give significant details on Szilard's efforts to forestall the nuclear arms race with the Russians. Szilard promoted sharing secrets with the Russians in order to bring about international arms control agreements. He was the only one who correctly predicted the short period of time the Soviets would need to make their own bomb. He was also at the heart of the drive to petition President Truman to prevent the bombing of Japanese cities. Szilard was the driving force behind the successful lobbying of Congress to shift post-war control of atomic research and weaponry from military to civilian hands. Although he was chief physicist of the Manhattan Project Met Lab, and proposed and designed the breeder reactor, until his death in 1964 he worked tirelessly to control the bomb he had helped to create.

108 Larsen, Rebecca. *Oppenheimer And The Atomic Bomb*. New York: F. Watts, 1988.

109 Laurence, William. *Dawn Over Zero*. Knopf, 1946.

110 Lawren, William. *The General And The Bomb: A Biography Of General Leslie R. Groves, Director Of The Manhattan Project*. New York, Dodd, Mead, 1988.

The General and the Bomb is a very biased revisionist history based on the idolization and redemption of General Leslie R. Groves. For instance, the author says, "the success of the Manhattan Project was due not to Oppenheimer, but to Groves."

The book is purportedly based on Grove's "previously overlooked personal papers" and many interviews – Grove's papers and diaries are in the National Archives, along with a history of the MED. There is also an additional collection of Grove's papers at Stanford at the Hoover Institute's Library. Finally, General

Richard H. Groves, son of Leslie Groves, was, according to the author, of immeasurable help.

Lawren's book focuses on the making and dropping of the bomb with Groves as the key character. He often rewrites history: "Bush (Vannevar) sensed--even if many of the scientists did not --that the making of a bomb would ultimately require the construction of immense industrial installations, sprawling "fission factories." (pg. 17), "When the planning of that construction began, scientific brain power would have to make room for engineering expertise (Gen. Groves)."

As the author says, Groves' "philosophy was to delegate wherever he could and then put the screws to the delegates." (Gen. William Wannamaker) "He was proud of the fact that people were scared of him." (his son in law) "He knows what he wants and knows how to get things done." (Gen. Styer, pg. 61-62).

Initially, Groves told Styer that without more rank and complete control he could not command the scientists' respect, so Styer promoted Groves to General and put him in charge of the whole project. As is evident, this book provides some astonishing quotes, but is so biased and provides so few citations and evidence that it must be rated as a questionable history. For example, Lawren says that although earlier, the NDRC had picked the Tennessee Valley site in earlier discussion, but it was Groves that "pushed it through", and he also pushed and got an AAA rating for raw materials "on his own". On the afternoon of his appointment to the project, he ordered Nichols to go to New York and buy all the uranium Stengier would sell, although no one knew of the uranium stores held for over two years in New York (pg. 74).

- 111 Libby, Leona Marshall. *The Uranium People*. Crane Russak, New York, 1979.

This is the story of the development of the atomic bomb as told by the only woman physicist on the Manhattan Project. She joined the project when she was a graduate student at the University of Chicago Met Lab. Later at Hanford, she conducted research on heavy water and helped to build the first nuclear reactor. After the war, she went to Princeton with Oppenheimer to do further research. In this memoir, she details the science and the personalities she worked with. This book was drawn from her notes for a series of lectures, given in the early part of 1976 at the University of Utah. Libby includes no notes or bibliography.

In discussing the preliminary planning for the Trinity site, she also states that "Harold Ickes, Secretary of Interior, had directed through President Roosevelt and General Groves that not a single Indian should be displaced from his home and his land." (pg. 217-218)

- 112 Los Alamos National Laboratories. *Los Alamos, Beginning Of An Era*. Los Alamos, NM: LANL, 1984.
- 113 Lyon, Fern and Jacob Evans, ed. *Los Alamos: The First Forty Years*. Los Alamos New Mexico: Los Alamos Historical Society, 1984.

This volume is dedicated to Robert Oppenheimer. It includes Einstein's 1939 letter to Roosevelt and Roosevelt's 1943 letter to Oppenheimer, establishing the special lab.

The book includes an incredible group of pictures, documents, letters, newspaper articles and magazines that let the journalism of the time speak for itself. It contains a great wealth of reprints and as such may be used as a general primary source. Especially valuable are reprints from the Los Alamos "Bulletin" and town council minutes. This is Los Alamos' scrapbook.

- 114 ***"Manhattan Project: Official History and Documents."*** Manhattan Project: Official History and Documents, 1972.

This document is the index of microfilm regarding every aspect of the Manhattan Project History. Sections include the site selection requirements, processes, and land acquisitions for both the Los Alamos facilities and the Hanford area. An extensive section regarding Col. Matthias is also included.

These microfilms are available at both the DOE-RL Public Reading Room and the National Archives II in Maryland. The material listed in the index offers further research opportunities regarding the Manhattan Project.

- 115 Mason, Katrina R. ***Children Of Los Alamos: An Oral History Of The Town Where The Atomic Age Began.*** New York: Prentis Hall, 1995.

This volume is an oral history derived from more than seventy interviews conducted in 1992 and 1993. The interviews with the children of Los Alamos followed no set list of questions, but were directed through central themes concerning their memories of the land, the people and the bomb. The appendix has excellent biographical notes on each of the interviewees.

The children of Los Alamos were a combination of Europeans, Anglo-Americans, African and Hispanic Americans. They grew up in a town unlike any other. A town whose average resident was twenty-four years old. A town where there was no unemployment, no elderly, and no disabled. Uniting this group of children from diverse backgrounds, was their physical isolation from the rest of the country. In general, the children quickly accepted the fences, the guards, the soldiers and the secrecy far more than their parents ever could.

The recollections of the children from 1943-1952 have three common threads: 1) the magnetic attraction and sense of connection with the land, 2) a sense of security, 3) multi-culturalism. Academic success was what truly determined the children's social strata.

Many of these children grew up to be exceptional and do exceptional things. Most say they think of Santa Fe or Los Alamos as home. To this day, the children still are very connected to each other. They stay in touch and many of their families are close. Their reaction to the bomb and their parents' role in its development is the greatest variable in their Los Alamos experience.

Surprisingly, the children have a constant theme running through their lives at Los Alamos. It is the way in which the Indian population affected them. Some children saw them as mythic heroes, some as silent strangers, and some as the force that helped shape their feelings about land, spiritualism and art. In all, the children of Los Alamos have fond memories of their Pueblo caregivers and cherish the Pueblo culture they assimilated . . . almost all took away some treasured Indian craft (pg. xi).

Mason's section on Edith Warner and her Indian companion Tilano is very interesting in that she shows how Edith Warner formed a bridge between the Anglo Scientists and the Pueblo Indians. Tilano lived with Edith and liked sharing his world with children. He spent time with the children of Los Alamos, giving them small gifts, arrowheads, pots, feathers, making them moccasins, telling them stories, giving them rides on his horse. In this way he conveyed the sacredness of the natural world to the children. The children, in turn, have fond memories of him. They remember him as a strong romantic character of their childhood. As one child says, "The Indians made an enormous impression. The women were working as cleaning women, the men were working construction. We had a wonderful woman who worked at our house . . . she was a potter . . . she would invite us to San Ildefonso . . . that's vivid to me, the dancing, the chanting, the black bread . . ." (pg. 51). Other children traced their spirituality to their Indian caretakers (pg. 52). Several of the older children remember going to the pueblos, dancing with the Indians, and understanding, though communication was hard (pg. 79, Nella Fermi). "The Indian culture was something that was respected and was regarded as exotic." (pg. 85).

Many of the children grew to love New Mexico and Los Alamos. Many stayed on; others returned later in their life. The spirituality of their youth brought some home, ". . . the things that stand out in my mind are the relationships with the Indians. They were much more than maids. They were surrogate parents, in our case. I still visit our housekeeper, Isabel, she is in her nineties and she is very special." (pg. 121). Some children returned because of their ties to the land. Grant Caulkin credits his early years in forming his attachment and understanding of the land that led to his becoming president of the Sierra Club. Some children stay because of the art and the artists they have become. Secundino Sandoval, a well-known Hispanic artist, says, "I met Maria in 1945. I was in fifth or sixth grade when she came to one our classes and formed a piece of pottery. I became fascinated with her and the Indian culture and the art that is a part of their everyday lives." (pg. 125).

In all, the children were close to their Indian caregivers and friends. They were accepting of their culture, conscious of the Indian beliefs, reverent of the land, and at ease with the spirituality of the Indian way of life. This book is a critical piece in establishing the Indian role in the Manhattan Project. Further study in this area is absolutely critical.

- 116 Mathien, Frances, Charlie Steen and Craig Allen. *The Pajarito Plateau: A Bibliography*. U.S. Department of the Interior & National Park Services, 199?.

- 117 McKee, Robert E. *The Zia Company Of Los Alamos: A History*. El Paso: Carl Hertzog, 1950.
- 118 *Memories Come To Us In The Rain And The Wind: Oral Histories And Photographs Of Navajo Uranium Miners And Their Families*. Published by the Navajo Uranium Miner Oral History and Photography Project, Sun Press, Mass: 1997.

This small volume containing interviews and photographs of Navajo uranium miners and their families is a key part of the history of nuclear development and uranium mining in America. The interviewees, as a group, reveal the lack of protection and safety for Indian miners and those who worked in the refineries. In addition, it shows that the miners and their families were exposed to radiation as a part of their daily lives. The Navajo lived near the mines, built their house from the ore, bathed in and drank the water, and ate the plants and animals in the area. Their children played on the slag piles of ore and breathed in the dust of the radioactive mineral. Only later in the 1960s and 70s, when record numbers of miners begin to die from lung cancer and their children and families recorded abnormal levels of cancer, birth defects and death, did they begin to discover the depth of the hazards that they were exposed to. It was not until 1990 that the RECA Act began to pay compensation for their losses. The RECA standards for compensation are so difficult that very few miners or their survivors have been able to collect any compensation.

The voices of the miners and their survivors in this oral history tell a sad story. In some ways, the Navajo is the victim of our race to master nuclear technology. Here are some of their voices. Floyd Frank, “. . . some of my animals have been affected, my brothers have died. Are we disposable to the government?” (pg. 8). Thomas Benally, “The men I worked within the mine, they are all vanished. There are still just two of us. We are the only two that are still old men. It is unsafe was never said.” (pg. 18). Julia Yazzie, “. . . my husband worked in the uranium mines. He died in 1980. My older brother, my uncle and my father worked in the mines. They are all dead. We were considered not to be worthy people and we were harmed. In every way, uranium ruined the community. I have a retarded son from uranium.” (pg. 24). Dan Benally, “43 of the people I worked with have died now.” (pg. 26). Tom James, “Anglo workers were given room and board, a mess hall and showers, they did not work in the pit mine.” (pg. 60). Joe Ray Harvey, “There was always lots of smoke and a powder smell from the blasting. In the mine, ventilation tubes did not go into the areas where we worked.” (pg. 38). Dorothy Zohnnie, “My father was very sick. His doctor never recorded this and the Indian Health Service destroyed his x-rays. He died in November of 1977. Now we are all having respiratory problems. We cannot breathe.” (pg. 42). Mary Louise Johnson, “My husband worked in the mines as a driller. Everyone wore their own clothes and the wives washed them. My husband died. I will never lose the memory.” (pg. 48). May John, “We all drank water from the mine. We thought it was pure. Our children played in the mine.”

(pg. 34). Kathlene Tsosie-Blackie says, "There are a lot of widows who live alone." (pg. 39).

- 119 Miller, Richard L. *Under The Cloud: The Decades Of Nuclear Testing*. New York, The Free Press, 1986.

This study is a complete history of America's nuclear testing program and strategies. The author shows how testing affected the American culture of the 1950s and 60s and how quickly it became an accepted part of life.

Miller is most effective in showing the exercise of military force and folly in the testing program. He also provides good maps on the spread of fallout for over two decades and has an appendix that tracks all the atomic denotations, underground and at ground level, between 1951 and 1961. His notes are based largely on government documents, which is a useful map for further comparative studies.

- 120 Moore, Ruth. *Niels Bohr: The Man, His Science And The World They Changed*. New York: Alfred A Knopf, 1966.

The author of this book is a reporter, an academic and a writer. This was the first biography of Niels Bohr. It includes a layman's introduction to nuclear physics and sets forth the fundamental ideas of modern physics. The lack of specific citations, bibliography and notes make this biography of marginal use to any serious scholar. Since Bohr did not write about his own life, we are left to secondary accounts like this to discover one of the most influential men in the development of nuclear physics.

Bohr altered the course of history in 1913, when he described the structure of the atom. He won the Nobel Prize in 1922 for his work. Bohr's initial work, joined to that of Planck and Einstein, led to the splitting of the atom in 1938. During WWII, Bohr got most of the key scientists out of Germany and Italy before the Nazis could take their toll. He returned to Denmark during the war to work against the Nazis, escaping at the last moment in a hair-raising race across three continents. Bohr also traveled back and forth between Roosevelt and Churchill to elicit international cooperation on the bomb and on the progress of physics.

At Los Alamos, Groves and Oppenheimer decided that Bohr's main duty would be to review all phases of the work to make certain that nothing had been overlooked. He also went to Oak Ridge to do the same, but never went to Hanford. He was one of a handful of scientists that had an overall picture of all the workings of the Manhattan Project.

- 121 Morrill, Richard L. *Population Of The Hanford Region, 1945-1951*. 1994.
- 122 National Park Service, Pacific Northwest Region. *The Hanford Reach Of The Columbia River: Final River Conservation Study*. Seattle, WA: National Park Service, 1994.

- 123 Nichols, Maj. Gen. Kenneth D. *The Road To Trinity: A Personal Account Of How America's Nuclear Policies Were Made*. New York, William Morrow & G., Inc., 1987.

From June 1942, Maj. Nichols was the Deputy District and District Engineer of the Manhattan Engineering District. He was responsible for the design, construction and operation of the huge plants for the production of U-235 and plutonium.

His memoir limits its scope to include the events in which Nichols personally participated in, and, of which he had first hand knowledge. He provides good organizational charts in the front of the book, as well as maps of each of the sites (pp. 15-21). The section on site selection is brief, but very well done (pp. 39-40). The pictures, although not rare, are interesting.

Nichols recounts how he continually struggled for priority in resources and funding and learned not to rely on normal military channels to get things done. Often he was at odds with Groves, but he respected his ability to push things through. Nichols' main responsibility was Oak Ridge. He rarely visited Los Alamos believing that it was Grove's domain.

The final chapters of the book are concerned with the Cold War, control and development of weapons, and ends with the accident at Chernobyl.

- 124 Norberg, Arthur Lawrence. *Cyril Stanley Smith: Metallurgy And Atomic Energy Policy*. Berkeley, CA: UC Berkeley, 1980.

- 125 O'Niell, Dan. *The Firecracker Boys*. St. Martin's Press, New York, 1994.

O'Niell tells the unbelievable and unsuccessful story of Operation Chariot. In 1958, Teller went to Alaska to test the efficiency of building a new Panama Canal with nuclear explosions by first creating a manmade harbor by detonating six nuclear bombs. According to this plan, they were also planning on using Alaska as a living laboratory for EVAC and experiments on the local population.

This book is also the story of Eskimo and scientific opposition and the coalition they formed to fight the ecological and economic hazards of the project. They fought Teller, the AEC and the Alaskan Government to the very end and won. This chapter in American nuclear history, while amusing, shows the overall ignorance of the uses and consequences of atomic detonation.

- 126 Ortiz, Alfonso, ed. *New Perspectives On The Pueblos*. University of New Mexico Press, 1972.

This is a collection of essays on prehistory, ethno-history, language, ecology, demography, symbolic forms and actions, ritual drama, oral literature, religion, music, mythology, and world-view. It is a scholarly volume of experts in the field, made all the more interesting by the studies of younger anthropologists, covering a wide scope of knowledge concerning the Pueblo Indians. This book is for scholars only.

127 Palmer, Joel. *Journal Of The Travels Over The Rocky Mountains*. Ann Arbor, Michigan: University of Michigan Press, 1966.

128 Parsons, E.C. *Pueblo Indian Religion, 2 Volumes*. Chicago, University of Chicago Press, 1939.

This source is an encyclopedic work in two volumes. It provides an in-depth scholarly reference for the Pueblos before WWII. This set provides a complete look at all aspects of Pueblo life, religion, ceremonials, spiritualism, social organization and art as a representation of myths and superstition. It also deals with the impact of changes brought on by outside contact with other people and cultures. The author also looks at all of the Rio Grande Pueblos as well as the Hopi, Navajo, Acoma, Zuni Pueblos. There is also a section specifically on the Pueblos of San Ildefonso.

These volumes form the basis of understanding Pueblo daily life and culture prior to WWII.

129 Parsons, Elise Worthington. *The Pueblo Of Jemez*. Yale University Press, 1925.

130 Peterson, Susan. *The Living Traditions Of Maria Martinez*. Kodansha International, 1977.

This author is one of the foremost figures in ceramic art in America. In this volume, through original photographs and text she details her thirty-year association with Maria Martinez. This is the first photographic representation of seventy years of Maria's life and work. Peterson gives us a portrait of the San Ildefonso potter and her black-on-black pottery that has shaped three generations of potters. The author's text is a collection of vignettes of everyday life in a Pueblo village and of a remarkable woman's life and family. As the author says, "Indians preserve what they have within themselves" (pg.15). With regard to the art of pottery, she says, "The succinct element, I believe, is that theirs was a communal art, a happy and shared art." (pg. 16).

With regard to the Manhattan Project, her comments are brief, but very telling. She states, ". . . the whole reservation is situated below Los Alamos, the town that . . . altered the lives of nearly all Native Americans by giving them a type of work and outside experience they had never had before. It became more rewarding for the men to go off the Pueblo to work. Julian, Maria's husband and fellow potter, was among them." (pg. 76). Several members of Maria's family continue to work at Los Alamos while they live in the Pueblo.

131 Pettitt, Roland A. *Los Alamos Before The Dawn*. New Mexico: Pajarito Press, 1972.

This book is a history of Los Alamos before the dawn of the atomic era. Pettitt gives an account of the Anasazi period from 700 AD to 1100 AD, when the great cliff cities of Pueblo Bonito, Mesa Verde and Canyon De Chelly were constructed. From 1100 to 1300 AD the classic period of Pueblo culture was at

its peak. In the 1400s, twenty-five years of prolonged droughts made them abandon their cliff cities and move to the Pajarito Plateau.

The Pueblo culture of the Pajarito Plateau was, “. . . a beautiful balance developed in which the Indian contrived to make itself a part of the total scene, using only what he needed from his environment, leaving and revering the remainder as something equally precious in the site of his God as himself.” (pg. 30). After the drought, the inhabitants of Otowi, Tsarkawi, Tshirete moved to what is now San Ildefonso.

The first white conquerors came in 1540 with Coronado, but the conquest of New Mexico was not complete until 1598. With Santa Fe as their capital, they began to convert the Indians to Catholicism and cheap labor. With the revolt of 1680, which cleared the Spanish from New Mexico for twelve years, the San Ildefonso returned to its traditional ways. When the Spanish retook New Mexico twelve years later, the Indians of San Ildefonso fortified themselves on Black Mesa. They resisted the Spanish for seven months and became the last Pueblo to submit to the return of Spanish rule. In 1696, San Ildefonso again rebelled, burning their Catholic Church and killing the Priests. During the 1700s, the Spanish granted land to Christian Indians and “settled” communities. When the U.S. took over Santa Fe in 1846, they recognized all valid land grants. In 1856, Congress confirmed seventeen Indian land grants including Jemez, Cochiti, San Ildefonso, Santa Clara and San Juan.

In 1880, Adolf Badelier discovered Anasazi ruins in Frijoles Canyon. When his writings were brought to public attention, it triggered a tourist boom that grew from 1909 to 1914. The tourists came and often went away with artifacts and pieces of the Indians’ past. In an effort to stop the pillaging, in 1916, Badelier National Monument was established. The construction of the railroad from Espanola to Santa Fe also helped to build the tourist trade. The branch of the Denver and Rio Grande from Antonito to Santa Fe known as the Chili Line stopped at Otowi, San Ildefonso and the Santa Clara Pueblo bringing tourists and visitors to the lesser known Pueblos,

The author, who has been employed by the Zia Company since moving to Los Alamos ends his book with a detailed look at the Los Alamos Ranch School.

132 PNL. *Hanford Cultural Resources Management Plan*. June, 1989.

Appendix B of this document is the most relevant. The appendix is entitled, “History of Cultural Resources Management Activity on the Hanford Site.” It is broken down into eight separate sections, which divide up the history of cultural resource management by years of operation. In the section from 1943-1966 is the first reference to the Wanapum people’s concerns regarding a number of their cemeteries within the Hanford region. According to the document, Hanford went through various stages and attempts at documenting and managing its cultural resources. None of them seemed effective until the mid-1980s when DOE took control of the situation and created a management plan, which resulted in this document.

- 133 Ponting, Clive. *A Green History Of The World: The Environment And The Collapse Of Green Civilizations*. New York: St. Martin Press, 1991.

This unique volume is a history of world cultures as they are affected and shaped by the environment. The author is, by training, a historian, but is not claiming original scholarship in this treatment. It is a book that does not propose solutions, but gives a very interesting and thoughtful account of the link between environment, pollution and the rise and fall of civilizations.

In a small section in chapter 16, the author addresses nuclear issues and waste. Ponting believes that this is the most dangerous form of all pollution. "The whole population of the world (but particularly the native inhabitants of the areas near the test sites) has been exposed to the fallout from 458 nuclear explosions in the atmosphere between 1945 and 1985." (pg. 377).

The author touches briefly on the problem of uranium mining and refining and states ". . . in the twentieth century, one half of all uranium miners have died of lung cancer (this rate is five times higher than that of the whole population) . . . the milling of uranium ore causes four thousand deaths a year from lung cancer in the U.S." (pg. 377).

Ponting identifies Hanford as one of the most polluted sites in the U.S. Between 1945 and 1973, 422,000 gallons of radioactive material leaked out of storage tanks at the site.

- 134 Pringle, Peter and James Spigelman. *The Nuclear Barons*. New York: Holt, Rinehart and Winston, 1981.

This is a story of the international elite of scientists, engineers, politicians, administrators and military who brought Atomic energy under control. The book examines the choices that faced this elite and provides the layman with an overview of atomic nuclear decision-making.

Each nation that has developed their nuclear capability has made decisions without public debate. In general, advocates of nuclear technology have built institutions to keep the atom apart from the checks and balances of the normal political process.

This book gives a good account of the building of the Soviet bomb, Britain's post-war atomic race for knowledge, as well as a good section on development of nuclear power by private industry.

In the post-war environment, a key issue with American policy makers was the distrust of Russia and her ability to develop the bomb. This led to the expansion in atomic bomb production in March of 1950 and Truman's go-ahead for the H-bomb, against the advice of the AEC. Although Niels Bohr and other scientists foresaw the arms race, because of this rivalry, they could not prevent it.

In the 1950s, amid a constant barrage of nuclear testing, the AEC never developed a fallout protection system to ensure that those people affected by the Nevada test sites would not receive more radiation than was safe. "In the 1950s, the AEC

knew that the public did not understand . . . it was assumed that as long as the public remained uninformed, they would not worry; nor would they ask embarrassing questions.” (pg. 180). The AEC determined that the public good was best served by first defending the U.S. from communism. They did know the dangers of fallout and of inhaling particulates, though they never made these public (pg. 182). Not until the 1970s, as reports were declassified, did radiation effects become known worldwide. Disregard for these effects was the norm. Even at the Alamogordo test site, 200 Apaches and 1,000 sheep and cattle farmers lived in the fallout path. Gen. Groves chose not to evacuate them because of the secrecy issue and he also “. . . vetoed any serious research into the biological after-effects.” (pg. 189). This was despite evidence that radiation at any level would effect human genes.

By the end of the 1970s, the public image of all of the scientific experts had been seriously shaken. The public felt deceived once the health effects of the Nevada testing were known. At the same time uranium miners began to die because of their exposure to radon gas in mines where no health standards were enforced. Despite all this evidence in the 1970s, there was a spread of optimism regarding nuclear energy.

In 1976, there was a turning point for the anti-nuclear movement, when a handful of nuclear engineers resigned, claiming that nuclear plants were unsafe and a threat to man’s existence. Up until this revolt of the scientific elite, it was possible to dismiss activists and concerned people as simply not knowing enough about nuclear science. As the criticism increased, the overall hostility to nuclear power grew through out the world. The safety of nuclear reactors was the focal point of concern and protest. For once, the public had no confidence in experts or their control of their own systems. The industry had a history of accidents, at Hanford in 1973, and the Russian accident at Kushtym in 1973. This pattern finally culminated with Three-Mile Island and Chernobyl. After 1976, the Ford administration took a tougher stand on nuclear proliferation in energy. When Carter, in 1977, banned processing and breeder reactors, nuclear issues began to decline.

Today, the largest nuclear issue is one of waste and waste processing. “In America, 100,000,000 gallons of nuclear wastes were generated by the weapons program and were buried in giant steel tanks on military reservations.” (pg. 406). Nuclear power potentially generates three times as much waste and there is no place to put it. This book generates a great deal of future research possibilities for scholars in the area of nuclear waste containment and reprocessing.

135 Purcell, John. *The Best Kept Secret: The Story Of The Atomic Bomb*. New York: The Vanguard Press, 1963.

The author of this book was a war correspondent with the Pacific Fleet and he was also a science and military affairs reporter for Life Magazine in the early 1940s. His account is a very basic overview of atomic physics and the early

developments regarding the atomic bomb. He also has a good section on the early processing of uranium and on the elements of the bomb.

His section on site selection attributes the two basic elements necessary for uranium separation, abundant power and water, as the driving force behind Hanford (Columbia River) and Oak Ridge (TVA). The author also has detailed sections on security issues and bomb design. In all, this book constitutes a technical history for the layman. The overall criticism of the book is that it contains no bibliography and no notes.

- 136 Rabi, I.I., Robert Serber, Victor F. Weisskopf, Abraham Pais, and Glen T. Seaborg. *Oppenheimer*. New York: Charles Scribner's Sons, 1969.

This volume was written by five of Oppenheimer's colleagues and friends. These essays are based on personal recollections, enhanced by sections on chronology, bibliography, a good basic glossary, reference notes, and good biographical paragraphs.

Serber traces Oppenheimer's early years and scientific contributions in the 1930s. Weisskopf deals with the Los Alamos years. Pais recounts the Princeton period and Oppenheimer's role in theoretical physics. Seaborg, Oppenheimer's friend for thirty years, looks at his overall contributions. Finally, I.I. Rabi sets the book in context of the time. In all, these essays represent speeches given at the Oppenheimer memorial session of the American Physics Society meeting in Washington D.C. in April of 1967. The photographs come from Kitty Oppenheimer's private collection.

The main themes of these essays are Oppenheimer as a mythic figure or celebrity, Oppenheimer as a unique, powerful teacher, Oppenheimer, the director and intellectual, and Oppenheimer, the outcast.

- 137 Ramsey, Norman. *A Collection Of Papers Relating To The Manhattan Project*. (manuscript), 1945-1946.

- 138 Relander, Click. *Drummers And Dreamers*. Pacific Northwest National Parks and Forests Assoc., 1986.

The material for this book was gathered from fieldwork with the Wanapum and other Indians, in an effort to preserve whatever knowledge existed about the almost unknown Indians of Eastern Washington. The author's friendship with Puck Hyah Toot, a nephew of Smowala, helped with the research. Relander learned from him the fundamental beliefs of the Yakima and Wanapum, their daily life, their history, philosophy, traditions, and taboos. The book is filled with interesting illustrations in addition to a good bibliography containing interviews, U.S. documents, books and manuscripts.

The most notable event in the lives of Wanapum Indians was the advent of the prophet and teacher, Smowala. Born in 1820, he was a religious reformer who urged his people to return to the old ways and to turn away from white influence. He believed that Indians could learn the highest wisdom only from dreams and

Dreamer ceremonies. This book shows the depth of Yakima spirituality and the importance of ceremony and the land. In 1875, Smowala held that reservations were an evil influence on the Indians and that they should resist being put on them at all costs. His teachings were very similar to many of the plains Indian's Ghost dance beliefs.

Taken together with other volumes that study Yakima and Wanapum beliefs and history, this book helps the reader to understand the changes in the Yakima relation to the land.

- 139 \_\_\_\_\_, *Strangers On The Land: A Historiette Of A Longer Story Of The Yakima Indian Nation's Effort To Survive Against The Great Odds*. Franklin Press, 1962.

This volume is an oral history combined with a long-ranging discussion of Yakima treaties and land infringements. A large section is told as a second person narrative of "George Joe Leather" regarding customs, everyday life and the savagery of whites. There is also a section on various treaties.

There is nothing that pertains directly to the Hanford site, although the author does state that, "... in 1944 a lump sum of fifteen million was paid to the tribe for the loss of Celio Falls Fishery because of the construction of the Dalles Dam." (pg. 12).

- 140 Rhodes, Richard. *Dark Sun: The Making Of The Hydrogen Bomb*. New York, New York: Simon & Schuster, 1995.

This work by Rhodes is the follow-up to his previous book *The Making of the Atomic Bomb*. In this book, Rhodes describes how and why the hydrogen bomb was made.

Rhodes begins his story with the events just after the bombings of Hiroshima and Nagasaki. The creation of the hydrogen bomb played a key role in the deteriorating Cold War relations between the United States and the Soviet Union. Rhodes follows the scientific and political developments of both the United States and the Soviet Union as a direct result of the development of the Super-bomb.

- 141 \_\_\_\_\_, *The Making Of The Atomic Bomb*. New York: Simon & Schuster, 1986.

The author is a well-known writer and scholar and his work is the most elegantly readable story of the nuclear age. Rhodes gives more detail on the personalities and events concerning the development of the bomb than any other history. In addition, he provides a good background on the history of science and the nuclear era. This book was the 1987 winner of the National Book Award.

Rhodes includes an intricate set of chapter notes and an extensive bibliography. He also has two sections of rare photographs.

This book serves both the student and the scholar and is essential for understanding the complexities of the building of the bomb.

- 142 Rice, David G. *Archaeological Reconnaissance Hanford Atomic Works: NPS, AEC, & WSU*, 1968.

This is a study written by David Rice in 1968 under the direction of the Atomic Energy Commission. The intent of this document was to create a comprehensive cultural resources inventory of the Hanford area. The need to record such data arose from the proposed Ben Franklin Reservoir, which, at that time, would have affected lands on the Hanford Reserve. The Atomic Energy Commission determined that it was necessary to inventory any cultural resources on the Hanford Site that were potentially affected. The only prior attempt at creating an inventory of the Hanford area was conducted in 1928 by H.W. Krieger of the U.S. National Museum. This archaeological work done by Rice revealed twenty-six sites that had some archaeological significance.

- 143 \_\_\_\_\_ . *Cultural Resources At Hanford*. By Washington Public Power Supply System, Chairperson. Richland, WA: US DOE.

This work covers eight topics concerning cultural resources at the Hanford site, as defined by David Rice. These eight subjects are Location and Setting, What are Cultural Resources, The Investigation of Cultural Resources, Cultural Resources at Hanford, The Significance of Cultural Resources, Early History, History of Settlement, and Recent History. A majority of the artifacts that Rice uncovered can be traced to the Wanapum and their ancestors. The tribal people of the Hanford area show that "the basic pattern of settlement and practices of fishing, hunting and gathering used by the historic Indian peoples can be traced back at least nineteen centuries at Hanford." (pg. 22)

- 144 \_\_\_\_\_ . *Overview Of Cultural Resources On The Hanford Reservation In South Central Washington State*. Richland Operations: US DOE, 1980, RL-E-80-0043.

This document is also a study of the cultural resources at the Hanford Site conducted by David Rice. One purpose of this study was to take an inventory of any cultural resource sites that may have been within areas of proposed construction of the Washington Public Power Supply System's Hanford Energy Generating Plant, and the WNP-2 and WNP-1&4 nuclear power plants. A secondary purpose of this study was to create an up-to-date inventory of the cultural resources on the Hanford site for future projects.

- 145 Rigden, John S. *Rabi: Scientist And Citizen*. New York: Basic Books Inc., 1987.

The author is a physicist who worked closely with Rabi in writing this book. The research was sponsored by the Alfred P. Sloan Foundation. Rigden includes a good set of interviews and pictures.

Rabi was a key figure in American physics, winning the Noble Prize in 1944. His influence was pervasive. Rabi studied with German scientists in the 1920s, but in August of 1929, he went back to Columbia as a lecturer. After the first year, he was promoted to a professor and by the beginning of 1931, Rabi's Molecular Beam Lab was producing hard, accurate data. Rabi always considered that the Rad

lab had won the war by breaking the back of the German offensive with airborne and ship-based radar.

In 1940, Rabi joined the MIT Rad lab. He was recruited for his work on microwave radar. Always conscience of the impending war, Rabi stated, "I took the war personally." (pg. 124). At the beginning of 1942, the Rad lab had 500 employees. By the end of that year, there were 2,000 employees and 50 projects in process.

"While he never worked formally for the Manhattan Project, Rabi often gave it the benefit of his advice. He was Oppenheimer's advisor, but he thought radar was more important to winning the war. He did not like the whole idea of the bomb." (pg. 145). Rabi did, however, give Oppenheimer some of the Rad employees, including Bethe, Basher, Alvarez, Bainbridge, and Ramsey.

After the war, Rabi went back to Columbia as chairman of the physics department. After the bombs fell on Japan, many physicists felt guilty; Rabi did not. He did not get involved with the Federation of Scientists. Rabi was one of those who wanted to internationalize nuclear power and remove it from every nation's domestic agenda. Both Rabi and Oppenheimer recognized the inevitability of an atomic arms race if the U.S. tried to keep the new knowledge to itself. Rabi as well as Fermi were morally revolted with the Super-bomb.

Although Rabi was relatively unknown to the public, he was the chief advisor to Oppenheimer and his closest friend. Rabi was the first one to ostracize Teller because of his damaging testimony against Oppenheimer at the AEC trial. Although Rabi was Oppenheimer's advisor, he knew Oppenheimer's failures as well as triumphs. He warned him that his ego would be the end of him. As Rabi says, "Oppenheimer was a man who was put together of many bright and shiny splinters." (pg. 231).

- 146 Ringholtz, Ray C. *Uranium Frenzy: Boom And Bust On The Colorado Plateau*. University of New Mexico Press, 1991.

This book is about the first white uranium miners and millionaires. Although interesting, there is almost no detail or documentation. Because of the limited focus, there is no mention of Indian miners or prospectors. This book is more of a rags to riches tale, and has very little historical value.

- 147 Robinson, George O. *The Oak Ridge Story: The Saga Of A People Who Share In History*. Kingsport, Tennessee, Southern Publishers, Inc., 1950.

Robinson's book is a general history of Oak Ridge, based on newspaper articles, official releases of the war department and the Atomic Energy Commission. The author, a former newspaperman, was associated with Oak Ridge since 1943. He was the public relations officer for the Manhattan District, helping to put together and distribute the official story of Oak Ridge. This volume is rich in pictures, lists, maps, press releases and quotes.

The Oak Ridge site was chosen because of the enormous amount of power available due to the TVA. In all, one thousand families in the area had to vacate their homes and farms. Acquiring the land cost the U.S. Government 2.5 million dollars. The cost of building Oak Ridge cost 96 million. Oak Ridge produced U-235 through gaseous diffusion and electromagnetic processes and eventually also by thermal diffusion. By the spring of 1944, 47,000 construction workers were in Oak Ridge constructing a city of nine thousand acres.

The author has statistics on everything built at Oak Ridge and of all the non-secure facts regarding its administration and operation. For this reason, this book, although very government oriented, is well worth reading.

- 148 Rothman, Hal K. *On Rims And Ridges: The Los Alamos Area Since 1880*. University of Nebraska Press, 1992.

This book is a historical look at the land usage of the Los Alamos area from the 1880s to the present. In the last half of the twentieth century, the land was claimed by Indians, ranchers, archaeologists, the U.S. Forest Service, and Los Alamos. Today they still have a presence on the plateau. The author shows how the long-term effects of federal land policy and technology have transformed the cultures and the environment. It is well written and extremely informative and the author includes chapter notes and a bibliographical essay.

Much like *Time Ball*, it provides a glimpse of the land prior to the influx of Euro-American Settlers. Rothman covers in great detail the relationship the Pueblo peoples had to the land and how that changed with the coming of the Anglos. Los Alamos became the driving force on the plateau and its inhabitants. It superseded all other claims to the land and became the source of economic survival for its inhabitants. After 1945, the expansion of the lab drove the growth of the region. The Manhattan Project was a catalyst for permanent and destructive change among the Pueblos.

- 149 Rowe, James Les. *Project W-47*. Ja A Ro Publishing, 1978.

- 150 Ruby, Robert H. and John A. Brown. *Dreamer Prophets Of The Columbia Plateau: Smowala And Skolaskin*. Norman: University of Oklahoma Press, 1989.

These authors have written several books on Indians of the Northwest. Their chapter notes are extensive, their bibliography is well researched and they provide good maps and pictures.

This book is a history of two nineteenth century Dreamer-prophets. Dreamer-prophets were important spokesmen for their tribes' revitalization. There is a long tradition of Indian prophets in the Wanapum. 2,000 Indians along the Columbia River from various tribes followed the Dreamer religion. The prophets were anti-white traditionalists who believed in non-violence, life after death and a covenant with God. Although opposed to war, the active phase of the movement stopped in 1889, when Smowala was sentenced to Alcatraz. Prior to that the prophet's sacred longhouses became rallying points for resistance to the U.S. Government.

This book provides a foundation of the religious and social elements of Columbia River Indians.

- 151 Sando, Joe S. *The Pueblo Indians*. San Francisco: American Indian Educational Publishing, 1976.

The author of this book is a Jemez Pueblo educator and lecturer. The book has great maps and tables and an appendix provides a good historical outline of the Pueblo. In all, it is a summary of present issues and Pueblo life including great biographies of Pueblo leaders.

The author says that the Pueblo story is one of persistent efforts to maintain the harmonious relationship of man with his neighbors and man with his environment. Sando provides his readers with a Pueblo history from the Indian perspective.

One of the biographies in this volume is of Popovi Da (son of Maria Martinez). The biography states that he was drafted by the army in 1944, sent to Oak Ridge without going through basic training and then sent on to Los Alamos where he was assigned to the Special Detachment of the Army. After he was discharged in 1946, he went back to work as a civilian at Los Alamos for three years. After that, he went on to get a small business loan and open a small art studio and store in San Ildefonso. More research needs to be done on this subject.

- 152 Sanger, S.L. *Working On The Bomb: An Oral History Of WWII Hanford*. Portland, Oregon: Continuing Education Press, 1995.

In this book, Sanger uses an interview format. He chronicles the experiences of workers, farmers, Indians, and individuals who participated in the construction and running of the Hanford site (pp. 26/27, see photographs). This book also has an excellent reference section.

The Wanapum Indians roamed the Hanford site for centuries. When Groves dispatched Col. Matthias in 1942 to select the Hanford site, he had meetings with the Indians (pp. 80-81), and with Chief Johnny Buck. Matthias decided the most favorable outcome was to arrange to let them continue to fish tribal waters and, for security reasons, to use military vehicles to transport them. In this account, Indians are thought of as strong, curious, mythic creatures despite their dependence on the military for traveling to their traditional forage sites.

- 153 Saunders, Lyle. *A Guide To Materials Bearing On Cultural Relations In New Mexico*. Albuquerque, NM: UNM Press, 1944.

- 154 Schull, William. *Song Among The Ruins*. Cambridge, MA: Harvard University Press, 1990.

Four years after Hiroshima and Nagasaki, Schull, who was a newly graduated geneticist, was sent to Japan to investigate the biological and medical damage among children of the survivors of the atomic bombs. The Atomic Bomb Casualty Commission sponsored him. Along with a team of investigators, he took

the next four decades to assemble the basis for estimating the biological risks of exposure to ionizing radiation.

This book was written as the author's personal journey to understand the aftermath of the atomic explosions. Initial studies focused on the damage to the body's ability to form new blood cells and on the high instances of leukemia. This study was largely based on the clinical observation of survivors. The book is a good scientific study although the author does acknowledge his Pro-Japanese feelings and his growing horror over the uses of the bomb.

- 155 Schwartz, Richard Alan. *The Cold War Reference Guide: A General History And Annotated Chronology with Selected Biographies*. Jefferson, N.C.: McFarlan, 1997.
- 156 Seaborg, Glenn T. *The Plutonium Story: The Journals Of Professor Glenn T. Seaborg*. Columbus: Battelle Press, 1994.
- 157 Segre, Claudio G. *Atoms, Bombs And Eskimo Kisses: A Memoir Of Father And Son*. Viking Press, 1995.
- This memoir of Emilio Segre is by his son Claudio. He is a historian and writer. Claudio died just before publishing this volume. There are meager notes and no bibliography. He relies primarily on recollections, diaries, letters to his father, and Emilio's autobiography.
- In essence, this book is a personal exorcism and reconciliation with the father Claudio held in awe, in rage, and in grief. It is also a book that details his childhood starting at age eight at Los Alamos. His memories are very isolated. He has no memory of the Indians, land or events that swirled around him. In all, Claudio admires his father, but lives in his shadow, unable to take a step back far enough to allow us to see Segre in anything but a child's eyes.
- 158 Seidal, Robert W. *Los Alamos And The Development Of The Atomic Bomb*. New Mexico: Otowi Crossing Press, 1993.
- 159 Serber, R. and Richard Rhodes. *The Los Alamos Primer: First Lectures On How To Build An Atomic Bomb*. California: UC Press, 1992.
- 160 Sherwin, Martin J. *A World Destroyed*. New York: Knopf, 1975.
- 161 Shroyer, Jo Ann. *Secret Mesa: Inside Los Alamos National Laboratory*. Jon Wiley & Sons, Inc., 1998.
- 162 Silverberg, Robert. *The Pueblo Revolt*. Lincoln: University of Nebraska Press, 1970.

This book is a narrative account of the Pueblo revolt of 1680. According to the author, the chief cause of the Indian revolt was the assault upon the Pueblo religion. The secondary causes were interference in village social life, forced labor, taxation and the abuse of native women. In addition, from 1650 on, the Pueblos underwent years of drought and disease. It was these conditions that

brought the Pueblos together and set the stage for revolt. The Spanish retook the land after twelve years

- 163 Smith, Alice Kimball. *A Peril And A Hope: The Scientists Movement In America 1945-1947*. Chicago: University of Chicago Press, 1965.

This book was written from a scientist's point of view. The author chose 1946 as an endpoint because of the passage of the McMahon Bill in the summer, assuring civilian control and reasonable freedom of research of nuclear technology. The title comes from an Oppenheimer quote in 1945 that atomic energy is a field with great peril and great hope.

The author focuses on what the scientists did to control the bomb. During the war, these scientists were mostly Niels Bohr, Vannevar Bush, and the Met Lab in Chicago. In the final years of the war, Bush and Conant presented to Stimpson and the President the problems that they thought would result from atomic weapons. Most of the doubts were about Anglo-American hegemony. They wanted the release of basic scientific information, believing that security did not lie in secrecy. To this end, the Met Lab released the Jeffries report, which warned of an impending nuclear arms race.

The appendices of this volume include the Jeffries Report, the Franck Report, and the Memo to the Committee on Panel Discussions (July 1945). The author uses interviews as a principal source as well as correspondence with the participants in the Scientists Movement.

The author states that in Los Alamos, after the detonation of the atomic bombs, "As the days passed, the revolution grew, bringing with it, even for those who believed that the end of the war justified the bombing, an intensely personal experience of the reality of evil." (pg. 77). Oppenheimer got the scientists to think on international terms, where the bomb's influence was the strongest, but the motivating force for most of the scientists was a sense of personal responsibility. Their mission was to save mankind from disaster. In the end, they succeeded in developing the support that established the civilian control of atomic energy. They also contributed to agreements on the technical aspects of international control and made some headway in educating the public regarding science and technology (pg. 531).

- 164 Smith, Alice Kimball and Charles Weiner, Eds. *Robert Oppenheimer: Letters And Recollections*. Cambridge, Mass: Harvard University Press, 1980.

- 165 Smythe, Henry DeWolf. *Atomic Energy For Military Purposes*. Princeton University Press, 1945.

This book is the first official history issued publicly by the U.S. government. The account was severely limited by security concerns although Gen. Groves officially sanctioned it. Smythe was the only one allowed to detail the basic scientific knowledge on which the bomb was based and the general administrative history of the Manhattan Project.

This book was written not for the layman, but for a professional group of scientists and engineers. The intention was that any reader would need a good grounding in physics and chemistry to understand the technical passages. The text also details how the Manhattan Project evolved administratively. The edited and more readable version is by Anthony Cave Brown and Charles B. McDonald, *The Secret History Of The Atomic Bomb*.

- 166 Spicer, Edward. *Cycles Of Conquest: The Impact Of Spain, Mexico and The United States On Indians Of The Southwest*. Tucson, AZ: University of Arizona Press, 1962

- 167 Spicer, Edward H. ed. *Perspectives In American Culture Change*. Chicago: The University of Chicago Press, 1961.

This volume was written as a part of an Inter-University Summer Research Seminar in 1956 at the University of New Mexico. It is a comparative case study of perspectives on Indian response to contact, showing the conditions under which a redefinition of purpose has taken place or old values have prevailed. The central question is, On what does cultural change depend?

The section on Rio Grande Pueblos was written by Edward Dozer. His general conclusion is that the Rio Grande Pueblos are the least changed of any Indians. Dozer contends that the Spanish authorities forced a cultural change using Catholicism, but the Indians adopted the externals of Catholicism, while keeping their customs and faith behind closed doors. Essentially, the Indians played along and kept their old ways. This was also true of the U.S. attempt to socialize the Indians of the Pueblos. Dozer contends that the fact that the Pueblos were permitted to remain in the same villages was a major factor in the retention and continuity of Pueblo culture through the years.

- 168 *Standing By And Making Do*. Edited by Charlotte Serber and Jane S. Wilson. Los Alamos, NM: The Los Alamos Historical Society, 1988.

This book, written originally in 1946, by nine women who lived in Los Alamos, has a significant amount of information regarding the amount of cultural interaction between scientific workers and their families with the local native population. At the Los Alamos site, this interaction occurred primarily in a domestic labor context. We learn that many Pueblo women were employed as housemaids, and a large number of Pueblo men were employed in manual labor.

The wives tell not only of their interaction with the local Pueblos on a domestic level, but there are numerous stories of festivals and dances, which Los Alamos employees attended. This book truly shows the cross cultural exchange that went on among the employees of the lab and the local tribal members. The final essay was by Charlie Masters. She writes that some of the inhabitants of the Hill were immune to the surrounding Indian culture. Others were only mildly affected, doing what was fashionable. She says that some went completely "native," decorating with all the local rugs, pottery and baskets, invading the Pueblos and spending a lot of money.

The book as a whole sees the Indians as stoic, romantic figures. The Anglos describe them as dignified and silent.

- 169 Stapp, Darby C. and Thomas E. Marceau. *Towards Tribal Management Of Cultural Resources On Federal Lands: A Case Study From The Hanford Site In Washington State* [Paper presented at the 48<sup>th</sup> annual Northwest Anthropological Conference]. Portland, Oregon, 25 March, 1995.

This work was presented at the forty-eighth Annual Northwest Anthropological Conference in Portland, Oregon, to show how tribes were becoming more involved in Cultural Resource Management on Federal Lands. According to Stapp and Marceau, tribal involvement did not really begin until 1987, when Hanford's Cultural Resource Management Plan became a full-time program. The tribes in the area who have an interest in the Hanford region were asked to advise and comment on the Management Plan.

In 1993, DOE increased its efforts by actively involving the tribes of the region in revising Hanford's Cultural Resources Management Program. The tribes stressed a number of issues that were important to them. The involvement of tribes and how they stress a more holistic and long-term approach to clean-up is Stapp and Marceau's strong concluding argument.

- 170 Stimpson, Henry L and McGeorge Bundy. *On Active Service In Peace And War*. New York: Harper, 1947.
- 171 Stoff, Michael, Jonathan Fanton and R. Hal Williams. *The Manhattan Project: A Documentary To The Atomic Age*. Temple University Press, 1991.
- 172 Stoffle, Richard W., David B. Halmo, John E. Olmstead, and Michael J. Evans. *Native American Cultural Resource Studies At Yucca Mountain, Nevada*. Ann Arbor: University of Michigan, Institute for Social Research, 1990.

This report integrates and summarizes the findings from the 1987-1988 Native American Cultural Resource studies related to the Yucca Mountain High Level Radioactive Waste Isolation Facility. The study under SAIC, Las Vegas, gives a good background on Indian environmental participation. It is also a waste-disposal site-selection primer as well as an ongoing study for the Department of Energy.

The study's purposes are to describe traditional cultural values, to describe the methods used in research and then to provide a theoretical discussion of the role of cultural resources in the American Indian's past and contemporary society.

- 173 Suazo, Gilbert, Darryl Gutierrez, Audrey Martinez, Susan Whittington, Edward Aguilar, Martin Pena, and Margaret Atkinson. *Los Alamos National Laboratories Native American Task Force Report*: LANL, February, 1988.

This report is an inquiry of Native Americans who were employed at LANL in 1988. It was compiled by the Native American Task Force, which at the time, was made up of American Indian employees who were voted in by Native American coworkers. The group was formed in 1984. This work took longer

than anticipated to produce due to the overwhelming amounts of data collected, while the Indians had to maintain their normal job responsibilities.

This report is a general survey of the number of Native American employees that were employed at LANL in 1988, and the trends concerning how Native Americans there were employed in the past and what was being done to recruit future tribal members. Also in this report is a survey of the types of issues Native Americans dealt with while working at LANL. This report has differing levels of census data that detail where employees are from, what level of education they have, and how worker's complaints are filed and to whom they were referred.

- 174 Siphon, Robert J. *Ethnological Report On The Wasco And Tenino Indians (Umatilla, Walla Walla, & Cayuse)*. New York: Garland Publishers, 1974.
- 175 Swadesh, Frances Leon. *20,000 Years of History: A New Mexico Bibliography, Compiled And Annotated With An Ethnohistorical Introduction*. Sunstone Press, Santa Fe, 1973.

This book was compiled largely by the staff of the Museum of New Mexico. It is divided into sections by ethnic group. It is a basic history of the Pueblos, Apaches, Navajos, and Hopis, concentrating on cultural ceremonial and artistic aspects in the very early periods of development.

In general, the listings are barely annotated and therefore the book is of limited use for the period from 1900 on.

- 176 Szasz, FM. *The Day The Sun Rose Twice*. Albuquerque, NM: University of New Mexico Press, 1984.

This is a historical account of the scientific discoveries that led to the development of the bomb and the diverse personalities that were involved before and after Trinity. The book is rich in detail and relies on an extensive use of well-researched footnotes.

This volume does include several instances of contact between the scientists and Indians. For instance, there is a picture on page 53 of Fermi visiting with potter Maria Martinez and her grandchild in December of 1945 at a ceremonial dance. Although he acknowledges the Indian presence, there is no mention of how Los Alamos affected the Indian population; Szasz like many others, interviews only the "white ranchers and townspeople."

- 177 Szilard, Leo. *Leo Szilard: His Version Of The Facts: Selected Recollections And Correspondence*. Cambridge, Mass: MIT Press, 1980.
- 178 Tchakmakian, Pascal. *The Great Retreat: The Nez Perce War In Words And Pictures*. Chronicle Books, 1976.
- 179 Thayer, Harry. *Management Of The Hanford Engineer Works In WWII: How The Corps, DuPont, And The Met Lab Tracked The Original Plutonium Works*. New York: ASCE Press, 1996.
- 180 Titus, Constandina A. *Bombs in the Backyard: Atomic Testing And American Politics*. Reno: University of Nevada Press, 1986.

The author of this volume is a professor of politics. His study examines the political history of atmospheric testing and the government liability for its victims. The book covers two periods: 1. The Manhattan Project from 1942 to the Limited Test Ban Treaty of 1963, which ended atmospheric testing, and 2. 1976 to the present, regarding the consequences of atmospheric testing and its judicial and legislative remedies.

Titus contends that National Security has always come before safety. The U.S. Government, as a result of testing, research and development, has put a significant percent of the U.S. population in the path of radioactive fallout. The Government mounted an extensive public relations campaign explaining the necessity of the tests and the safety with which they were being done. By the late 1970s, the effects of radiation had surfaced and both individuals and groups pressed the government for compensation. The author also details the way in which the government refused to admit its responsibility and errors, preferring to fight off issues of compensation in the courts. In general, this book is extremely anti-victim and pro-government.

- 181 Toombs, George L. *Summary Report For Lower Columbia River Environmental Survey in Oregon: August 1, 1964-July 31, 1965*, 1966.

- 182 Trimble, Stephen. *The People: Indians Of The American Southwest*. Sar Press, Santa Fe, 1993.

The author visited the fifty modern Indian Nations throughout the Southwest for ten years, taking pictures and listening to their stories. This volume combines ethnography, ethno history and pre-history. Trimble lets Native voices speak for themselves. His interviews span eight years, concentrating in the late 1980s. He also includes great maps of the region, and an annotated bibliography by chapter. In addition, there is a good section on modern environmental and economic concerns.

In 1821, the Pueblo Indians became citizens of New Mexico. This inclusion confused Indian land titles, especially when the U.S. refused to ratify none of the treaties with the Pueblos. In 1858, they recognized Spanish Land Grants, which gave the pueblos their lands. Despite this, as their numbers increased, the Anglos took Hispanic land and the Hispanics, in turn, took Pueblo land. The Pueblos have survived conquerors, land grabs, and modern civilization to keep their ties to the land intact.

The author of this volume gives a great deal of detail for the period of WWII. "During WWII, tribal government and enterprises and the BIA programs virtually ground to a halt. More than 65,000 (some estimates say 113,000) mostly young people left the reservations to fight or work in war-related industries. This was the first great off-reservation migration. The Pueblos competed with each other in buying war bonds, using money from pottery sales, photo fees charged to tourists and benefit dance performances . . . the 25,000 Indians who served in the military were fully integrated into the forces . . ." (pg. 24). Many did not return to the reservation. "In 1940 less than five percent of the Indian population lived in cities; by 1950, almost twenty percent did." (pg. 30). Those who did return to the reservation sent reservation unemployment statistics soaring. In 1945, Indian families still had a net income of just \$500 (pg. 24).

After the war, the uranium mines provided instant employment. For thirty years, 800 people, seventy percent from the Laguna Pueblo were employed, and 8,000 acres were leased from the pueblo for mining uranium. Most of the workers were Indian in the mines and refineries where no precautions were taken against the silent poison of radiation. ". . . yellow clouds of radioactive dust drifted over the village of Laguna for thirty years. They even built houses from the crushed ore." (pg. 88). It was not until 1987, after a long battle in Congress and the courts, that the major mining company in Laguna, Anaconda, paid \$47,000,000 for the Pueblo to take over reclamation of the land.

- 183 Truslow, Edith C. *Manhattan District History: Nonscientific Aspects Of Los Alamos Project Y, 1942-1946*. Los Alamos, NM: Los Alamos Historical Society, 1973 LASL-LA-5200.

- 184 Udall, Stewart L. *The Myths Of August*. Pantheon Books, New York, 1994.

This memoir addresses the central question, "How did officials who ran the AEC become so intoxicated by their national security responsibilities that they recklessly sacrificed the lives of other Americans?" (pg. 4).

Udall was one of the first to champion the cause of Americans exposed to toxic radiation. He cites the need for security above morality and the great "moralistic" vacuum of American Government. His book is an unvarnished account of the motives behind several key characters. In it, he renews the liberal debate over the morality of using the bomb and nuclear power, as well as the idiocy of the arms race.

In Chapter Nine, Betrayal of Uranium Miners, Udall writes a personal memoir of his experiences beginning in 1979 when he was a personal injury lawyer for the Navajo miners against the Kerr-McGee Oil Company. Most of the miners died in the 1930s or 40s, leaving young widows and many children. Most of the Indian miners and their survivors were illiterate. Udall details a decade long fight for the survivors and widows that eventually involved most of the Udall family.

In 1992, Congress enacted a law to pay compensation to the widows and living miners. Their major premise was that the AEC knew by 1948 the health hazards of uranium mining and ordered investigators to do nothing. When the Begay case came up for trial in August 1983 with ten plaintiffs, the judge saw himself as the protector of U.S. interests by finding against the miners. The case also lost in higher court and finally lost in the Supreme Court.

- 185 Uebelacker, Morris L. *Time Ball: A Story Of The Yakima People And The Land*. The Yakima Nation, 1984.

This book is an excellent source of cultural anthropological information regarding the life style of the Yakima people from past to present. Uebelacker details the types of food sources that were gathered, the regions they came from, and the seasons of the year in which those types of food were collected. It gives the reader an understanding of the extent to which the Yakima Peoples are tied as hunter-gatherers to the land.

The book describes the relationship that exists between the Yakima people, past and present, and the land of Eastern Washington. Uebelacker begins by describing the geological history of Eastern Washington dating back thousands of years. He discusses what he terms the "Ancestors" and their usage of the land, and the continued use until the construction of the Hanford Site.

- 186 Underhill, Ruth. *Life In The Pueblos*. Santa Fe: Ancient City Press, 1991.

The author is a well-known anthropologist who presents in this volume a popular study of family and village life of the Pueblo Indian. This volume was originally published in 1946 by the Bureau of Indian Affairs. It has great pictures and provides a succinct account of life in the Pueblos.

Underhill introduces us to the Pueblo people who have lived in the same area for five hundred years. Unlike other Native populations, the Pueblo Indians were not hunter-gatherers. They raised their own food, traded, made pottery and established government and religion in the same place their ancestors had lived. Among the eighteen surviving Pueblos, there are differences of decoration, language, government and ceremonies, but their attachment to the land and their spiritual life bind the villages together.

This is perhaps the best volume for understanding the traditional elements of Pueblo life. It also forms a basis for comparing WWII and the Manhattan Project as an agent of change in the individual villages.

- 187 Underhill, Ruth M. *Red Man's America: A History Of Indians In The United States*. Chicago, University of Chicago Press, 1953.

This book was written for the lay reader by a foremost archaeologist. Underhill states that the purpose of the book is to give whites a picture of their "fellow citizens." In this sense, it is a basic book of Indian history and is far too simplified for advanced use. The book does make use of an extensive set of illustrations and maps as well as good chapter notes and a good bibliography. Perhaps its most distinguishing feature is that it provides the highlights of Indian history seen from the Indian point of view.

- 188 United States Joint Task Force. *Operation Crossroads, The Official Pictorial Record*. The Office Of The Historian, Joint Task Force One. New York: W.H. Wise & Co., 1946.

- 189 U.S. Atomic Energy Commission. *Radioactive Waste Management: A Bibliography Of Publicly Available Literature Pertaining To The USA*. Oak Ridge, Tenn.: USA AEC Office of Information. Services, 1973.

- 190 U.S. Senate. *Hearing Before The Committee On Governmental Affairs U.S. Senate 103<sup>rd</sup> Congress 2<sup>nd</sup> Session*. U.S. Government Printing Office, 15 January, 1994.

This hearing before the Committee on Governmental Affairs is entitled "Human Radiation and Other Scientific Experiments: The Federal Government's Role." In this session, a number of congressmen discuss the role the Federal Government had regarding scientific experiments on the environment and people. More importantly, they discuss the role the government needs to play in the present and future concerning the aftereffects of the past experiments. The reference to these experiments is worth further investigation to determine how government actions during development of nuclear technology affected tribal members.

- 191 U.S. Task Force One. *Official Pictorial Record Operation Crossroads*. New York: William H. Wise and Co., 1946.

This officially sanctioned book on the Bikini Tests contains more than fifty thousand stills and 1.5 million feet of movie film. It is well annotated, though the text is far too conversational.

On January 10, 1946, the Joint Task Force One was created, comprising two hundred ships, 42,000 men, 150 aircraft and the cooperation of the Army and the Navy to assess the affect of atomic bombs on naval targets. In a series of air and subsurface tests they recorded the damage to various types of Naval vessels. The tests were an effort to understand that the “. . . bomb constituted a revolution in pre-existing concepts of tactics and strategy for war.” (pg. 7).

- 192 Van Arsdol, Ted. *Hanford: The Big Secret*. Ted Van Arsdol, 1992.
- 193 Various Contributing Authors. *Great Memories: Early Hanford and the Tri-Cities, 50<sup>th</sup> Anniversary Hanford*. Edited by Carolyn Krogness and Gary Gesell. Hanford 50<sup>th</sup> Anniversary Association, April 1994.

This work is a compilation of personal memories from residents of Hanford and the Tri-Cities area during the early years of Hanford's construction and operation in the 1940s. Of the fifty-two personal accounts, only one woman made reference to cultural resources from the Hanford Area. This undoubtedly comes from the secrecy and hierarchy of military and political control that dominated the Hanford region and its inhabitants in those early years.

- 194 Walker, Deward E., Jr., ed., *Handbook Of North American Indians, vol. 12, Plateau*, Smithsonian Institution, Washington, 1998.
- 195 \_\_\_\_\_, *Conflict And Nez Perce Acculturation: A Study Of Religion And Politics*. U. Press of Idaho, 1985.
- 196 Walker, Deward E. and Frank I. Halfmoon. *Transport Factors On Fish: A Review And Evaluation Of HEDR Project Columbia River Pathway Modeling And Dose Calculation Procedures: Final Report*. , 1995.
- 197 Weart, Spencer R. *Nuclear Fear: A History Of Images*. Cambridge, Mass: Harvard University Press, 1988.

Weart is the director of the Center for History of Physics. This innovative study is the result of fifteen years of research concerning the symbolism attached to nuclear bombs and energy from the turn of the century to the present. His book is an interesting pioneering splinter of the psychohistory (1970-1980) movement.

The study of images is a relatively new field of history, started by French scholars exploring widely expressed and static beliefs from the past. The methodology of this form of history is to look through materials of every description and find, for a given group of people, what pictures, symbols, beliefs, rational concepts, feelings and emotions have become strongly associated with one another and that come together to form a particular subject. The next task of the historian is to find out how associations came about--deliberately, or by chance.

The author's use of this new form provides interesting insight into the manner in which people's associations are formed, shared and continued.

- 198 Weisgall, Jonathan M. *Operation Crossroads: The Atomic Tests At Bikini Atoll*. Naval Institute Press, Annapolis, Maryland, 1994.

Weisgall's book is based on a wide range of unavailable material. This is the first account of the subject not compiled and sanctioned by the U.S. government. The book covers in detail the opposition to the test by Manhattan Project scientists, and the public protests concerning the effects of the radiation released in the Bikini Tests. He also addressed the impact of tests on the U.S./USSR disarmament talks, and the willful disregard of the consequences of atomic fallout worldwide.

Using material in lawsuits and interviews, as well as unpublished sources and oral history transcripts and manuscripts, Weisgall views two underwater nuclear tests (the second was the first nuclear disaster) and the test at Bikini Atoll. The Bikini test was the most powerful U.S. test and the first that made the U.S. aware of the widespread risks of fallout and radiation.

Because the author was the litigator for the Bikinians from 1975-1988, his is a very personal account of atomic testing. "The story of Bikini is the story of fear and destruction, the arrogance and ignorance of the atomic age." (pg. 3).

He sees no genuine villains, just victims, and admits that no one knew the true danger of radioactivity. He concludes that a great deal depended on misinformation enhanced by secrecy and national security concerns. Since there was no civilian agency overseeing tests, the internal navy and army fighting ultimately propelled testing forward despite safety concerns.

This is a great overview of the ins and outs of testing and what it revealed about how much we didn't know, and how much we ignored in the race for atomic dominance. The parallels between the treatment of Bikini's inhabitants and the Indians on lab or test sites are very interesting. This might be a possible starting point for studying the impact of testing on indigenous populations.

199 ***When Los Alamos Was A Ranch School.*** Los Alamos Historical Society, 1974.

This small volume, published by the Los Alamos Historical Society includes many rare pictures and quotes. These photographs are contained in the collection at the Los Alamos County Historical Museum, established in 1968 as a joint effort of the Los Alamos Historical Society and Los Alamos County. The book grew out of an October 1973 reunion of over fifty Los Alamos Ranch School Alumni.

At its largest point, Los Alamos Ranch School had fewer than 200 people in residence. In the fall of 1940, enrollment was 47 students studying in an academic and health program unlike any in the United States or abroad. The school was built around a Boy Scout's experience as a way to build healthy individualists. Among its alumni are many famous figures in business, politics, and the arts.

200 Whitman, William. ***The Pueblo Indians Of San Ildefonso, A Changing Culture.*** New York: Columbia University Press, 1947.

This book was originally a Columbia University anthropological study. The data were gathered in the village of San Ildefonso during the summer of 1936, winter and spring of 1937 and finally in the summer of 1939. The author died before

completing the book. His wife Marjorie edited it for print in 1947. The author and his family lived with the Indians off and on. Their purpose was to study behavior in a small homogeneous Indian community. The intent was to do a cultural anthropology study of child rearing and development, family interactions, work, religion, dancing and games.

In general, this is a very "white" version of Pueblo life, judged by an Anglo set of values and morality. The author has a small interesting section concerning the agrarian nature of the Pueblo economy and the impact of government work upon the Pueblo and its male population. In short, government work paid better than farming and allowed the men to keep up with the money their wives were bringing in through sales of pottery.

The author also details the pottery revival that Maria Martinez began, concentrating on the competitive nature of pottery making among different villages.

- 201 Wyden, Peter. *Day One: Before Hiroshima And After*. New York: Simon and Schuster, 1984.

The author was a Washington correspondent for Newsweek, and though he provides us a good narrative, it suffers from the lack of notes and citations; he does, however, provide a good bibliography. He bases his book on a whole series of new documents and eyewitness interviews. A list of these interviews is on page 394 of his book. In addition, there is a center section of pictures that are quite different.

In his book, the author deals with scientific breakthroughs and espionage, and describes the leading cast of characters. His portraits of Oppenheimer and Groves are not born out of hero-worship or aggravation. He details their relationship as pivotal, especially as they arm-wrestled over the treatment of the scientists. Wyden also shows Edward Teller in a new light that begins to explain his troubles with Oppenheimer. Teller hated Los Alamos and felt betrayed by Oppenheimer's goal-oriented attitude.

The author also provides a blow-by-blow history on the making of the bomb and all of its intricacies. In addition, he discusses the scientist's role in post-war issues that centered around control of atomic technology, secrecy, and international cooperation. The most concerns were over the use of the bomb. Led by Szilard in the Chicago Met Lab, the scientists lobbied for a demonstration use and to tell the Russians about the bomb. No one in the administration seriously analyzed the option of demonstration, and finally, Truman went for use of the bomb against Japanese cities as the simplest course of action. Many of the scientists knew the radiation danger that the bomb would pose to the Japanese people and many argued in earnest that the Japanese should be warned before the bomb was dropped.

*Day One* has a third of the book dedicated to a personal account of Japanese witnesses to the Hiroshima bombing and its aftermath. This is in contrast to most

of the histories of the bombings, because it is from a Japanese point of view. In this sense, it provides a much more eloquent account of radiation effects than simple bomb calculations could ever make. It was many of these pictures and onsite evaluations by the U.S. military that led Oppenheimer to say “we scientists have known sin.” It helps to explain to the reader why so many of the scientists, after the bomb’s use, worked so hard to control proliferation and fought for international cooperation on nuclear arms and disarmament.

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**Attachment B**

The Council of Energy Resource Tribes  
And the  
Department of Energy  
Policy/Program Internship

August 28, 1998 - August 20, 1999

By  
Milton John Bluehouse, Jr.  
Council of Energy Resource Tribes Intern

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I. Intern Profile

II. Internship Description.

A. Office of Environmental Management.

1. Functions.

B. Office of Intergovernmental Management.

1. Functions.

C. Tribal Program.

1. Participating Tribes.

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III. Internship Evaluation.

A. Internship preparation.

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D. Future Goals.

E. Internship Recommendations.

F. Contacts.

G. Resume.

## I. Intern Profile

My name is Milton Bluehouse, Jr. I am a member of the Navajo Nation. I was raised in Ganado, Arizona on the Navajo Reservation and graduated high school from St. Catherine's Indian School in 1990. I attended Fort Lewis College in 1990 and enlisted in the United States Marine Corps in 1991. While I was stationed at Camp Lejeune, North Carolina I attended night school at Campbell University for two years. After being honorably discharged from the Marines in 1995 I enrolled at the University of Arizona. I am currently completing my last semester and will be graduating in May 2000. My minor is in American Indian studies with an emphasis in Federal Indian law and policy. I am majoring in political science and history.

## II. Internship Description.

I interned with the Department of Energy's Office of Environmental Management, Office of Intergovernmental and Public Accountability, Tribal Program Office. The following information outlines the mission and functions of each of the offices.

### A. The Office of Environmental Management.

The office of the Assistant Secretary for Environmental Management (EM) provides program policy development and guidance for the assessment and cleanup of inactive waste sites and facilities, and waste management operations; develops and implements waste research and development programs to provide

innovative environmental technologies to produce permanent disposal solutions; and oversees the transition of contaminated facilities from various Departmental programs to environmental restoration once they are determined to be surplus to their original mission. The Assistant Secretary provides centralized management for the Department for waste management operations, environmental restoration and related applied research and development (R&D) programs and activities, including EM program policy guidance to all DOE Operations Offices in these areas.

#### 1. Functions:

- a) Manages the developmental policy and program guidance for waste operations and environmental restoration programs and activities at DOE facilities, operations or sites (or portions thereof) that have been assigned to DOE for environmental restoration and serve, or will serve, no future productive need; are used for the storage, treatment or disposal of hazardous, radioactive and mixed hazardous waste materials that have been properly characterized, packaged, labeled and have been formally transferred to the Office of Environmental Management by another DOE office for the purpose of environmental restoration and eventual return to service either as a DOE facility, or other governmental or civilian use; or are not exclusive for long-term storage of DOE waste material and are not actively used for

production. Exercises programmatic management of the Rocky Flats Field Office.

- b) Manages corrective activities at facilities operations, or sites specifically under EM management to bring them into compliance with external air, surface water and solid waste regulatory requirements and internal DOE requirements.
- c) Develops, promulgates and monitors the effectiveness of DOE policy (in conformance with applicable laws or agreements) related to the handling, storage, treatment, or disposal of DOE waste material, in accordance with the Strategic Plan.
- d) Formulates and monitors annual budget requests for activities identified in the Strategic Plan. For activities at facilities, operations or sites not specifically under EM management, obtains information from the appropriate program office for inclusion in the Plan.
- e) Develops and promulgates a system for the prioritizing proposed waste management and environmental restoration activities.
- f) Manages a national program of applied R&D to resolve major technical issues and rapidly advance beyond current technologies for environmental restoration and waste management operations.
- g) Manages the process to prepare and issue annual updates of the Strategic Plan.

- h) Manages the transition of contaminated Departmental facilities from the initial shutdown, to decontamination and decommissioning, to the eventual disposition of the facility.
- i) Ensures EM organization promotes diversity, civil rights and minority affairs.

B. Office of Intergovernmental and Public Accountability.

The Office of Intergovernmental and Public Accountability works to ensure meaningful, timely, public participation in all of EM's key decisions and site and programmatic planning efforts, by educating the public about EM's decision-making process, institutionalizing public participation within EM, and providing means and opportunities for meaningful public input.

1. Functions:

- a) Institutes processes to ensure appropriate involvement of local communities and other external stakeholders (State and Tribal governments) in EM and site planning efforts.
- b) Designs and implements processes to involve stakeholder participation in the annual budget development process.
- c) Works with affected line programs to involve stakeholders in agreed upon issues including regional and national forums on opening WIPP; FFCA implementation; waste management PEIS; BEMR; spent nuclear fuel; and others.

- d) In coordination with the EM line offices and field sites, prepares the Environmental Management Annual Report for distribution to Congress along with the annual budget request.
- e) Continues to prepare and publish on a quarterly basis EM Progress, a widely distributed update on EM activities.
- f) Works with the HQ and field offices to promote successes from public participation initiatives through press releases, radio and TV opportunities.
- g) Uses innovative technologies and existing means to communicate with the public (e.g., an interactive database network to enhance public participation and program acceptance through electronic dissemination of information; Center for Environmental Management Information).
- h) Serves as focal point for Environmental Management on Environmental Justice issues in conjunction with the Office of Economic Impact and Diversity; manages the environmental justice clearinghouse to ensure the EM program carries out intent and requirements of Executive Order 12898.
- i) Integrates the advice of the Site Specific Advisory Boards into the EM decision-making process through close coordination with the sites and program office; evaluates the effectiveness of the SSABs.

- j) Serves as EM focal point for State and Tribal Government Working Groups; makes specific recommendations on partnering between DOE/EPA/states; tribal issues; and improving the regulatory process.
- k) Oversees the Environmental Management Advisory Board; continues/concludes the work of the eight subcommittees, incorporating the recommendations into the Department's decision-making process.
- l) Develops public participation and communications programs for EM, strengthening the public participation plans.
- m) Evaluates public participation techniques and shares "lessons learned" throughout the complex.
- n) Continues to design and implement a "customer satisfaction" and "trust and confidence" survey to gauge the effectiveness of EM's openness initiatives.
- o) Continues to manage cooperative agreements with 10 tribes to achieve cost effective decisions while recognizing and protecting Tribal legal interests and resources.
- p) Develops integrated Tribal sensitivity training program for HQ and field offices.
- q) Leads a crosscutting team on landowner policies to include: economic development activities (e.g., reuse of facilities); privatization; analysis of landlord costs; and planning.

r) Oversees EM road shows and exhibits for the entire Department.

### C. Tribal Programs.

Originally, EM programs and field offices provided funding to Tribes located around EM sites. This funding strategy resulted in poorly coordinated efforts with impacted Tribes. Further, Secretarial commitments to good-faith pre-decisional interactions with Tribes went unfulfilled.

Conflicts escalated and claims arose that EM's approach to distributing financial and technical assistance to Tribes was arbitrary and capricious. Furthermore, the relationship between EM and the Tribes was marked with distrust and the potential for significant and costly legal challenges. EM instituted a coordinated approach to government-to-government interactions by establishing a team at Headquarters to serve as a credible and central point of contact and ombudsman, guide for protocol, source of background policy analysis, and financial assistance management. The headquarters team works closely with the field contacts at each site to ensure that EM equitably and consistently carries out its legal obligations to the Tribal Nations. From a program perspective, Tribal rights and concerns are more properly considered in planning and implementation of EM initiatives.

The Office of Environmental Management currently maintains cooperative agreements with ten federally recognized Tribes located near departmental operations at Richland, Idaho National Environmental Engineering

Laboratory, Los Alamos National Laboratory, Sandia National Laboratory, and the West Valley Demonstration Project.

The cooperative agreements enable participating Tribes to build environmental management programs in which Tribal staff and members can actively engage in assisting The Office of Environmental Management with its cleanup efforts. As a result, Tribal governments acquire the technical scientific capability and staff. Tribal leaders and communities are thus better informed to participate in the decision-making processes at EM sites and facilities.

1. Participating Tribes:

Richland/Hanford Site

The Nez Perce Tribe

The Confederated Tribes of the Umatilla Indian Reservation

The Yakima Indian Nation

Idaho National Environmental Engineering Laboratory

Shoshone-Bannock Tribes of the Fort Hall Indian Reservation

Los Alamos National Laboratory

Cochiti Pueblo

Jemez Pueblo

Pueblo de San Ildefonso

Santa Clara Pueblo

Sandia National Laboratory

Isleta Pueblo

West Valley Demonstration Project

Seneca Nation of Indians.

2. Program Activities

Government-to-government agreements establish core environmental programs in which the Tribes have started to build the internal capacity to engage fully with DOE in cleanup activities. Currently, with the assistance of hired Tribal staff and scientific experts, Tribes can now examine major issues at the sites and provide comments on how activities at the site may impact the Tribe and the environment. In addition, the Tribe may provide comment on proposed site initiatives. The capacity development revolves around three different areas:

- a. Advise Tribal Leadership- increase the knowledge and skill development of Tribal decision makers and staff persons about DOE operations in order to make better-informed decisions and more effective environmental programs.
- b. Enhancement of Technical Capabilities- provide training for tribal staff persons to gain skills in scientific data gathering, analysis and evaluation in order to perform monitoring on Tribal lands and to better inform Tribal leaders about current information for decision making purposes.

- c. Recruitment, Training and Placement of Tribal members- prepare high school and college students for careers in environmental management and cleanup through internship programs, with scholarship assistance, and training programs related to emergency preparedness and hazardous material response.

Cultural resource management within the Tribe and DOE field offices is another significant area of development under the agreements. Tribal concerns ranging from the definition of cultural resource to the protection of the resources are being addressed.

Each Tribe performs a number of the following activities:

- a. Transportation/Emergency Response.
- b. Water Quality Assessment.
- c. Air Quality Assessment.
- d. Biological Assessment.
- e. Botanical Assessment.
- f. Geological and Hydrological Assessment.

### III. Internship Evaluation.

#### A. Internship Preparation.

My preparation for the Department of Energy (DOE) and Council of Energy Resource Tribes (CERT) Policy/Program Internship has been facilitated by previous internships with CERT's educational program: Tribal Resources In Business, Engineering, and Science (TRIBES), CERT Tribal leadership, and personal mentoring with David Lester, Executive Director for CERT.

For three consecutive summers, beginning in 1996 and ending in 1998, I interned as a Teaching Assistant and as an Instructor for TRIBES' American Indian Studies 150 at the University of New Mexico. This internship furthered my understanding of the importance of Tribal governments as the main institution for the development and protection of Tribal resources, the role of State and Federal governments in "Indian Country," and the applicable policy and case law that have contributed to the intergovernmental relations between the three governments.

An additional source that prepared me for the DOE/CERT Policy/Program Internship was the Tribal leadership from the Tribal nations that composed the Council of Energy Resource Tribes. Through various meetings with Tribal leadership, site visits to Tribal governmental offices, and personal dialogue with Tribal leadership, I acquired a practical real world understanding of Tribal issues and concerns. These issues and concerns ranged from the preservation of Tribal ways of life, culture, and language to the protection and development of Tribal

natural resources, sovereignty, and improved intergovernmental relations between other Tribal nations, State and Federal government agencies.

An important aspect of my preparation for the Internship was the mentoring and guidance of David Lester, the Executive Director for CERT. Under his leadership I was taught valuable lessons about the importance of developing and protecting tribal sovereignty and Tribal resources in an era when Tribal resources are an ever-important quality to the vitality of both Tribal nations and the United States. His leadership by example in the area of Tribal resource development and protection demonstrated the highest competence, diplomacy, humility and ethics as a liaison between and between CERT member Tribes and Federal agencies. The pinnacle of his leadership, guidance, and mentoring has been the understanding regarding the importance of doing the right thing when crafting policies and programs that ultimately effect the source of Tribal sovereignty; Tribal People.

#### 1. Application of Political Science and American Indian Studies.

Throughout the DOE/CERT Policy/Program Internship I relied on my major in political science and my minor in American Indian studies for understanding applicable policy, case law, and program implementation related to the ten participating Tribes. On one hand, political science familiarized me with the structure of Executive Agencies such as the Department of Energy, the budget process, and governmental processes. On the other hand, the education I

received in the American Indian Studies Program at the University of Arizona greatly assisted me in becoming adept in the Federal/Tribal government-to-government relationship. This helped me to understand Tribal and Federal issues pertaining to ceded Tribal land; contamination; program funding; treaty interpretation with regards to treaty language, rights, and sovereignty; and cultural and natural resources preservation, protection, and restoration.

## B. Internship Assignments

While interning with the Department I was assigned tasks that ranged from general office support, memo writing, data entry, and document analysis i.e. budget reports, correspondence, and interoffice memos, and participating in staff meetings. These tasks were important in that I learned the inner workings of the Office of Intergovernmental and Public Accountability within the structure of the Department. Additionally, I learned about the daily issues and concerns of the office and the concerns and issues presented by Tribal nations.

Throughout the internship five major projects were creating and designing the Tribal Programs Web Page, creating a Tribal protocol handbook for the Department, Assisting Catherine Volk, Public Relations, with the State and Tribal Government Working Group (STGWG), and assisting Brandt Petrasek, Program Manager, with the Secretarial Briefing of Tribal Programs.

The Tribal Program Web Page consisted of gathering information on the legal/policy status of Tribal nations vis-à-vis the "government-to-government"

relationship between the Federal government and Tribal governments, assembling current data on Tribal Programs, and Departmental site information. The purpose of compiling this information was to fulfill the mission of the Office of Intergovernmental and Public Accountability in maintaining public and Tribal participation and communications and strengthening public and Tribal participation.

The information was then arranged to provide optimum use and understanding of the role and function of Tribal Programs within the Department of Energy's Office of Environmental Management, Office of Intergovernmental and Public Accountability. The technical assembly of this information to the World Wide Web was prepared by the Center for Environmental Management Information (CEMI).

The Tribal Protocol Handbook served to inform and education Departmental officials about Tribal protocol. The handbook was designed to be used as a tool for achieving effective and mutually beneficial communication between Departmental Officials and Tribal Leadership and staff persons. I created the initial draft of the protocol handbook. This draft was then built upon and modified by both the Office of Intergovernmental and Public Accountability and a public relations contractor.

The draft handbook's focus was on informing the Department official about the legal/political/geographical status of Federally recognized Tribal nations, Tribal cultures, and Tribal governments. For the information and structure of the

handbook I consulted Gilbert Suazo, Team Leader, Tribal Governmental Relations, Community Relations, Los Alamos National Laboratory. Mr. Suazo was instrumental in providing information and concerns about Tribal protocol.

The State and Tribal Government Working Group provides an opportunity for State and Tribal governments to convene on common issues, concerns, and challenges that face both governments in relation to the Department of Energy's continued effort at cleaning up and managing nuclear waste, contaminated facilities, and environmental impact on the environment. This forum provides access to policy level representatives from States, Tribes, and DOE officials.

I worked with Catherine Volk as a Departmental and Tribal liaison in the preparation for STGWWG conferences. This involved contacting Tribal leadership and staff persons and informing them of pertinent issues and concerns and confirming their attendance at STGWWG conferences. My most instrumental achievement was securing the participation of the Navajo Nation's Environmental Protection Agency's Director. This was instrumental for several reasons. First, the Navajo Nation had not participated in STGWWG meetings in the previous three years. Second, it was important for the Tribe to participate in light of the Navajo Nation's recent concern about the transportation of nuclear waste across Tribal jurisdiction. Finally, the information and knowledge gained by the Navajo Nation was instrumental in formulating Tribal regulatory codes on the transportation of nuclear waste across Tribal jurisdiction.

The Secretarial Briefing of Tribal Programs was similar in scope, intent, and content as the Tribal Program Web Page. Compiling the information for the Secretarial Briefing was readily available as a result of the work we had done in creating the Web Page. The most challenging part of the briefing was the revision of information, the editing and refining process of the briefing, and the constant rechecking of information and budget numbers for accuracy. The drafting and final brief was a slow, detailed, and methodical process that involved the Site offices at Hanford/Richland, Idaho National Environmental Engineering Laboratory, Los Alamos National Laboratory, Sandia National Laboratory, and the West Valley Demonstration Project.

C. Professional Development.

The Department of Energy and Council of Energy Resource Tribes' Policy/Program Internship has tremendously guided my professional development and understanding analytically and communicatively. The most important development pertained to sharpening my analytical skills necessary for understanding the cause and effect relationship between policy and program implementation. This understanding was vital for successfully and effectively thinking about and addressing the challenges, issues, and concerns facing both the Department and the Tribal nations.

Additionally, an important development was learning the skills necessary to communicate effectively with both Federal and Tribal policy and program level

personnel about issues pertinent to both Federal and Tribal governments.

Effectively communicating encompassed several mediums i.e. memo writing, public speaking, discussion and dialogue, and listening. I learned that an essential element to communicating effectively is understanding the circumstances and environment.

Communicating effectively included writing, editing, finding an accurate definition of words and sentences, articulating ideas before speaking, researching and understanding issues, and listening and internalizing the points, issues, and ideas raised by both Federal and Tribal policy and program personnel. This, likewise, positively influenced my thinking, writing, speaking, and listening skills.

#### 1. Significant Acquired Knowledge

Though there were numerous experiences that linked academic knowledge to “real world” experience, one stands out because of my personal involvement in its creation. I had been given the assignment of researching and providing historical, legal and policy information for the Tribal Program Web page. I literally returned to the classroom and library to dig up information and policies that would be beneficial to the role of the Office of Intergovernmental and Public Accountability and to the Tribal Program Office. This was important for two reasons: on the one hand I was doing academic research, and on the other I was combining the researched with program activities. For example, we began by

defining and describing the legal and political relationship that the Department shared with the participating tribes. We incorporated the historical development of Federal Indian law and policy and tribal sovereignty and established the current tribal and departmental relationship with current policy initiatives by both the President and the Secretary of the Department of Energy.

After researching and compiling the information we created a foundation from which to introduce the Department's Tribal programs. My internship supervisor and I began with geographically defining the programs, the specific site issues, and Tribal programs. In providing the academic principles of Federal Indian law and policy, and by building upon that foundation, the Tribal Program Office took a proactive position. The Office revealed "how" the fiduciary relationship was being implemented in the Department, "why" it was important to recognize this relationship, and "where" this relationship was being implemented.

The internship was an experience of a lifetime. It taught me the relationship between my academic studies and "real world" issues. It also gave me a new understanding of the importance of recognizing the "real world" relationship to the classroom. Class information before the internship experience was limited to the classroom and textbooks. After the internship, class information has taken on a new meaning by my constant questioning of class lectures and class material. I now sit in class and ask myself, "How does this relate to the real world? Does it relate? How can I use this information in Tribal governmental

issues?" Another aspect of my classroom experience that has changed is my critical analysis of the accuracy of information and my experience. I have returned to school with a new understanding of my relationship to both academic studies and real world applications.

#### D. Future Goals.

After the enormous learning experience of the DOE and CERT Policy/Program Internship I have come to a deeper awareness of the importance and crucial need for educated Native Americans in both Federal and Tribal government. My future goals are divided into short-term goals and long-term goals. My short-term goal is to attend law school at the University of New Mexico. The specialty that I intend to undertake is in the area of Federal Indian law and policy and natural resources law. My long term goal is to use the expertise in the two fields of law represent and protect the interest of Tribal governments in Congress as a legislative aid or Tribal consultant. Ultimately I hope to be a future Executive Director of the Council of Energy Resource Tribes and to be at the service of Tribal people and their numerous governments.

#### E. Internship Recommendations

- 1) Provide briefing packet/meeting for intern before being assigned to internship site office.

- 2) Have weekly briefing meetings via conference phone with pertinent CERT Headquarters staff and Intern.
- 3) At the inception of the internship program have a meeting with the Executive Director of CERT, the Deputy Director of the Office of Intergovernmental and Public Accountability, The Tribal Program Manager, and other pertinent federal employees to discuss the role and responsibilities of the Intern.
- 4) Hold debriefing meeting after the conclusion of the internship.

F. Contacts.

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3<sup>rd</sup> District, New Mexico  
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Derrick Watchman  
Department of Energy

Resume.

Milton John Bluehouse, Jr.  
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Tucson, Arizona 85722

### SUMMARY

United States Marine Corps veteran and University of Arizona senior studying Political Science and History. Strong skills and ability in communicating clearly and understandably, and in preparing and accomplishing goals in a timely and efficient manner. Strong ability to motivate and direct teamwork with unity among people from diverse backgrounds. Excellent quality of leadership by example, a 'can do' attitude, and unafraid of challenges. Culturally and spiritually grounded in Indigenous philosophy of social accountability, religious reverence for all creation, and a solid identity in regards to Indigenous sovereignty in religion, government, and society.

### Experience

Congressional Intern, Morris K. Udall Foundation, Native American Congressional Summer Internship The Morris K. Udall Foundation Internship Program 110 South Church Ave., Ste. 3350 Tucson, AZ 85701 (520) 670-5529 May 28<sup>th</sup>, 1999- August 8<sup>th</sup>, 1999

- Congressional Intern for the House of Representatives, House Committee on Resources, Democratic Minority Staff. Worked as an apprentice legislative assistant on Native American and Insular Affairs.
- Major Accomplishments include analyzing H.R. 1828 (Comprehensive Electricity Competition Act) and finding language that may possibly effect Tribal utilities by default; analyzing legislative measures relating to the welfare of Native Americans, including management of Indian lands in general and special measures relating to claims which are paid out of Indian funds. Analyzing matters regarding the relations of the United States with Native Americans and Native American tribes, and matters regarding Native Alaskans and Native Hawaiians; prepared back ground briefings for proposed legislation routed for mark up at full committee; researched and investigated and conducted follow up on legislative information; and provided advice to legislative staff on Native American issues.

Policy/Program Intern, Department of Energy and The Council of Energy Resource Tribes, 1999 Broadway, Suite 2600, Denver, CO 80202-5726 (303)-292-7576

August 28<sup>th</sup>, 1998 - August 27<sup>th</sup>, 1999

- Policy/Program Intern for the Department of Energy, Office of Environmental Management, Office of Intergovernmental and Public Accountability, Tribal Program Office. Worked as a Tribal Programs Assistant with Federal employees with office support, program support, and Tribal issues and protocol with regards to four of the Department of Energy's nuclear weapons production facilities located near ten impacted Tribal nations.
- Major accomplishments include: assisting in compiling nuclear program and policy information for a Secretarial briefing for both the Secretary of Energy, Bill Richardson, and the Assistant Secretary for the Office of Environmental Management, Carolyn Huntoon; worked on creating and maintaining a Tribal program web page for the Office of Intergovernmental and Public Accountability; and assisted with the creation of a Department of Energy Tribal Protocol handbook for Departmental employees; revised and updated the Tribal program booklet; assisted in arranging two State and Tribal Government Working Group conferences; and assisted in setting up the Department's American Indian program in November of 1998 and 1999;

Native American Studies Professor/Instructor, Native American Studies 150, Tribal Resources In Business Engineering and Science (TRIBES), Council of Energy Resources Tribes (CERT), Comprehensive Education Program, 695 South Colorado Boulevard, Suite 10, Denver, CO 80246, (303)- 282-7576

June 11<sup>th</sup> - August 8<sup>th</sup>, 1998

- Professor/Instructor for the Native American Studies course at the University of New Mexico. Taught twenty-six Native American students from diverse backgrounds and different communities throughout the United States and Canada. The course material covered pre-contact tribal governments, the complexities that were created with contact with European culture, government, and thought. The course then covered specific cases in Federal Indian Law that highlighted the enforcement of sovereignty, which created the ward/ guardian relationship, and facilitated the loss of sovereignty. Likewise Native American Studies 150 covered Congressional legislation that encroached upon or attempted to protect tribal sovereignty, land base, culture, and religion. The course centered on the social accountability of the students to return, or to help Native American communities with the education they will receive.
- Supervised Native American Studies Intern. The intern helped with various aspects of the class; preparing class material, clarifying issues in Indian affairs

law and policy, and offered his experience with different elements of the class.

Intern/ Teachers Assistant and Tribal Government tutor with residential responsibilities, Tribal Resources In Business Engineering and Science (TRIBES), Council of Energy Resources Tribes (CERT), Comprehensive Education Program, 695 South Colorado Boulevard, Suite 10, Denver, CO 80246, (303)- 282-7576  
May 28<sup>th</sup> - August 15<sup>th</sup>, 1996  
May 30<sup>th</sup> - August 15<sup>th</sup>, 1997

- Teachers Assistant for writing improvement course at the University of New Mexico. The course emphasized creative thinking and improved writing skills for Native American college bound freshmen. The material taught had the greater application in pending Native American issues in both Indian and non-Indian communities, and within both Federal and Tribal Governmental entities. The primary results of the internships have been two 60 page analytical and technical reports. The reports recorded the daily development of the teaching philosophy, academic progress, curriculum application, and residential responsibilities during the progression of the program. These reports were used to create a foundation for the TRIBES program, and also to fine-tune the program for future TRIBES programs at other Universities.
- Tutored Native American college freshman in the Tribal Government course. Issues tutored included Indigenous definitions of sovereignty, the historical development of the Tribal/Federal Governmental relationship; defining Indigenous land title in *Johnson v. McIntosh*, trust responsibilities, fiduciary relationship, interpretations of treaty rights, divestiture of criminal jurisdiction in *Ex Parte Crow Dog and the Major Crimes Act*, and the developing use of plenary power by Congress, the incursions of the State in the fiduciary relationship between Federal and Tribal Governments, as well as an analytical historical dissection of the policy eras of Federal Indian Policy, and it's causes and effects.
- Engaged in one on one discussion with students. The topics included Indian gaming, alcoholism and substance abuse, social and political historical injustices re: Wounded Knee, Indian removal era/policy etc., the social and physical conditions on the reservations and urban enclaves of Indian peoples. The discussions centered on the students' personal social accountability and their conscience to return to their respective communities with the knowledge and education gained for a combined effort to improve community conditions.
- Combining the roles of the Teacher Assistant, tutor, and residential advisor created the unique opportunity for teaching students in a variety of academic settings. Similarly, the challenging and competitive environment and spirit of the TRIBES program created another opportunity to supervise the

employment of two tutors, both of which were key to the success of the individual students' completion of a rigorous academic program, and to the success of the Intern's accomplishments of the goals set.

Editor, RED INK Scholarly Student Journal, The University of Arizona,  
American Indian Studies Program, 1615 East 7<sup>th</sup> Street, Tucson, Arizona 85719,  
(520)-622-3504

April 15<sup>th</sup>, 1996 - Current

- Editorial board member of RED INK, the only Native run student scholarly journal in the United States. RED INK is composed of eight editors from various Indigenous Nations. The Journal Focuses on creative writing, scholarly articles, art and photography. RED INK currently has a subscription database of 400, and a circulation of 2,500 both nationally and internationally. Our goal is to educate Indigenous and non-Indigenous populations within Canada, the United States, Mexico, New Zealand, and Europe, and to provide an outlet for Indian and non-Indian people wishing to publish articles, creative literature, art and photography- all in the scope of Indigenous issues.

Historical Cultural Research Intern, Navajo Nation Peace Keepers Division,  
Navajo Nation, Judicial Branch, PO Drawer 520 Window Rock, Arizona 86515,  
(520) 871-6388

June 18<sup>th</sup> - July 30<sup>th</sup>, 1995

- Researched cultural creation story with elders and coworkers and recorded oral tradition in written and graphical form. This was used in mediation to reestablish traditional relationships, harmony and peace in domestic violence, out of court civil differences, and land disputes among other issues of adjudication. This traditional problem solving involves reaching a consensual agreement via traditional legal thought contained in oral creation stories. 'Peace Keeping,' as it is known among the Navajo Nation has become the bulwark of "restorative justice," a cultural/legal concept that is meant to reestablish the presence of traditional problem and dispute resolution in issues that would normally be resolved using Western legal mechanisms, thereby strengthening traditional culture and relationships that would otherwise be divided using Western courts and judicial procedures.
- Acted as liaison for highly knowledgeable traditional Dine (Navajo) elder, and liaison for compiling and recording data on computer and audiotape with elder's consent.

Non-Commissioned Officer, The United States Marine Corp

May 13<sup>th</sup>, 1991- February 17<sup>th</sup>, 1995

- Honorable discharge; National Defense Award, Good Conduct Award, Overseas Service Award; Expert-Pistol, Expert-Rifle.
- Primary Occupational Specialty; Logistics. Secondary Occupational Specialty; Marksmanship Instructor. Third Occupational Specialty; Marine Security Guard.
- The execution of duties as a United States Marine greatly contributed to a mature, respectful, and obedient personal conduct, quick thinking, loyalty, integrity, physical and mental discipline, non-negotiable values and standards, respect, tact, and sobriety.
- Overseas service in Okinawa, Japan afforded the unique opportunity to learn from a very respectful and respected people, the opportunity to reflect on humanity and its conduct in different environments, and the opportunity to establish a solid identity based on cultural integrity.
- Attended night school for two years at Campbell University with a G.P.A. of 3.2. This opportunity made it possible to be accepted at The University of Arizona.

### Education

Undergraduate, Fort Lewis College, 1990  
Major: Undeclared

Undergraduate, Campbell University, 1992-1994  
Major: History

Undergraduate, The University of Arizona 1995- Current  
Majors: Political Science and History

### Military Service

United States Marine Corp 1991-1995  
2<sup>nd</sup> Force Service Support Group 1992-1994  
7<sup>th</sup> Communications Battalion 1994-1995  
3<sup>rd</sup> Force Reconnaissance Intelligence Group 1994-1995  
Corporal E-4  
Honorable Discharge 02/17/95

**Council of Energy Resource Tribes**  
*and the*  
**U.S. Department of Energy**

**Year Long Internship Program**

**FINAL REPORT**

*By*  
**LaWanda T. Johnson**  
**CERT/DOE Intern**  
**June 1998**

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Tribal Environmental Program  
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## **1.0 PERSONAL STATEMENT**

My mother's family which is Naashgali Dine'e is originally from Black Rock, Arizona, on the Navajo Nation. I was raised in Shiprock, New Mexico, and graduated from Shiprock High School in May 1993. My entire family has greatly influenced the shape my life has taken with the greatest impact stemming from my parents. My mother, Evelyn B. Johnson, attended a small private college in Arkansas in the late 1960s and was the first person in her family to graduate from college. Presently, she is a kindergarten teacher at Nenahnezad Community School in Fruitland, New Mexico. My father, Albur A. Johnson, who is Bitaahnii, is currently an administrator with Navajo Nation Headstart in Window Rock, Arizona.

My parents raised my sister and I with a great deal of emphasis on education. My sister Tanya recently completed her first year at the University of New Mexico in Albuquerque, New Mexico, where she is studying architecture. Her 1 and ½ year old daughter and my niece, Virginia Deezbaa' Begay, is learning how to count and now owns more books than toys. My brother-in-law, Paul Begay, is also attending school in Albuquerque. Part of the education my father encouraged included gaining as much experience living off the reservation as possible; and so every summer throughout high school, my father sent me away to different parts of the country to live and relish experiences unlike those I had while growing up in Shiprock.

After graduating from Shiprock High, I matriculated at Dartmouth College in Hanover, New Hampshire in the fall of 1993. While at Dartmouth, I studied government and environmental studies and received a bachelors of Arts degree in government in June 1997. My last two years at Dartmouth, I began to focus greater attention on Tribal governments, particularly the Navajo Nation government. The focus on Tribal government development eventually became intertwined with a deepening interest in environmental studies. Primarily, the environmental studies courses I enrolled in centered on environmental law, policy, and risk assessment. In one such class, the group I worked on a project in hopes of finding out how a Tribal perception influences decision making in environmental risk assessments. We answered, fundamentally, a Tribe which has a holistic view of the world perceives the environment in a totally different light than a private company such as Monsanto. At that time we were unable to answer exactly how a Tribal environmental risk assessment differed from conventional risk assessment.

Two months after graduating from Dartmouth, I began a three-month long internship with the Tribal Environmental Program at the Council of Energy Resource Tribes (CERT) in Denver, Colorado. I took advantage of such an opportunity to learn more about environmental risk assessment and risk analysis within Tribes. While at CERT, I learned about the current efforts of the Confederated Tribes of the Umatilla Indian Reservation and the Nez Perce Tribe to develop environmental risk assessment models based on Native American lifestyle scenarios. What I did not experience first hand in an environmental studies course manifested during my internship at CERT. More importantly, at CERT and in Tribal meetings, fundamental ideas and principles such as trust responsibility and government-to-government relationships were made evident. After three months, I completed a report culminating policy concerns of environmental risk assessment for Tribal representatives.

In late November, I was fortunate to undertake a greater challenge within the environmental field at the United States Department of Energy (DOE) in Washington, DC. The Council of Energy Resource Tribes selected me to serve as a year long intern in the Office of Environmental Management where I currently work with ten federally recognized Tribes located near DOE sites and facilities. I serve as a sort of ombudsman focusing on Tribal involvement and participation in the Department's decision making process and its clean-up mission. Since beginning at DOE, I have also been afforded the opportunity to meet Tribal leaders, representatives and staff who have given me an insider's look in the development of Tribal environmental programs. The most valuable experience at DOE has been to examine the Tribal-Federal relationship from both points of view and how they converge in light of greater federal policy on Indian Tribes. In the end, I believe I was able to lend a hand to the Department in ensuring its government-to-government relationship with the Tribes in the time since I have been here.

At Tribal and Federal meetings and at conferences around the country, Tribal leaders have spoken about the urgency to further develop Tribal capacity in the environmental arena. Their work encourages my future involvement with Tribal governments whether future experience may lead me to work in the Federal government, private industry, or with Tribal governments. The development of Tribal capacity in the environmental realm excites me and I am encouraged by the work and dedication to Tribal issues that so many have committed to throughout Indian Country. I have wanted to work directly with Tribal issues and interning at the Department of Energy provided that experience for me.

In the future I plan to return to school and would like to pursue either a Ph.D. in political science or a law degree. Though immediately after the CERT internship at DOE, I will be joining the Navajo Nation Washington DC Office as a legislative associate where I will be able to further apply and develop the skills I have learned at CERT and at the Department to assist my Tribe in its efforts regarding energy and environmental issues. The Council of Energy Resource Tribes and the U.S. Department of Energy have facilitated what had been a little dabbling in a few environmental courses in college to a point where I have been able to gain skills necessary for working with Tribes in the future.

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## RESUME

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#### **Government**

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Date completed: June 1997

GPA: 3.2/4.0

Areas of concentration: American politics, political theory, environmental law and policy, and environmental risk assessment

Language Study Abroad

Universitat de Barcelona, Barcelona, Spain

Certificate in Environmental Studies

Class of 1965 Award in Memoriam of

#### Diploma

**Shiprock High School, Shiprock, New Mexico**

Graduation date: May 1993; Salutatorian

Navajo Nation Chief Manuelito Scholar

### WORK EXPERIENCE

#### November 1997-Present

#### **CERT-DOE Intern**

**Office of Intergovernmental and Public Accountability**

**Office of Environmental Management**

**U.S. Department of Energy, Washington, DC**

Help ensure the government-to-government relationship between the Department's Office of Environmental Management and ten federally recognized American Indian Tribes located near or around DOE sites and facilities. Duties include: Assist in preparing budgets and budget justifications; prepare for briefings for the Assistant Secretary of Environmental Management; assist in writing, editing and formatting letters; and write web page information for the Office of Environmental Management Tribal information.

**August-October 1997**

**Environmental Intern  
Tribal Environmental Program  
Council of Energy Resource Tribes, Denver, Colorado**

Prepared a report focusing on policy recommendations for Tribal environmental risk management and environmental risk assessment; compiled information and drafted a report submission to the United States Commission on Risk Assessment and Risk Analysis; and gained an introduction to grant writing.

**June-August 1996 &  
January-May 1997**

**Minority Recruitment Intern  
Undergraduate Admissions Office  
Dartmouth College, Hanover, New Hampshire**

Helped the Assistant Directors of Admissions to increase the number of minority applicants to Dartmouth College. Duties included: Plan campus visits for prospective students; arrange for meeting spaces; plan and give campus tours; arrange student accommodations with Dartmouth students; help plan the annual Perspectives Weekend where more than 100 prospective students visit the campus; chair student committees for food and Cultural Expressions, a two-hour show featuring campus groups and musicians.

**September-December 1996 Sales Associate**

**Dillards Department Store, Farmington, New Mexico**

Duties included: Increase sales in the Trim-a-Tree department; responsible for tree design and product display; responsible for cash, credit, and check purchases and returns; assist customers with holiday decoration advice.

**October-December 1996**

**Substitute Teacher  
Shiprock Alternative Schools, Inc., Shiprock, New Mexico  
Central Consolidated Schools, Shiprock, New Mexico**

Implemented formal daily lesson plans of teacher.

**January-February 1996**

**Intern  
Office of Navajo Government Development  
Navajo Nation, Window Rock, Arizona**

Assisted Director with conference planning. Duties included: Contact speakers; plan agenda; draft fundraising letters and letters of invite; arrange meeting space; design newspaper advertisement; design conference brochure and registration forms.

## **CONFERENCE PRESENTATION**

### **Informing Democracy for the Atomic Age through the Principle of Tribal Environmental Accountability**

Presented at Waste Management Symposia 1998, "HLW, LLW, Mixed Wastes and Environmental Restoration-Working Towards a Cleaner Environment," Tucson, Arizona. Co-authored with David F. Conrad, Director-Tribal Environmental Program, Council of Energy Resource Tribes.

## **RELEVANT SKILLS**

**Computer-** Experience with Macintosh and IBM personal computers, Windows 3.1, Microsoft Word, WordPerfect, and PowerPoint.

**Meeting Planning-** Coordinated efforts for Navajo Government Development conference: draft fundraising letters, invite speakers and panelists, arrange meeting areas.

## **COMMUNITY SERVICE**

**May 1998-present**

**Project Northstar, Inc., Washington, DC**

Tutor homeless, formerly homeless, and at-risk students in the District of Columbia public school system.

### 3.0 EXECUTIVE SUMMARY

The United States Department of Energy's Office of Environmental Management (EM) hosted the yearlong Council of Energy Resource Tribes (CERT) Internship. I served as the CERT intern from November 1997 to June 1998 in EM's Office of Intergovernmental and Public Accountability. EM currently maintains cooperative agreements with ten federally recognized American Indian Tribes located around DOE sites and facilities throughout the country. The working relationships between the Department and the Tribes are currently maintained through the Office of Intergovernmental and Public Accountability. The agreements served as the Department's primary interaction with Tribes and facilitate Tribal government involvement in the Department's decision making process regarding the clean up and remediation of the waste remnant of the Cold War's nuclear weapons production.

As a CERT/DOE Intern, the training I received focused on an orientation to Tribal and Federal relationships and the facilitation of those relationships. I worked directly with Mr. Albert Petrsek in the Office of Intergovernmental and Public Accountability on issues pertinent to the cooperative agreements with the ten Tribes and related projects. The following Tribes that work with EM are grouped according to the Site Offices each works with.

<b>Albuquerque Operations Office: Los Alamos National Laboratory and Sandia National Laboratory</b>	<b>Richland Operations Office: Hanford</b>	<b>Idaho Operations Office: Idaho National Environmental Engineering Laboratory</b>	<b>Ohio Operations Office: West Valley Demonstration Project</b>
Pueblo of Cochiti  Pueblo of Jemez  Pueblo of San Ildefonso  Pueblo of Santa Clara  Isleta Pueblo	Confederated Tribes of the Umatilla Indian Reservation  Nez Perce Tribe  Yakama Indian Nation	Shoshone-Bannock Tribes of the Fort Hall Indian Reservation	Seneca Nation of Indians

EM's commitment to involve Indian nations in its remediation activities is based on the Department's recognition of its trust responsibility to Tribes and the Department's American Indian Policy. With assistance from the Department, the aforementioned Tribes have developed environmental programs on the reservations that work in conjunction with the field offices to address particular health and safety issues, Tribal cultural concerns, and areas of environmental restoration and waste management.

In addition, I had the opportunity to work with the Acting Director of the Office of Intergovernmental and Public Accountability, Martha Crosland, and the Deputy Director, Melinda Downing. At the field offices, I worked in a small capacity with Margaret Hodge, Tribal Liaison at the Albuquerque Operations Office, and Kevin Clarke, Manager of the Indian Nations Program at Hanford.

The training experience I received during the past seven months focused on developing necessary public relations skills and learning about the DOE budget process. A number of duties related to the training included preparing briefings for the Assistant Secretary of Environmental Management and other DOE managers; drafting and editing general information about Tribes for internal use; meeting with Tribal leaders and representatives; and editing correspondence and designing budget charts.

The purpose of the work I did was in part to further enhance the government-to-government relationship between the Department and the Indian Tribes. The facilitation of such a relationship occurs in several different capacities and requires a dual understanding of Federal and Tribal issues and concerns. One capacity of work with Tribes in a Federal agency that is not stated clearly is acting as an educator of Tribal issues. I took for granted that nearly everyone I interacted with at some point had a basic understanding of Tribes and their relationship to the Federal government. Upon realizing that the persons I worked with did not necessarily have an understanding of Tribal issues, it became apparent that communication of these issues in a brief and concise manner was paramount. An assumption that others had knowledge about Tribes, trust responsibility and government-to-government could no longer be made. Coming from an academic background where I gained some familiarity with American Indian history, government and contemporary affairs, some would argue that I should have had at least a general notion that Tribes are not given thought to in the overall bigger picture of Departmental decision making.

Through meetings with Tribal leaders and representatives and other involved parties, I learned the importance of conveying to those unfamiliar with Tribes that Tribes out to be treated with a level of respect required in a government-to-government relationship.

I also became familiar with the decision making process within the Department and how muddled a decision making process can become at different levels of the game between the Tribes and a Federal agency. The Tribal meetings and conferences I attended brought attention to the different steps in the development of working relationships between Tribes and Federal agencies. At the White House Domestic Policy Working Conference in Olympia, Washington, the early stages of developing a Tribal and Federal relationship demonstrated the process in which the U.S. Department of Defense with the involvement of Tribes wrote a set of principles for future Tribal and Defense working relationships.

At the U.S. Department of Energy, another example of Tribal and Federal relationships can be viewed. Beyond the developmental work by the Department of Defense, the Department of Energy's current relationship with a number of Tribes located near or on DOE sites and facilities bring to light one manner in which Tribal capacity building is encouraged and fostered through cooperative agreements. At U.S. EPA sponsored events, maintenance and the level of understanding of Tribal and federal relations within a federal agency is also apparent. Through these meetings I became aware of how much more development in tribal and federal relationships can take place with greater education about Indian Tribes.

Communication has played the most significant part of my work at the Department and with the Tribes. Effective communication factors greatly into all aspects of working in a Federal agency and with ten American Indian Tribes. A development of effective communication skills can be fostered through a number of ways that includes drafting and editing correspondence, preparing meeting agendas, using multi media approaches, giving presentations, preparing for and giving

briefings to the Assistant Secretary and staff, and meeting with Tribal representatives. The Office of Intergovernmental and Public Accountability is at the crux of Tribal and Federal relations and having the opportunity to work in this office lends a hand to a useful development of effective communication skills. Communication plays the greatest role, and if communication is effective, both Tribal and Federal viewpoints can converge and benefit both entities.

Part of developing sound communication skills includes the art of listening. During a meeting with Tribal or Federal officials, being able to identify concerns shared by either or both parties is important for developing a strategy to pull together and find solutions.

The greatest significance of the work I have been involved with is seeing how Tribal capacity building takes shape among a number of Tribes. Though this process is not always the smoothest, it shed light on program development in different departments of a Tribe. Tribal capacity building supported by the Department has allowed for effective program development, and has allowed the Tribes to identify their own needs and to develop a scope of work to meet those needs. In doing so, Tribes have been able to train and employ the necessary scientists, technicians, and interns.

The Department in its support of Tribes has to further enhance the roles Tribal leaders and policy makers in Federal decision making processes. In developing the capacity to address environmental concerns, the Tribes learn to deal effectively with clean-up issues. With a trained and knowledgeable staff and a supportive role in DOE decision making the Tribes can fulfill their part of the trust relationship with the Federal government. The future of Tribal and Federal relations requires a collaborative effort on part of both entities to work together to clean up DOE sites and facilities.

There are a number of tangible and intangible outcomes of the internship. Beneficiaries of these outcomes include the Tribes with whom the Department works with, other DOE headquarters staff and interns, and the general public. For example, new and updated information regarding Tribal involvement in clean-up and public participation activities of the Office of Environmental Management can be viewed on the Internet. The information can be used as a starting point for researchers interested in Indian energy and environmental clean-up issues or Indian college students wanting to learn more about current Tribal and Federal relationships.

The Office of Intergovernmental and Public Accountability with the assistance of the Oakridge Operations Office redesigned and updated the office website. I wrote new and current information for the Tribal Nations page on the office's official website. The information is categorized into History, Policy, and Guidance; A Government-to-Government Approach; Tribal Environmental Programs; and Points of Contact.

In addition to the website rewrite, I co-authored a paper with David F. Conrad, Director of the Tribal Environmental Program at the Council of Energy Resource Tribes. The paper was presented at the Waste Management '98 Symposium in Tucson, Arizona, to an audience composed primarily of Tribal environmental staff and Federal employees. The paper is entitled Informing Democracy for the Atomic Age through the Principle of Tribal Environmental Accountability, and accompanying the paper was a presentation laying out the Principle of Tribal Environmental Accountability. The paper focused on the development of environmental principles in Tribal origin stories and identified three key elements found in Tribal origin stories.

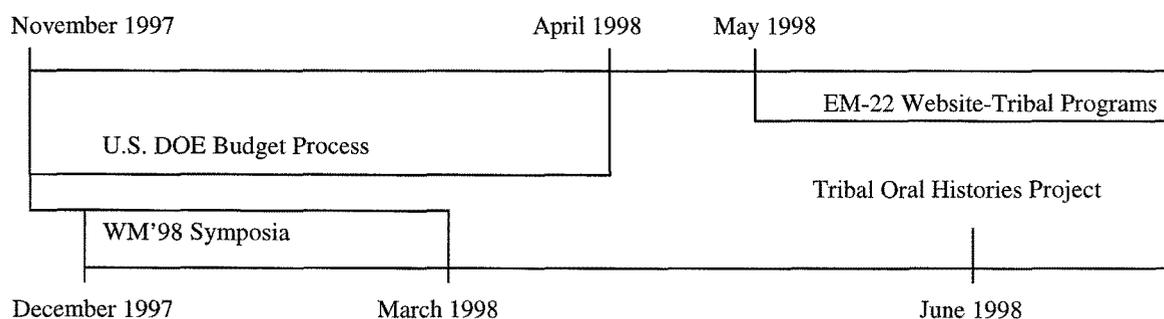
Other tangible outcomes produced during the internship are written materials not appropriate for inclusion in an intern report. Much of this type of work I focused my time on included correspondence to Tribal leaders and representatives in regards to the Tribal Oral Histories Project and other matters; charts of internal budget information; general information packets for other DOE offices or personnel; and briefing materials gathered for DOE managers.

The beneficiaries of these tangible outcomes are the audience who attended the section on Indigenous Waste Management issues at the Waste Management Symposia, Tribal representatives who were invited to attend the Tribal Oral Histories meetings held at Xavier University's Center for Environmental Programs, the consultants present at the Xavier meetings, and DOE managers. All the tangible outcomes of the work I did throughout the seven months provided information to a number of individuals who either knew little about Tribal and Federal relations or who were involved in the day-to-day business of Tribal governments. The information provided for the different needs and perceptions of the individuals I worked with over the internship.

The intangible outcome of the internship, personally, has been a greater level of awareness and understanding of Tribal issues within a Federal agency and the relationships between those two entities. Other interns in the Office of Intergovernmental and Public Accountability also gained a greater understanding either through direct involvement in working with Tribes or through casual conversation in the workplace. Not only do I benefit from learning more about how to deal with Tribal issues and the complex inter-working of Tribal and Federal policies, others have as well. I am more prepared to enter the workforce where my focus will be on Indian or Tribal affairs. I've gained substantive knowledge to support my desire to work with Indian Tribes. Other interns or DOE employees who had little knowledge about Tribes now have tools to recognize impacts to Tribes in some aspect of their work.

## 4.0 Projects

### CERT/DOE Internship: Project Timeline



*\*Note: In addition to the main projects, various assistance was provided by the intern in other issues pertinent to the Tribal Programs in the Office of Environmental Management.*

#### **4.1 U.S. DOE Budget Process - EM Tribal Programs**

I learned about the U.S. DOE budget process in four steps. The first step was an orientation to material relating to the purposes for funding Tribes and the activities undertaken by the Tribal environmental programs in conjunction with DOE field offices. Secondly, a gauge of the status of Tribal funding was taken and followed by the developing a strategy to move along the budget process as smoothly as possible. Last, follow up work regarding current funding support and future support was initiated. These steps were very general and overlapped at different intervals and in some cases it may required a return to a previous step before moving on.

I served in a supportive role to the staff of EM-22 throughout the budget process. I gained experience in chart design, briefing preparation, and letter writing. Duties involved in the process included charting previous budget information in a clear and concise manner before which I helped compile necessary information. Briefings for the Assistant Secretary of Energy and other DOE managers entailed compiling the most current information on the Tribal environmental programs, writing the information into easily understandable text, and preparing reading packets for briefing participants.

The budget process is swift and arduous and requires everyone to have access to the most current information. This fiscal year the focus of the Tribal budget process was to ensure level Tribal funding. The Office of Intergovernmental and Public Accountability viewed ensuring this funding level as a way to continue the crucial development of Tribal environmental programs. With a greater development of these programs, Tribes gain the tools and knowledge to become more involved in DOE decision making and clean-up activities.

The deliverables for this "project" included many briefing packets, organized and easily read budget charts, and the message that Tribes will be ensured maintenance of level funding. Outyear funding exercises can utilize the information gathered in the previous year to develop a strategy for Outyear funding purposes.

My first duty was to design a chart using WordPerfect graphing to present budget data and information from previous fiscal years and the current fiscal year with clarity. Designing a fluent chart required experimentation with different designs, styles, and shading. I also assisted the Tribal point of contact in the Office in researching budget information and data on current Tribal activities. The compiled information was then used to write briefing packets. Part of the information gathering included getting in contact and working directly with the field offices to provide the most current information. Once the information had been put together in chart and in briefing packets, I assisted the Office staff in giving briefings to DOE managers.

Not only did I gain experience with the process, I worked with the Office staff in drafting correspondence relaying what decisions had been made. In all, being exposed to the budget process helped me gain familiarity with issues pertinent to the budget cycle of the Federal government.

The most challenging aspect of the budget process is presenting the gathered information in a manner supportive of ensuring level Tribal funding. On the other hand, while researching and gathering the necessary information, it was inspirational to see how well developed some of the Tribal environmental programs have become and the level of activity many of these programs sustain.

Throughout the entire process I worked closely with Albert Petrasek, the Tribal point of contact in the Office of Intergovernmental and Public Accountability. He provided the encouragement to familiarize myself as quickly as possible with the wealth of information and to communicate effectively. In addition, I worked on occasion with the Acting Director of the Office of Intergovernmental and Public Accountability, Martha Crosland, and Melinda Downing, the Deputy Director of the same office. Outside the Office, I contacted DOE field offices and their Tribal program managers with Mr. Petrasek.

On a smaller scale, I received compliments from the Acting Director on the clarity of the budget charts I prepared. At the end of the budget process for the fiscal year, the funding provided to the Tribes had been maintained. The Tribes were notified about their funding levels and were able to continue in the development of their environmental programs. Others working on future budget cycles also have clear and concise information about this year's budget process for use in future budget strategy.

## **4.2 WASTE MANAGEMENT '98 SYMPOSIA**

In addition to becoming engaged in the DOE budget process, I co-authored a paper entitled Informing Democracy for the Atomic Age Through the Principle of Tribal Environmental Accountability with Mr. David F. Conrad, the Director of the Environmental Program at the Council of Energy Resource Tribes. The abstract for the paper was accepted for presentation at the Waste Management '98 Symposia held in Tucson, Arizona. The Waste Management Symposia featured three days of presentations by other Department of Energy offices and Federal contractors. The symposia was called "HLW, LLW, Mixed Wastes and Environmental Restoration - Working Towards a Cleaner Environment." The paper was accepted for presentation in the section entitled "Indigenous Waste Management." The other papers accepted for presentation in this category focused on revegetation efforts by the Nez Perce Tribe at Hanford, a land use plan developed by the Nez Perce Tribe as well, and the legal and environmental policy issues facing Tribes.

The title of the paper I presented at WM '98 was Informing Democracy for the Atomic Age Through the Principle of Tribal Environmental Accountability. The presentation focused on the origin of environmental principles held by many American Indian Tribes in the United States. In the paper, the origin stories of Tribes were identified as the source for long held environmental principles. In writing the paper for the Symposia, Mr. Conrad and I believed that presenting a material on the origin of Tribes and their highly valued beliefs could serve educational purposes for audience members who worked with Tribes yet had little familiarity with the beliefs of those Tribes. Tribe specific information was not shared in the overall presentation, but rather commonly held concepts and principles were shared. The final copy of the paper and presentation were provided to the Council of Energy Resource Tribes.

In co-writing the paper, I helped draft portions of the paper and edit and formatted the final copy. Mr. Conrad and I designed a presentation with PowerPoint. During the presentation, I had hoped the audience would be engaged by the topic and follow up with questions. After I completed the presentation, the audience did ask questions and a short discussion followed. One member of the audience shared the fact that he could have heard the same presentation on the importance of origin stories and principles in an indigenous conference in New Zealand. Another audience

member suggested those persons or entities working with Tribes ought to look to how Tribal or indigenous principles arise and use those principles to complement the work at hand.

The most challenging aspect of preparing a paper for Waste Management '98 was concisely stating complex Tribal origin information without overgeneralizing Tribal beliefs. Instead of melding different Tribal specific information, Mr. Conrad and I identified common held beliefs and similar principles shared by Tribal origin stories. A diagram explaining the source of principles finally illustrated the information and categorized common held beliefs. Most importantly, our goal was to present new and unfamiliar information to a primarily non-Indian audience in a concise manner. The types of questions and the level of discussion which followed the presentation demonstrated the level of understanding the members of the audience gained.

The two most inspirational events occurred during the discussion that followed the presentation. First, when an audience member acknowledged that he would hear the same principles developed through the origin stories of the indigenous peoples of New Zealand gave me the sense of security that the indigenous peoples of North America are not alone in their beliefs. Secondly, the level of discussion encouraged me to continue work important to facilitating a greater understanding of Tribes.

I worked closely with David F. Conrad on writing the paper and generating ideas and developing a framework on which to introduce the Principle of Tribal Environmental Accountability. Prior to beginning work on the paper, long discussions with David Lester, Executive Director of the Council of Energy Resource Tribes; Merv Tano, former Director of CERT's Tribal Environmental Programs; and one of my grandfathers provided a basis of knowledge on a myriad of environmental issues pertinent to Indian Tribes.

Mr. Lester, Mr. Conrad, Mr. Tano, and my grandfather contributed to my level of understanding of the bigger picture of environmental stewardship from a Tribal point of view. I also learned how to design presentations using PowerPoint with the help of Mr. Conrad, and I continued to develop my writing skills and my communication skills.

### **4.3 TRIBAL ORAL HISTORIES PROJECT**

The Department has been working in partnership with nine of the Tribes it currently has cooperative agreements with to capture the oral histories of Tribal members. The Tribal Oral Histories Project was initiated to tell the story of the impacts of the DOE sites and facilities on Tribes. In 1995, the Department published *Closing the Circle on the Splitting of the Atom*, which documented the development of the country's nuclear weapons complex around the country and the legacy of radioactive waste contamination. The stories of the impacts on Tribes had yet to be captured, and the Tribes coordinated efforts with the Department to begin collecting oral histories. In addition, the National Tribal Environmental Council, the Council of Energy Resource Tribes, and Xavier University's Center for Environmental Programs all have supported the project in an administrative and research support capacities.

After the budget process for the fiscal year ended, my work focused sharply on the Tribal Oral Histories Project. My role in the project has been to assist the Office and Xavier in an administrative capacity. I have also had the opportunity to present ideas on research efforts for the project and the video training sponsored by Xavier. I assisted the Office in writing letters of invite for the Tribal meetings, suggested ideas for the video training agenda, and helped edit a brochure about the project which was distributed by Xavier University.

The Tribes are presently collecting the oral histories. The desired outcome is that the Tribes gain better use of the purchased video equipment and to collect and eventually submit transcripts of oral histories, which could help the Department in cleaning-up sites. I personally did not have any deliverables for the project other than providing direct assistance to completing the project within the next year. In the appendix is an edited version of general information on the Tribal Oral Histories Project I assisted in writing.

The most challenging aspect to overcome was to allay the concerns of the Tribes. One of these concerns was the notion of control over the final product and the production of a final video product. The Office reassured the Tribes of their control and final say in matters regarding the final product or any sort of national production. On the other hand, it proved inspirational to work with nine different Tribes on one project despite the distance involved and the differences in the stories of impacts to surrounding Tribes. Although some negative occurrences did take place during the project, none were so great that the situations could not be resolved through discussion.

Near the close of the project, the value of bringing together representatives from the Tribes and other entities involved to discuss future steps did not escape me. Mr. Petrasek alongside Xavier were able to coordinate a meeting in which expert consultants could give advice on the possible next steps for the group whether it is producing a video for a national audience or compiling the gathered oral histories on CD-ROM for archival purposes. After listening to the consultants, the Tribes could make a much more informed decision regarding the next steps.

The Tribal Oral Histories Project as supported by the Department will come to a close this year after the Tribes have collected the oral histories. Since the project was first initiated, the Tribes have gained the capacity to work with digital video equipment, and perhaps others within the Tribe could utilize the equipment for other projects. The persons capturing the histories on video have gained an introduction however brief to videography. Finally and most importantly, the Tribes have been able to collect on important oral histories which may otherwise have been lost.

#### **4.4 EM-22 WEB SITE - TRIBAL PROGRAMS**

The Office of Intergovernmental and Public Accountability (EM-22) has a website with all the programs and project currently underway. The website also features a Tribal Programs homepage that provides information on the relationship between the Department of Energy's Office of Environmental Management and ten American Indian Tribes. EM-22 is currently updating and reformatting its website with the assistance of the Oakridge Operations Office in Tennessee. The Acting Director of EM-22, Martha Crosland, assigned me the responsibility to update the information on Tribes and their relationship with the Department. I reviewed the current website and rewrote much of the text explaining the relationships between the Tribes and the Department, activities of the Tribal environmental programs, and other related projects sponsored by EM-22.

After I reviewed the old web information, I developed a new outline on which to base the textual information. First, the history and policy guidance supporting Tribal involvement in DOE activities needed to be laid out before any information on the activities of Tribes was presented. Following the history, I decided to write a brief explanation of the government-to-government relationship between the Tribes and the Department. Afterwards, an explanation of the Tribal programs and cooperative agreements is given. Lastly, as part of the text, I wrote short

paragraphs on different Tribal projects currently ongoing or either the projects had been at one point sponsored directly by EM-22.

Once I started reviewing the website, I contacted Jim Sparhawk at the Oak Ridge office. He was responsible for placing the text onto the Internet. After I completed the text on the Tribal program information, I submitted them via E-mail to Mr. Sparhawk. A few weeks later I viewed the new material on a developmental page. Some information did not flow smoothly and some titles seemed out of place, so I made more revisions to the developmental page and submitted those again to Mr. Sparhawk. I wrote much of the text, and Mr. Petrasek reviewed the material and provided some edits.

The most challenging aspect of writing the text was to present the information without sounding like an internal agency document. Throughout the revision work I gained a better and bigger picture of the Tribes and the Office of Environmental Management. I understood the information and could use it in briefing materials, yet the important thing in this assignment was to present what information and I knowledge I had gained during my time at the DOE.

The developmental page with the new information has yet to be placed on the Internet for public viewing. Yet, once the information on EM-22 is loaded onto the Internet, the website can be reached through [www.doe.gov](http://www.doe.gov).

## 5.0 MEETINGS AND CONFERENCES

<b>CERT/DOE Internship Trips: November 1997 to May 1998</b>	
<b>Meetings and Conferences</b>	<b>Location</b>
White House Domestic Policy Council	Olympia, Washington
National Congress of American Indians National Conference	Santa Fe, New Mexico
Risk Roundtable	Pendleton, Oregon
Meetings with Pueblo Governors	Pueblo of Cochiti, Jemez Pueblo, and Santa Clara Pueblo
Waste Management Symposia '98	Tucson, Arizona
State and Tribal Government Working Group	Santa Fe, New Mexico
Tribal Oral Histories Project Video Training	Los Alamos, New Mexico
National Tribal Environmental Council Annual Conference	Spokane, Washington
Tribal Oral Histories Project meeting	New Orleans, Louisiana

The White House Domestic Policy Council along with officials from the U.S. Department of Energy met with Tribal representatives to review and edit the proposed American Indian Policy for the Department of Defense. In addition, representatives from different Federal agencies such as the U.S. Environmental Protection Agency who work with Indian Tribes presented updates on their programs and ongoing initiatives. The Deputy Assistant Secretary for the Office of Planning, Budget, and Policy, Dan Berkowitz, spoke to the efforts of his office in working with Tribes and reaffirmed the support given by the Office to continue working with the Tribes.

I attended the meeting as a first hand introduction to the activities undertaken by Tribes with the assistance and support of different Federal Agencies. Others present at the meeting included Martha Crosland, Acting Director of the Office of Intergovernmental and Public Accountability, and Alexander White-Tail Feather, Tribal Programs Assistant for the same office.

The National Congress of American Indians' Annual National Conference was held in Santa Fe, New Mexico. I attended the NCAI's Nuclear Waste Policy Committee's meeting where Mr. Albert Petrsek from the Office of Intergovernmental and Public Accountability gave an update to the Tribes present on Departmental funding to support Tribal environmental programs. The meeting was the first occasion where I was able to view the public interaction of Tribal and Federal Officials in a discussion of current environmental activities surrounding nuclear waste.

The Confederated Tribes of the Umatilla Indian Reservation and the University of Washington co-sponsored the Risk Roundtable in Pendleton, Oregon. I was invited to attend the roundtable by the Umatilla Tribe. The Roundtable was held for the benefit of Federal officials who were interested in what role environmental risk assessment was going to play in the environmental programs of the Tribes. More than 23 Tribal representatives were present. Participants discussed the possible applications of environmental risk assessment, and Tribes who have further developed a Tribal environmental risk assessment model presented their ideas including the use of Native American Lifestyle Scenarios.

In February, the Acting Director of the Office of Intergovernmental and Public Accountability, Martha Crosland, was unable to attend meetings with the newly elected or appointed Pueblo governors due to scheduling conflicts. She asked me to attend the meetings in her place, and I met with the Pueblo leaders and their staff along with Tracy Loughead and Margaret Hodge, both of the Albuquerque Operations Office. We met with the Governors of Cochiti Pueblo and Santa Clara Pueblo and a council member of the Jemez Pueblo. Each Pueblo discussed current activities of the Pueblo's environmental programs and iterated to the DOE that a cut in funding would prove detrimental to the staffing level.

The Waste Management '98 Symposia was held in Tucson, Arizona, in March 1998. I received permission from the Department to attend the symposia in order to present a paper I co-wrote with David F. Conrad of the Council of Energy Resource Tribes. The paper is entitled Informing Democracy for the Atomic Age Through the Principle of Tribal Environmental Accountability. I presented the paper in the section called "Indigenous Waste Management issues." The presentation elicited encouraging comments from the audience and a discussion on the importance of the origin of Tribal environmental principles followed.

Next, I attended the Tribal Oral Histories Video Training in Los Alamos, New Mexico, the first half of the last week in March. The second half of the week, I attended the State and Tribal Government Working Group meeting in Santa Fe, New Mexico. The Tribal Oral Histories Video Training allowed Mr. Petrasek and I a first hand view of exactly how the oral histories were going to be collected using the digital video equipment the Tribes had purchased. We also participated in discussion on what avenues the Tribal representatives could take in collecting the oral histories. At the State and Tribal Government Working Group meeting, we were able to listen directly to the concerns Tribes had with cultural resource management and protection issues at DOE sites and facilities. A number of DOE representatives from different offices were present at the meeting including Ana Ferrera, Special Assistant to the Secretary; Victoria Thornton, Departmental Liaison to Tribes; and Lois Thompson, who was involved in the production of the cultural resource management guide at the DOE.

The last week in April, I had the opportunity to attend the National Tribal Environmental Council's National Conference in Spokane, Washington. One aspect of the conference focused on the current initiatives by Tribes to develop a Tribal Environmental Policy Act similar to a National Environmental Policy Act (NEPA.) Some Tribes were looking at the implications for developing a broad based Tribal environmental policy for environmental management of reservation or Tribal lands. I attended the conference, which was sponsored by the U.S. EPA, mainly for educational purposes and to see what other environmental activities outside clean-up the Tribes were involved in. While I'm at DOE it can be easy to see only the DOE-Tribal puzzle piece and ignore the entire picture of Tribal environmental programs. The conference brought to every one's attention once again the myriad of environmental issues Tribes face.

I last attended the Tribal Oral Histories Meeting in New Orleans, Louisiana on May 28 and 29, 1998. Mr. Petrasek and I helped to coordinate presentations by four expert consultants in film making, oral history gathering and archiving during the meeting. The consultants introduced different avenues the Tribes could elect to take in making more public the story of the impact of DOE sites and facilities on Tribes. No final decisions were made regarding a product for a national audience. Instead, the Tribes decided to complete their oral history gathering and look at the possibilities for a national product or film.

The meetings and conferences served as educational forums and as a reconnect with the Tribal representatives the Office of Environmental Management works with. In the meetings between DOE and the Tribes, the leaders of the Tribe have been accorded the respect they deserve during their presentations or when they contributed to discussion. I was thankful for the experience since my interaction with any Tribal leaders or representatives prior to the internships at CERT and at DOE had been severely limited. These conferences and meetings also taught me about the sensitivities of Tribal and Federal relationships and introduced me to protocol in working with Tribes.

## **6.0 CONCLUSION**

First of all, I want to thank again the U.S. Department of Energy and the Council of Energy Resource Tribes for the opportunity to serve as a year long intern in the Office of Environmental Management. The experience has been well rounded and provided invaluable background for my career development in environmental affairs and Tribes. An important value of such an internship is learning about Tribal issues from a Federal point of view. While at DOE, not once was I made to feel like a lowly intern who did not have much to offer. My opinion was sought, and though I had not given thought to many of the issues, I came to grasp foreign ideas and learned a good amount about an office in a Federal agency. I believe the work I did contributed to the overall tasks assigned to the Tribal programs employees in the Office of Environmental Management.

Many of the individuals I worked with closely contributed to my professional development. Even negative aspects of the internship contributed to this development and did not take away from the time I spent working in the office. The variety of projects throughout the internship helped me to further develop a number of skills of which the most important has been the development of my communication skills. For future purposes, I would highly recommend the CERT/DOE internship to students completing their undergraduate education or graduate education. The internship serves to bring practical knowledge and experience to students interested in working with environmental issues pertinent to Tribes.

## **7.0 APPENDICIES**

## 7.1 Waste Management '98 Symposia Paper

\*Note: Final edited version available at the Council of Energy Resource Tribes Environmental Programs.

# **INFORMING DEMOCRACY FOR THE ATOMIC AGE THROUGH THE PRINCIPLE OF TRIBAL ENVIRONMENTAL ACCOUNTABILITY**

by

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## **ABSTRACT**

The Federal government faces the daunting task of cleaning-up sites remnant of the country's Cold War legacy. Unlike the years of heightened nuclear weapons production, the clean-up initiative set forth by the Department of Energy today requires the development of decision making guidelines to be determined by citizens, stakeholders, Tribal and State governments. Currently, Tribal governments are examining the establishment of environmental programs that institutionalize a decision making process based on what can be coined as the Principle of Tribal Environmental Accountability. The Tribal Environmental Accountability Principle translates an ethic of accountability based on the traditional beliefs of Tribes. The Department of Energy, in an effort to develop an inclusive decision making process, has initiated the National Dialogue (now referred to as the Cross-Site, Cross-Stakeholder Dialogue, which we will refer to as the "Dialogue"). The Dialogue forum seeks the input of the American public in order to provide publicly acceptable guidelines in the DOE decision making process. The focus of this paper is to introduce the Principle of Tribal Environmental Accountability and the importance of understanding Tribal decision making and planning efforts, and to discuss the Dialogue as an example of how the Principle of Tribal Environmental Accountability can be applied. In the analysis of the Dialogue and the Tribal Principle, the paper highlights America's individual and collective responsibility in national decision making scenarios.

## **INTRODUCTION**

"The Dialogue's aim has been to enable citizens and stakeholders to voice their concerns and interests related to nuclear material and waste management across

the nuclear weapons complex. By taking a national perspective, these concerns and interests can be translated into decision-making guidelines for DOE decision making. The dialogue is not intended, however, to provide DOE with specific decisions on nuclear material/waste management. Rather, it will help develop guidelines for decision making at the national and cross-site level, recognizing that ultimate responsibility for decisions lies with DOE" (LWV, 1998)

The national League of Women Voters, in the above passage, outlines the beginning of a framework on which to establish a new nuclear democracy. Such a framework involves the formation of guidelines and principles upon which decisions can be made. Most importantly, the League recognizes and acknowledges that the participation of the American public and other stakeholders in setting these guidelines is essential to the development of a sound set of criteria. The significance of how the LWV and the DOE have come to such a recognition and supported the formation of a National Dialogue can not be overlooked.

The U.S. Department of Energy under the administration of former Secretary O'Leary and former Assistant Secretary for Environmental Management Thomas Grumbly, heard the call for a National Dialogue from stakeholders across the former nuclear weapons complex. The Department's response was to initiate the National Dialogue through a cooperative agreement with the League of Women Voters Education Fund. The effort under the convening guidance of the League of Women Voters has been to define a process to lay the necessary educational groundwork to support the Dialogue. The Dialogue itself is meant to assist the Department by initially outlining values and principles the federal government can use in making sustainable and implementable national defense-related nuclear waste siting decisions. Ultimately, this paper asks whether the conceptual model of the Dialogue meets the standards of the Tribal Environmental Accountability Principle.

## **BACKGROUND**

The secrecy surrounding the development of nuclear weapons throughout the Cold War was necessary to achieve the singular mission of the weapons complex. Workers focused on tasks at hand and were not encouraged to inquire about the ultimate objective of their work. The working environment necessary for nuclear weapons production stands in stark contrast to one of the Department of Energy's (DOE) mission today. The Dialogue supported by DOE is the antithesis of this original weapons production management design.

The command and control management style (or some would argue "culture") of the nuclear weapons complex were appropriate for the purpose of producing plutonium and building nuclear weapons. This style of management reigned for nearly half a century and admittedly, managers heading the Cold War efforts could not change overnight. Yet, the psychological effect of the Cold War management left lasting impacts on many present and former weapons complex workers. Symptoms include distrust of the public; over-confidence in technical knowledge; and seeking approval for a job well-done, yet unheralded by the nation.

The fractured community built around weapons production caused the symptoms of what we believe to be a natural outgrowth of their disconnection with the rest of society. This disconnection seems to perpetuate itself through distrust compounded by a political system based on competing special interests. To address the environmental damage we also need to reconnect these segments of society on many levels (in an exchange both technically and socially).

A binding national self-consciousness needs to be revitalized in order to devise guiding principles or criteria for national decisions. Individuals must begin by acting not as competing multiple interests (as may work in economic models of reality) but as supporting multiple interests, as is appropriate for the task we now face. The Principle of Tribal Environmental Accountability, which we develop in the next section of this paper, illustrates how the concepts of individuality and community formulate the basis for a more open and inclusive decision making process.

The simple sum of individual citizens does not constitute a country. Individuals enter into a community and pledge allegiance to principles upon which a country is built. Allegiance is paid to those principles which facilitate the formation of the public or the community. Without interaction and interdependence, the community suffers and foremost, the individuals suffer. The challenge of the Dialogue is to see whether community can be fostered throughout the nation, as a nation. Such a challenge requires everyone involved to actuate a high brain function which is rarely exercised.

What follows in the next few pages are an introduction to the Principle of Tribal Environmental Accountability and a discussion of the early development of the Dialogue. The Tribal Environmental Accountability principle lays out a type of decision making used by sustainable communities and the process in which they have incorporated the cohesion and flexibility necessary for survival lasting thousands of years. Afterall, the ultimate challenge posed by the Dialogue is to

determine a way to outlive our own nuclear waste. Only then can we be said to have won the Cold War.

## **THE PRINCIPLE OF TRIBAL ENVIRONMENTAL ACCOUNTABILITY**

The nuclear weapons complex handles remedial waste from past nuclear weapons production by the United States. Geographically, the complex is contained within 14 major federal facilities in 13 states across the country, and covers 3350 square miles (Gerrard, 1994). The generation of nuclear material and waste at these sites resulted in impacts to communities far and wide; and the effects have extended beyond the boundaries of the military reservations into the communities of many regions in the country.

Separate programs have been sponsored by federal agencies to remediate and to store the nuclear material and waste, and to include the American public through local citizens' boards and groups. As greater attention was placed upon the management of nuclear material and waste, the American public either felt left out of the decision making process or felt they had very little input into the final decisions. The American public need not have to feel as though they have little say in the actions which will affect their futures.

More than ever, the management of nuclear material and waste requires key stakeholder participation and input in order to provide decision making guidelines for the US Department of Energy. By supporting the Dialogue, the DOE encourages the formation of a national perspective on nuclear waste and the development of a basis for explaining decisions the Department makes. Such a dialogue benefits the DOE because the dialogue elicits sound decisions based on rational decision making. A process inviting an informed dialogue among individuals with different viewpoints fosters the development of an accountable nuclear material and waste management program.

The Dialogue, a decision supporting process nurtured by former Secretary O'Leary and Assistant Secretary Grumbly, can historically be found in processes developed by American Indian Tribes. The decision making processes formalized by the Tribes has its roots in what we call the Principle of Tribal Environmental Accountability. Based on the Tribal Environmental Accountability Principle, a decision making process such as the Dialogue can produce defensible decisions.

American Indian Tribes have many commonalities of ideology about human life and the interaction with the natural world. Tribes have an ethic about the interconnectedness of the world which shapes Tribal decision making.

Undoubtedly, Tribes from across the country have unique customs that distinguish one from the other. Though such differences exist, Tribes share a similar ethic explaining the relationship between humans and the natural world, the necessity to protect and enhance the natural world for continued sustainability, and the responsibility to consider the well-being of future generations.

The formulation of a Tribal ethic begins in the origin stories of a Tribe. In the origin of the people, stories outline the history of the world, the formation of people and their relationship to the creating force, and these lessons are used to shape an ethic of accountability to that from which we come. Today, Tribes continue to draw from the histories and the ethics shaped by those accounts to develop an inclusive decision making process based on a principle of accountability. For instance a commonly held Tribal belief is that all parts of the Tribal community are necessary and sacred in sustaining the community; individuals, families, clans, geographic divisions, and whole Tribes. Furthermore, human identity is connected and beholden to various aspects of the natural community (i.e. wilderness), and therefore there is no clear delineation between natural and human communities. These relationships are fundamental to the Tribal Environmental Accountability Principle. The Principle of Tribal Environmental Accountability is the responsibility to make integrated, sustainable, and implementable decisions in a comprehensive process that recognizes future impacts. In order to reach this point one must understand who s/he is and their role in the world; individual place, potential, and authorities are all related to Tribal social order and spirituality. The determination of personal impact requires and individual to question how his/her actions can affect outcome based on highly developed Tribal understandings of creation.

Tribes have personal roles and responsibilities ingrained in their social orders. Tribal leaders draw upon the strength and wisdom of this order to examine questions of importance. Within this social order people are afforded roles which means that they are also restricted from other roles and activities. This teaches the individual self-restraint and respect for the roles of others. Whereas in western thought a division of the human and "the natural world" exists, and self-restraint is viewed as an unwillingness to "progress." It is this inclusiveness which gives rise to the phrase we coin in this paper, called "the Principle of Tribal Environmental Accountability." The principle answers to why it is important to consider the future impacts of today's decisions in the environmental realm. The importance of examining the impacts our decision making bears on the future can not be overstated. For example, Tribal leaders are keenly interested in "endstates." Additionally, there are efforts currently underway to build models which integrate tribal understandings of creation with western technical models of systems to provide a more intensive examination of these "endstates" (Harris,

1998).

The following four assumptions are integral to the Principle of Tribal Environmental Accountability. They are:

- First, there has to be a recognition of place in the world and that impacts have always and will continue to occur.
- Secondly, there has to be an acceptance that certain impacts will result.
- Next, there needs to be a realization that actions decided upon and followed through today will affect future generations.
- Lastly, a final decision will have to answer whether such actions could have a greater damaging effect than a positive effect overall.

In being mindful of possible future consequence, decision makers have to understand the reasoning which results in action and the manner in which those actions are followed through. The perceived reality of present conditions in the world and scrutiny thereof become the basis for reasoning. In order to contemplate and to attend to the needs of the community demands *selflessness* when considering impacts of decisions. Selflessness, when speaking for a community, can only be achieved if the representative has attained the people's confidence, acceptance, and their authorization. For a leader to reach this state requires demonstrated connections to tribal traditions, respect for individuals, and a proven track record of sound decision making in other instances. The leader is then capable of acting and thinking within the community consciousness, which is a gauge of relevance and priority setting. After an examination of how the future directly affects today's decision making, decision makers can truly make credible, justifiable and logical decisions.

The ethics shared by Tribes require today's Tribal leaders and decision makers to welcome and to examine differing viewpoints. The Principle of Tribal Environmental Accountability recognizes that community members or citizens may not share the same outlook though they share a common ethic. In implementing such a process based on Tribal ethics, Tribal leaders and the decision makers take the responsibility to not only listen to the voices of Tribal members, but to devise and to implement action based on the what is relayed to the leaders. An inclusive decision making process encourages an examination of the impacts to the present livelihood of the Tribe, to the surrounding natural world, and to the future generation. The Tribal Environmental Accountability Principle evolves from an ethic which encourages an inclusive form of decision

making.

The Tribal Principle of Environmental Accountability underlies and supports a logical, rational, and effective decision making process. Decisions made by leaders are not only sensible and discerning; decisions based on the Principle are defensible and legitimate. By following through on decisions developed by consensus, leaders are justifiably bound to stand by their decisions since their actions will correlate with the fundamental interest-based criteria set by the people. In addition to the interest-based criteria, the deliberation itself is of great importance in oral tradition communities. In Tribes with long histories of oral tradition, speaking, presence, and memory are highly valued traits. Therefore decisions are not deliberated, made, or pronounced frivolously.

Conceptually, one can recognize and appreciate the necessity to consider impacts of current decision making on future generations. On the other hand, people may have difficulty in comprehending the practical application of the Principle of Tribal Environmental Accountability. Fears of inefficiency and unruliness arise. Actually, such an inclusive decision making process based on the principle of tribal environmental accountability contributes to decision making based on criteria set by input from people or key stakeholders. The decision making process becomes cumbersome only after leaders and decision makers are *required* to include the public *after* a decision has been made.

A decision making process that encourages individuals and groups with different outlooks to come together, to learn, to discuss and to comprehend the impacts of nuclear material and waste can help devitalize the NIMBY mind-set. The NIMBY mind-set is a consequence of the failure of individuals to accept responsibility for what is produced in their country. In fostering dialogue between individuals, each can learn to recognize commonalities both positive and negative, and the need to provide and ensure a sustainable future.

The relevant message the Tribal Principle of Environmental Accountability imparts here is that no one can remain oblivious to and ignore the impacts and implications for management of nuclear material and waste. A dialogue integrating the Principle of Tribal Environmental Accountability motivates people with diverse perspectives to confront nuclear waste and to make decisions that can benefit the public rather than one single group or community. Moreover, the Principle does not allow individuals to refrain from having to face the consequences of the nuclear material and waste.

## **NATIONAL DIALOGUE EFFORTS TO DATE**

A number of stakeholder groups have been requesting the type of dialogue envisioned as the National Dialogue. The Nez Perce Tribe's Environmental Restoration and Waste Management Department wrote to the Department of Energy requesting an organization such as the National League of Women Voters, reputed as a neutral supporter of education and democracy, to convene a national dialogue to address DOE clean-up. The League of Women Voters Education Fund undertook this action and has moved forward in developing the inclusive dialogue process. The next few paragraphs outline the progress of the Dialogue to date and evaluate the action against aspects of the Tribal Environmental Accountability Principle.

The Department of Energy's Office for Environmental Management (EM) invited a number of individuals to deliberate the prospects of successfully holding a national dialogue like the one called for by various stakeholder groups. The group consisted of individuals with expertise in conducting work shops related to DOE EM issues. By convening such a group, DOE EM could gauge the success of implementing a national dialogue across a wide spectrum of viewpoints, strongly held beliefs, and values. This action could be said to be consistent with the Principle of Tribal Environmental Accountability if we assume the individuals are legitimately connected and authorized individuals who can speak from a community knowledge base. Examining this question, however, is beyond the scope of this paper because different organizations and communities grant this authorization in different ways and this can not be discussed adequately at this point.

As more representatives joined the Dialogue scoping group to examine the need, vision, concept, and necessary steps to achieve the goals of the Dialogue, the perspectives of the group widened. The group's examination of the vision and goals of the dialogue is consistent with the Tribal Environmental Accountability Principle, except that it remains centralized, or only discussed within this group. The centralization of the dialogue while waiting for federal authorization to proceed was necessary in order to facilitate the initiative at a wider more national level. Though this central core group facilitates the Dialogue, it did not and does not constitute the decision making body making DOE clean-up decisions nor the Dialogue itself. Therefore, an arrangement where a central body guides the development of the dialogue, conceptually, fits the Tribal Principle. The Tribal Environmental Accountability Principle does not necessarily assume that final decision making occurs at the community level, but it does assume that at least guidelines for decision making evolves at the community level. Decision making may continue to lie with the chosen leadership.

As the Dialogue gained momentum and support within DOE, federal counterparts wanted answers to a number of questions regarding the intent and definition of the effort. This request for clarification and a more developed scope is in accordance with federal project management. Another viewpoint is that the Dialogue is fundamentally counter to the Principle of Tribal Environmental Accountability because the Dialogue would be the first, fundamental, and completely necessary step to making any decisions of this nature. In other words, there would be no question as to its worth. Under the regime of a Tribal Environmental Accountability Principle, this would have been the first step, and we would have been well underway with this Dialogue years ago. Therefore to begin the Dialogue now, and then to question its value, is what is contrary to the Principle, not that it there will be dialogue.

The schedule of decisions at DOE sites and in various stages of on-going decision making processes required the group to plan for pilot field workshops to provide feedback on the process and idiom for discussing the development of values and principles for EM's use in making its decisions. This stage of the Dialogue is consistent with the Tribal Principle of Environmental Accountability because it is sharing the thought and soliciting input. The incorporation of the Dialogue into the national DOE schedule of decisions regarding federal facilities proved to be a challenging step. The proposed pilot field workshops designed for citizen and stakeholder feedback had to coincide with the previously planned schedule of decisions at DOE sites. Grafting the meeting dates of the Dialogue with DOE's schedule of decisions was necessary to solicit input. This stage of the Dialogue, though a pragmatic compromise for strategic benefits, is questionable in its consistency with the Principle of Tribal Environmental Accountability. During the Dialogue workshops the citizenry can provide input on federal decisions regarding the clean-up of DOE sites.

Throughout the planning process for the Dialogue, the Dialogue has drawn criticism at different times from citizen advisory boards, grassroots representatives, and State leaders. The Dialogue appeared to jeopardize previously established groups, and had been viewed by those groups as an unproven alternative process of decision making. Additionally, these groups saw the Dialogue as exclusionary due to the small working group and the limited number of workshops being proposed. The recommendation to stop the Dialogue is counter to the Tribal Principle because it is limiting the national deliberation. The temporal aspects of the nuclear waste issues require full dialogue, and can not be said to be the sole purview of any one section or geographical representation of people.

The groups sharing greatest concern can prove invaluable in providing input to the

Dialogue. Without the participation of citizens advisory boards, grassroots organization, and State leaders and representatives in the Dialogue process, informed, credible, and authoritative decisions can not be made. The Tribal Environmental Accountability Principle can welcome the criticism of other groups because the Principle requires input from those not sharing the same viewpoint. On the other hand, in cases where stakeholder groups recommend the cessation of the Dialogue, such action runs counter to the Tribal Principle. The advocacy to stop the Dialogue limits the decision making process.

Until this point, the question of whether the Dialogue fits within the scope of the Principle of Tribal Environmental Accountability remains unclear. Yet, forthcoming actions of the Dialogue reveal that ultimately the Dialogue may be impossible to accommodate within the Principle of Tribal Environmental Accountability. Conceptually, the Dialogue was created because the DOE *recognized* that impacts will occur, *accepted* that they will occur, *realized* that actions decided upon today will affect future generations in one way or another, and *decided* that inaction could lead to greater and much more damaging consequences. In the final analysis, fine tuning of the Dialogue concept to fit an ongoing separate decision making track would run contrary to the Principle of Tribal Environmental Accountability. The proposed national workshops focus on gathering input from the American public and stakeholders on decisions that are precariously close to being determined, prior to adequate deliberation on a national basis.

The Tribal Principle can be instructive at this juncture. We can understand that the Department of Energy is moving ahead with an established decision making process defined under the National Environmental Policy Act (NEPA) and other environmental command and control regimes such as CERCLA where the subjects for consideration are prescribed and require a great deal of technical information. Environmental decision making, begun under a commonsense approach in an attempt to account for various aspects of the environment has become distant from the community it is meant to serve (in protection of human health). We believe the shortcoming is in how the nation (people's common perception of community) is connected to the environment. Through the Dialogue, people who understand the decision making process under NEPA, but who also understand its shortcomings are willing to grow intellectual connective tissues back to commonsense (or the way people make serious decisions in their everyday lives). Through this Dialogue we have the prospect of facilitating the way society connects the mental image of nationhood with the environment. Through a deliberative decision making process which combines a great deal of technical information with relevant and evolving community perception, the participants in the Dialogue are creating a new, more meaningful way of making decisions. If it

were not for the deep ethical dimensions of the questions before us, we doubt if this decision making breakthrough would have been possible so soon. A greater deliberate effort among Tribal representatives to further define the Tribal Principle of Environmental Accountability could serve to smooth the way for the United States, as a whole, as it inches toward equitable decision making on a national scale, related to nuclear waste management.

## **SUMMARY**

The paper discussed and provided examples of how the Tribal Principle Environmental Accountability can be incorporated into current initiatives by the Department of Energy in its efforts to clean up the nuclear weapons complex. The Principle of Tribal Environmental Accountability is not fully achieved by the Dialogue, yet as we work through the development of the Dialogue we can see where the Principle can be instructive in the decision making process. The main purpose in outlining the Dialogue was to demonstrate how the Tribal Principle of Environmental Accountability realistically could be used to make more defensible decisions in environmental clean up. The discussion of the Principle leaves many questions to be answered and uncovers further topics for research. Though before any of those topics could be revealed, the Principle had to be iterated. The Principle reflects the viewpoint from which Tribal decision makers aspire to formulate their decision making processes. Yet, many questions remain. Other topics for further research include the prospects for developing a national environmental consciousness in which there would be discussion on the concept of stakeholder versus citizen, budget versus democracy, knowledge versus wisdom can be explored and analyzed.

Another important topic stemming from this paper is Tribal leadership in a nuclear democracy in which the incremental change can be facilitated by Tribes who understand and are willing to further develop the concept of Tribal Environmental Accountability Principle. All of these topics, including this paper's main topic require further inquiry and development by Tribes and other governments which are beginning to accept the notion that power lies not within few, but all.

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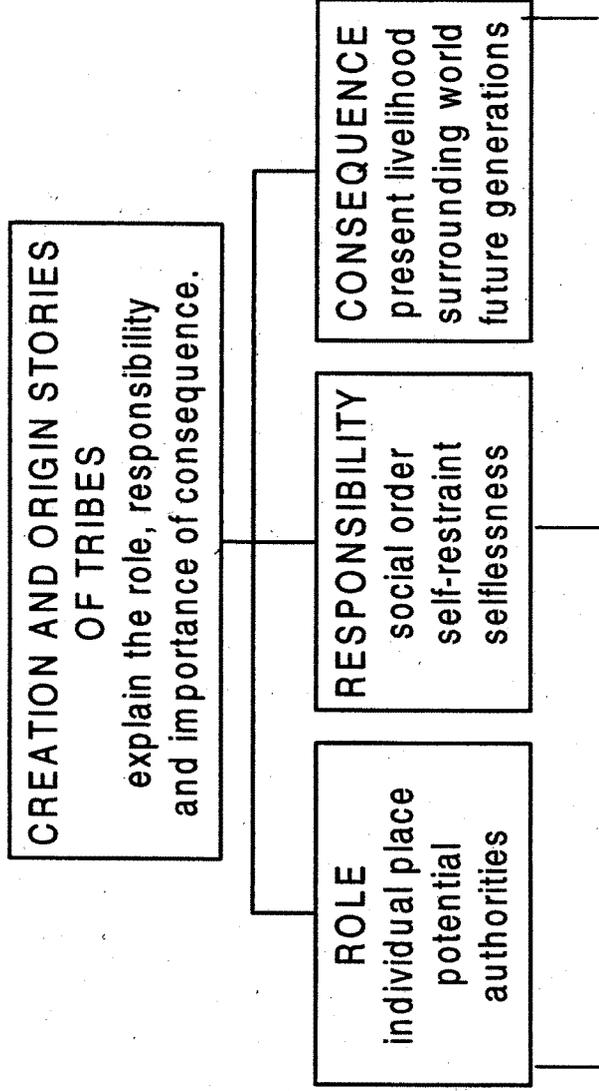
**Informing Democracy for the Atomic  
Age Through the Principle of Tribal  
Environmental Accountability**

**by David F. Conrad  
and**

**LaWanda T. Johnson**

# When and Where does the Principle of Tribal Environmental Accountability first appear?

first appear?



# Principle of Tribal Environmental Accountability

- The responsibility to make integrated, sustainable, and implementable decisions in a comprehensive process that recognized future impacts.

# Assumptions of the Tribal Environmental Accountability Principle

- First, there has to be a recognition of place in the world and that impacts have always and will continue to occur.
- Secondly, there has to be an acceptance that certain impacts will result.
- Next, there needs to be a realization that actions decided upon and followed through today will affect future generations.
- Lastly, a final decision will have to answer whether such actions could have a greater damaging effect than a positive effect overall.

# ELEMENTS OF THE PRINCIPLE

- ROLE (Individual Place, Potential, Authority)
- RESPONSIBILITY (Social Order, Self-Restraint, Selflessness)
- CONSEQUENCE (Present Livelihood, Surrounding World, and Future Generations)

# ROLE

- Incorporates interconnectedness of human activities.
- Promotes strong ties between humans and natural systems.
- Motivates people to consider consequences of their actions.

# RESPONSIBILITY

- Includes aspects of spirituality.
- Fosters consideration of diverse viewpoints.
- Encourages community focused Tribal leadership.

# CONSEQUENCE

- Incorporates interconnectedness of past, present, and future.
- Supports sustainability and responsibility to future generations.
- Requires individual responsibility to participate.

### 7.3 Tribal Oral Histories Project Information

#### The TRIBAL ORAL HISTORIES PROJECT

U.S. Department of Energy, the Confederated Tribes of the Umatilla Indian Reservation, Cochiti Pueblo, Jemez Pueblo, Nez Perce Tribe, San Ildefonso Pueblo, Santa Clara Pueblo, Seneca Nation of Indians, Shoshone-Bannock Tribes of the Fort Hall Indian Reservation, Yakama Indian Nation, and Xavier University

#### Background

In 1995, the U.S. Department of Energy (DOE) published *Closing the Circle on the Splitting of the Atom* and *Linking Legacies: Connecting the Cold War Nuclear Weapons Production Processes to their Environmental Consequences* which document the development of the United States' nuclear weapons complex around the country and its legacy of radioactive waste contamination. These publications were designed to increase and broaden public awareness of the environmental, health, and safety issues at the Department's sites and facilities. Meanwhile, the publications did not address the historical impacts of the DOE nuclear weapons production sites and the resulting waste contamination on American Indian Tribes in places like Idaho, New Mexico, New York, Oregon, and Washington.

A number of Tribes live near DOE facilities such as the Idaho National Environmental Engineering Laboratory, the Los Alamos National Laboratory and the Hanford Site, in addition to others. The stories of the Tribes and their members about the experiences and impacts of DOE sites, in a large part, have yet to be told.

In order to gather information of the effects of the weapons complex on Tribes, the DOE's Office of Environmental Management (EM) launched an effort to support the collection of oral histories as told by tribal elders. The **Tribal Oral Histories Project** is an important example of how we can prepare for the future from learning from the past. In addition to learning more about the impacts on Tribes, the Tribal contributions to the nation's effort in building and managing the weapons complex can be told. The project can help DOE and the Tribes in making better informed clean-up decisions as well as fill the information gap that exists in DOE publications.

The nine Tribal governments involved in this project, EM, and Xavier University are working together in the videotaping of the oral histories. The Department provided resources for tribal members of each of the nine Tribes for training on conducting the interviews using video taping techniques. Xavier University conducted two workshops in which the tribal members were instructed in the technological, theoretical and practical methods of capturing professional quality video footage and gathering oral histories.

#### Benefits of the Tribal Oral Histories Project

- The Project brings to life the stories and personal experiences of Native American elders and people in these contemporary United States. Their stories can play an invaluable role in helping today's generation formulate decision making strategies that take into account lessons from the past.

- The Project helps the DOE and the public better understand how tribal culture and resources have been impacted by Cold War production and radioactive waste contamination of their air, soil and water.
- The Project helps to maintain the cultural integrity of Indian Tribes through oral histories reaching back in time that can inform the public and tribal members as to how the Department's weapons production/sites affected traditional religious practices as well as traditional hunting and gathering of food.

## 7.4 Em-22 Website Tribal Programs

**Working  
Government-to-  
Government**

U.S. Department of Energy

Office of Intergovernmental and Public Accountability

Roles & Responsibilities    Current Opportunities    FAQs  
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The Department of Energy is committed to involving Indian nations in its decision-making process and remediation activities. This commitment is based on the Department's recognition of its trust responsibility to Indian nations and the Department's adherence to its American Indian Policy; a policy which guides the Department in its government-to-government interaction with American Indian Tribes. The Office of Environmental Management currently maintains cooperative agreements with ten Tribal governments and supports grants and projects with those Tribal governments including Tribal organizations.

The cooperative agreements help to foster a government-to-government relationship between Tribes and the DOE in two important ways. First, the agreements promote the building of environmental management capacity at the tribal level, and secondly, the agreements facilitate Tribal participation in the Department's decisionmaking. The Office recognizes that Tribal programs are critical to the successful fulfillment of the environmental management mission.

The working relationships have been successful in:

- establishing better working relationships between the Department and Tribes,
- building environmental management capacity at the Tribal level,
- facilitating Tribal participation in the Department's decisionmaking process,
- and creating opportunities for the development of a greater understanding of Tribal values and goals within the DOE.

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## History, Policy, and Guidance

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- **Presidential Memorandum on Tribal Governments**

In 1994, President Clinton issued a Memorandum to all Executive departments outlining Departmental responsibilities to consult with Native American Tribal governments in a government-to-government relationship.

"The United States government has a unique legal relationship with Native American tribal governments as set forth in the Constitution of the United States, treaties, statutes, and court decisions. As executive departments and agencies undertake activities affecting Native American tribal rights or trust resources, such activities should be implemented in a knowledgeable, sensitive manner respectful of tribal sovereignty."

- **DOE American Indian Policy and DOE Order 1230.2 American Indian Tribal Government Policy**

The Department of Energy was one of the first federal agencies to adopt an American Indian Policy. The Policy encourages the Tribes and the Department to develop collaborative working relationships which benefit the environmental clean-up missions of both the DOE and the Tribes. Former Secretary Hazel O'Leary affirmed a commitment to the Department's American Indian Policy. Secretary Pená, in May 1997, issued a memorandum in support of the President's Memorandum on Native American Tribal governments, and reaffirmed the Department's commitment to ensure that the Department meets its responsibilities in Indian Country.

"DOE recognizes Tribal governments as sovereign entities with, in most cases, primary authority and responsibility for Indian country. In keeping with the principle of self-government, the Department will view Tribal governments as the appropriate non-Federal parties for making decisions affecting Indian country, its energy resources and environments, and the health and welfare of its populace."

- **Executive Order 13007 - Indian Sacred Sites**

President Clinton issued Executive Order 13008 in May 1996 to protect and preserve Indian religious practices by accomodating access to and ceremonial use of Indian sacred sites and adversely avoiding affecting the physical integrity of such sacred sites.

- **Executive Order 13021 - Tribal Colleges and Universities**

President Clinton in October 1996 issued Executive Order 13021 to ensure that Tribal colleges and universities receive support from the federal government to assist the schools in providing high-quality educational opportunity for its students.

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The environmental programs established within the Tribes assist the DOE in various environmental/waste restoration activities that help to protect tribal cultural values, sacred sites and reservation lands, in addition to neighboring jurisdictions. A few examples of such activity at different DOE facilities include:

- Tribal employees in the Southwest United States are gaining valuable scientific skills in air, water, and soil monitoring, and working in conjunction with the Los Alamos National Laboratory (LANL) and the Albuquerque Operations Office to determine impacts the LANL may have had on Tribal lands.
- The Tribes in the Northwest have successfully initiated revegetation efforts of a portion of the Hanford site adjacent to the Columbia River. In addition, the Tribe have been able to advise the Department about plant species native to areas of the Hanford sit.
- Additionally, the Confederated Tribes of the Umatilla Indian Reservation have been able to train and maintain an active emergency preparedness and response team to handle potential transportation incidents on the reservation and in neighboring jurisdictions.

**ALBUQUERQUE OPERATIONS:** Los Alamos National Laboratory and Sandia National Laboratory

- [Pueblo of Cochiti](#)
- [Pueblo of Jemez](#)
- [Pueblo of San Ildefonso](#)
- [Santa Clara Pueblo](#)
- [Isleta Pueblo](#)

**IDAHO OPERATIONS:** Idaho National Environmental Engineering Laboratory

- Shoshone-Bannock Tribes of the Fort Hall Indian Reservation

**RICHLAND OPERATIONS:** Hanford

- [Confederated Tribes of the Umatilla Indian Reservation](#)
- [Nez Perce Tribe](#)
- [Yakama Indian Nation](#)

**OHIO OPERATIONS:** West Valley Demonstration Project

- [Seneca Nation of Indians](#)

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## Tribal Projects & Initiatives

U.S. Department of Energy

Office of Intergovernmental and Public Accountability  
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The initiatives the Department and the Tribes have engaged in since first establishing the cooperative agreements cover a wide range of issues important to the Tribes. In addition, the projects initiated by the DOE and the Tribes are meeting the Department's two fold mission of cleaning up the environmental legacy of America's past, and addressing environmental concerns for America's future. Past and current projects range from restoring salmon populations, to the revegetation of Hanford soil, to encouraging Native American youth to consider careers in the environmental sciences. The following projects demonstrate how the DOE and the Tribes in partnership can successfully preserve, protect, and enhance the environment by utilizing valuable Tribal knowledge for the current and future generations.

### Tribal Oral Histories Project

"One of the most important ways that I believe we can prepare for the future is to learn from the past."-Secretary of Energy Pena in a speech to the National Congress of American Indians

The Department is working in partnership with several Tribes to capture the stories of native peoples as they were affected by the development of the nuclear arsenal and the subsequent cleanup of the weapons complex. The Tribal Oral Histories Project is bringing to light the wisdom and knowledge of elders and tribal members in a way that can teach the Department and citizens about the significance of tribal culture and the inherent relationship with the land. The Department is working in conjunction with Xavier University and the Tribes to produce a video that showcases interviews with tribal members who can tell about the impacts of the DOE facilities on their Tribes.

### Salmon Corps

Native American youth from the Nez Perce, Umatilla, Yakama, Warm Springs, and Shoshone-Bannock Tribes in the Northwest United States are helping to restore the chinook salmon population of the Columbia River. They are using the immense, man-made basins at Hanford that once held hundreds of tons of water to cool nuclear reactors for salmon rearing and acclimation. The youth participate in Salmon Corps, which is an initiative extending from President Clinton's AmeriCorps program. After the salmon outgrow their temporary home, they are then released into the Columbia River. In addition, the youth are also learning to repair disappearing salmon habitats of the Columbia River Basin.

### Santa Fe Indian School

The Department values the importance of educating the next generation and continues initiatives to help educate and train tomorrow's scientists and engineers. EM and the Santa Fe Indian School have continued to support an innovative initiative to encourage Tribal youth to consider careers in the scientific and technical areas of environmental protection. In a community based approach students learn hands-on environmental monitoring and analytical skills. They work alongside Tribal environmental program staff from the Pueblos in water monitoring, wildlife monitoring and cultural resources protection activities. What the students learn in the classroom is continually being applied in field work important to the clean-up activities of the Tribes.

### Tribal Colleges Initiative (TCI)

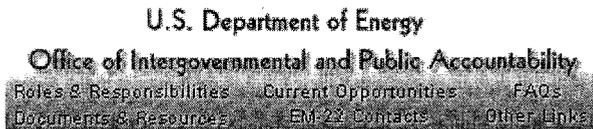
As Tribes are beginning to build environmental programs, they are also encouraging Native American college students at Tribally controlled colleges to consider careers in the

environmental sciences. With the help of the TCI, Tribally controlled colleges and universities are meeting the demand of the Tribes that are seeking qualified Native American scientists and engineers with the skills necessary for protecting and preserving the environment. Former Secretary Hazel O'Leary recognized the need of the Tribes and launched the Tribal Colleges Initiative to enhance the environmental education within Tribally controlled colleges and universities. Secretary Pena continues to support the TCI and its efforts to prepare the next generation's scientists and engineers.

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## Contacts



### DOE Headquarters

Office of Environmental Management  
 1000 Independence Avenue, SW  
 Washington, DC 20585  
 ph: (202) 586-5944  
 fax: (202) 586-5000

### Site/Field Offices

<b>Albuquerque Operations Office</b>	<b>Idaho Operations Office</b>
Tribal Government Liaison	Tribal Government Liaison
PO Box 5400	850 Energy Drive
Albuquerque, NM 87185-5400	Idaho Falls, ID 83401-1563
ph: (505) 845-5977	ph: (208) 526-0198
fax: (505) 845-4154	fax: (208) 526-0111

<b>Richland Operations Office - Hanford</b>	<b>West Valley Demonstration Project</b>
Indian Nations Program	Tribal Government Liaison
PO Box 550	PO Box 191
825 Jadwin Avenue	10282 Rock Springs Road
Richland, WA 99352	West Valley, NY 14171
ph: (509) 376-6332	ph: (716) 942-4629
fax: (509) 376-7501	fax: (716) 942-4547

### Tribal Programs

**Pueblo of Cochiti**  
Environmental Protection Office  
PO Box 70  
Cochiti, NM 87072  
ph: (505) 465-0617  
fax: (505) 465-1997

**Pueblo of San Ildefonso**  
Environmental Office  
Rt. 5 Box 315-A  
Santa Fe, NM 87501  
ph: (505) 455-7656  
fax: (505) 455-7351

**Confederated Tribes of the  
Umatilla Indian Reservation**  
Special Science and Resource  
Program  
PO Box 638  
Pendleton, OR 97801-0638  
ph: (541) 276-3165  
fax: (541) 278-5380

**Santa Clara Pueblo**  
Office of Environmental Affairs  
PO Box 580-1 Key St.  
Española, NM 87532  
ph: (505) 753-7326  
fax: (505) 753-8988

**Yakama Indian Nation**  
Yakama Indian Nation  
Department of Fisheries  
PO Box 151  
Toppenish, WA 98948-0151  
ph: (509) 865-6262  
fax: (509) 843-7378

**Seneca Nation of Indians**  
Environmental Protection Office  
1508 Route 438  
Irving, NY 14081  
ph: (716) 945-1790  
fax: (716) 945-0206

**Pueblo of Jemez**  
Department of  
Natural Resources  
PO Box 100  
Jemez Pueblo, NM 87024  
ph: (505) 834-7459  
fax: (505) 834-7697

**Shoshone-Bannock Tribes  
of the Fort Hall Indian Reservation**  
Tribal-DOE Project Office  
PO Box 306 - Pima Drive  
Fort Hall, ID 83202-0306  
ph: (208) 238-3708  
fax: (208) 237-0797

**Nez Perce Tribe**  
Office of Environmental Restoration  
and Waste Management  
PO Box 305  
Lapwai, ID 83540  
ph: (208) 843-7375  
fax: (208) 843-7378

**Isleta Pueblo**  
Pueblo Cultural Center  
2401 12th Street NW  
(1 block North of I-40)  
Albuquerque, NM 87192

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- [Bureau of Indian Affairs Home Page](#)

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Attachment C

COMMENTS OF THE  
COUNCIL OF ENERGY RESOURCE TRIBES  
TO THE  
WESTERN AREA POWER ADMINISTRATION  
January 6, 1998

The Council of Energy Resource Tribes (CERT) is a Tribal Organization founded, directed and controlled by 48 Indian Tribes who own and control energy resources. Our mission is to assist the Tribes and Tribal organizations use their energy resources in promoting Tribal self-governance, self-determination and economic growth through the prudent use, management and protection of their natural and human resources according to each Tribe's own values and priorities. Each member Tribe is represented on the CERT Board of Directors and participates equally in the governance and in setting the policies and priorities of the CERT organization.

At the direction of the CERT Board of Tribal representatives, we are working with industry, government and other interested parties in helping to develop greater access to federal power for Indian Tribes. But in a manner that respects each Tribe's values and priorities and honors the status of Tribes as separate and distinct political, economic and cultural communities. We are pleased to be able to provide these comments to the Western Area Power Administration.

#### Introduction

To fully understand the viewpoints of the Tribes in Western's service area, one must keep the historic and current fact situation in mind. The history of energy development and use in general and federal hydroelectric development in specific is a history of injustice and abuse of power on the part of the federal government. As a result, many of the federal dams were built from Indian lands and the resultant economic and social benefits from these projects were denied to the Indian Tribes. In many cases, Tribes were inadequately compensated for the loss of whole communities, valuable farmland and cultural resources.

While federal policy formally stated that federal power was available, in fact policy and practice discouraged Tribes from developing the institutional, management, and technical capabilities as well as the physical infrastructure and financing to actually access the power that on paper was available.

For the past three generations, Tribes have struggled to correct these past inequities while rebuilding Tribal political, economic, cultural and economic institutions and systems to serve a growing population and expanding economies. For the past 50 years, Tribes are experiencing a world class population explosion. Tribal population grows at a rate of 3% a year, 35% a decade and doubles every 25 years. This means that by the time the 20-year allocation expires, there will be nearly twice as many Tribal members requiring electric service. In addition, Tribal economies are growing very rapidly. While still lagging behind the economies of the surrounding states, we now see Tribal economic activities in a growing number of cases providing the economic engine to the surrounding regional economy. Both the Ute Mountain Ute Tribe and the Southern Ute Tribe are the largest employers in their respective regions. The

Indian Tribes in the State of Montana represent the larger share of manufacturing output for the entire state. And the Navajo Nation economy produces the larger share of economic output in the Four Corners region of the United States.

Furthermore, Tribal governments are taking on greater and more sophisticated governmental responsibilities. These include everything from law enforcement to housing, to roads and highways, to regulating commerce within the Tribal jurisdictions.

This is the dynamic economic, social and political reality that Western must bear in mind in its policy planning and development.

### General Comments

None of the issues listed by Western in its Federal Register Notice of December 1, 1998 directly address Indian Tribes, however almost all the issues can be applied to Indian Tribes. **All Indian reservations are currently retail choice environments, regardless of the state law that applies outside the reservation. State public utility commissions do not have regulatory jurisdiction over utility matters within reservations, Tribal councils have regulatory authority over these areas.** Therefore, unless a Tribe has passed a law removing retail choice, consumers within reservations are free to use any utility provider, and the tribe, as a utility customer for its governmental buildings and schools, is eligible to seek new utility providers at any time. Tribes are establishing vehicles for making these choices. These Tribal vehicles, that will sometimes be utilities, established under Tribal governmental powers, should be given full recognition by Western in its policy making and power allocations. Just as other preference customers have advocated local/state governance over federal control, Tribes insist that Tribal governance be given its full recognition.

**A major issue for Tribes and the people living within reservation boundaries is access to service.** Some reservation residents have no electric service. The Navajo Nation has more than 15,000 households or about 50,000 people with no electric service. More have service that is higher priced of lower quality and reliability than service outside the reservation. This is particularly troubling when Indian water and energy minerals are used to produce the electricity that the Tribe must buy and import back to the reservation. The natural gas and coal produced from the Tribes in the Four Corners supplies about 20% of the electricity consumed in Southern California. That energy supports a higher standard of living for those millions in Southern California than the less than 250,000 Indians in the Four Corners. No calculation has been made as to the volume of hydropower that Indian water produces as it flows through federal power plants on its way to thirsty down stream water users.

A Tribal utility could provide Tribal governments the opportunity and means to use Tribal borrowing and bonding status to improve infrastructure for electrical, and other utility services, improving the quality of life on very poor reservations. And if done in conjunction with system wide planning, Tribal infrastructure development could very well reduce physical constraints in the transmission systems that would benefit everyone.

**Another issue for Tribes is choice in service.** Because reservations are currently open access markets not under regulation by the state PUC, and because FERC mandates open transmission access, the Tribal utility can seek proposals for new providers. (Indian Tribes are separate political entities whose self-governance predates that of the states and the United States as well. Tribes therefore generally have powers equivalent to state powers within their own political jurisdiction.) A Tribal utility formed initially to receive an allocation of power from Western is the vehicle for shopping for new service providers, potentially decreasing prices and improving service.

Tribal councils have many serious issues to consider in governing their people, their lands and regulating their economies. Budgets and the Tribal tax base are limited. However, Tribal leaders are learning the importance of exercising regulatory jurisdiction over utility matters and the importance of utility infrastructure to economic development, self-determination, and sovereignty. **Tribes are eligible preference customers. Most Tribes are interested in receiving an allocation of Western Power. A useable allocation of Western power makes the difference in accomplishing this important governmental function.**

**Western has a trust responsibility** to the Indian tribes within its service territory. This is a different and a greater responsibility than Western has to its current customers. It is a different and greater responsibility than Western has to electricity end-users that are preference entities such as publicly owned schools. The trust responsibility is firmly established in law and is a part of Western, DOE, and the current Administration's public policy. This responsibility arises from past take-over of Tribal lands and economies by the federal government. In destroying traditional Tribal economies (whether the Tribe was a hunting, gathering or farming Tribe), the federal government accepted a responsibility to assist and allow Tribes to create new economies that are equal to the standards of living of other Americans.

The resource now in Western's control is directly related to the rights and resources that formerly belonged to Tribes, and for which the trust responsibility was created. Examples include the flooding of religious and cultural sites along the Colorado and Missouri Rivers; and in many cases, the flooding destroyed the farmland and the integrity of Tribal communities. If a state's resources or private property were destroyed for the profit of others by the federal government, all would see the justice in effecting reparation or restitution. And how are we to compensate for the loss of spiritual and cultural resources? What would be the formula for repairing or restoring or compensating the loss of that which is considered by more and more Americans as priceless?

**An allocation of power to a Tribe for only a small portion of their growing load is not enough.** We ask that Western reconsider the proposed allocation of 4% of its power to new CVP and CRSP customers, including tribes. This 4% does not appear to be related to Tribal needs, but appears to be a compromise that no Tribe had a part in creating for the Colorado River Storage Project, or for the Central Valley Project allocations. This 4% allocation honors the status quo and does not consider the history of the river systems, but only considers narrowly the history of public power. It could be persuasively argued that Tribes have been excluded from participating in the wealth of these rivers for the benefit of eligible preference customers (almost exclusively non-Indian) during the past rounds of power contracts. Maintaining the current system, while slicing off a small portion for Tribal utilities (as strictly defined), is narrow-minded and misses many opportunities to further public policy goals. Instead, we propose a change in the system of allocation which more fairly considers both history and the current

regulatory and utility environment. As well as being responsive to the real social, economic and governance dynamics underway in Indian Country within Western's service area.

An allocation of power is worthless without standards of service that allow Tribes to access and use that power on terms that are respectful of their rightful standing. Western should work closely with Tribes to assist them in becoming ready and able as well as willing to receive power. Distribution utilities serving Indian reservations should be required to offer retail access to its customers within the reservation as a condition of receiving a preference power allocation in the future. Western must not allow the Tribes to remain landlocked or to be held hostage by others who may have adverse interests to those of a Tribe. States are not permitted to do this to each other and should not be allowed to do so to Tribes.

Issues of transmission and distribution must be worked through which allow Tribes to access power. For example, all Pueblos in New Mexico are preference entities in the CRSP service territory. It has been Western's past history to build transmission to serve its customers. The new regulatory structure provides the opportunity to wheel power using existing systems. Western must find ways to facilitate its new preference entities working through transmission and distribution issues. Tribal allocations should be allowed to be accessed by Tribes **at any time** that they are ready to take service, giving Tribes time to work through difficult issues of Tribal utility set-up and use of facilities and services negotiations.

Tribes know that they must negotiate with current service providers for access to distribution facilities and services. These negotiations can create win-win situations that are acceptable and even favorable to both parties. **Western, through its policy making can set us up for success or for failure. We ask that you set us up for success. The degree by which Western's policies reward cooperation over conflict should be the standard by which its policies are judged.**

Tribes discouraged by government policy from participating as utilities may turn to their inherent powers of self-governance and begin regulating the utilities currently operating within reservation boundaries, creating less incentive for current service providers to work cooperatively with Tribes.

**Our greatest issue is communication and understanding.** Tribes could be assisted to know how to best access the parties and individuals within the industry to make power allocations and utility operations workable. Western could work closely with Tribes to structure its power allocations in a way that will meet Tribal needs, satisfy current customers, and meet its Trust responsibility. And, Western could do all of that which is just for the Indian Tribes without creating undue hardship on any other class of preference customer.

Numerous issues remain outstanding from the previous public processes involving the Central Valley Project and the Colorado River Storage Project power allocations. We would like the opportunity to further discuss those issues prior to the finalization of those processes.

In response to the questions asked by Western, we have these responses.

1. Western's power allocation system should be modified to take into account all regulatory changes, including those which allow Indian Tribes and others open access to transmission and therefore greater access to Western's power, and power of others.
2. Western should encourage the formation of utilities by Indian Tribes by its allocation system and by the standards of service it sets for receiving Western's public power. Time lines

should be flexible, negotiation assistance should be provided, and a Tribal "utility" should be broadly defined.

3. Even if Tribes do not form utilities, Western should allocate power directly to Indian Tribal governmental loads such as government buildings, tribally owned economic activities, and Tribal (public) housing and schools, as open access is now available on all reservations. Due to the Trust responsibility owed to Tribes and the Tribal/federal history surrounding the river systems, 100% of Tribal governmental loads (including load growth) should be served.
4. Preference distribution utilities should be permitted to use federal power as is most economically useful in benefiting all their customers. However, the status-quo allocations to current preference utilities should be reconsidered to fairly distribute the use of federal power.
5. Distribution utilities serving Indian reservations should be required to offer retail access to its customers within the reservation as a condition of receiving a preference power allocation in the future.

Thank you for the opportunity to make these comments.

cc: Secretary of Energy  
CERT Member Tribes  
Mni Sose Intertribal Water Rights Coalition  
All Indian Pueblo Council  
Intertribal Council of Arizona  
National Congress of American Indians  
National Indian Housing Council



## **ALL INDIAN PUEBLO COUNCIL**

### **COMMENTS OF THE ALL INDIAN PUEBLO COUNCIL ON TRIBAL FAIR SHARE OF POWER ALLOCATIONS BY THE WESTERN AREA POWER ADMINISTRATION**

The All Indian Pueblo Council (AIPC) is a Tribal organization founded, directed and controlled by the 19 Indian Pueblo Tribes of New Mexico. Each Indian Pueblo is represented on the AIPC council by its Governor and participates equally in the governance and in setting the policies and priorities of the organization.

At the direction of the Governors, we are working with the Council of Energy Resource Tribes, other regional intertribal organizations, industry, and government in helping to develop access to federal power for all Tribes in a manner that respects the values and priorities and honors the sovereignty of each Pueblo and Tribe. We are pleased to be able to provide these comments.

#### **INTRODUCTION**

To fully understand our viewpoint, keep in mind current socioeconomic realities as well as our history in dealings with the federal government. The history of federal water projects and Indian Tribes is a history of injustice and abuse of power on the part of the federal government. Many federal dams were built on Indian lands and Indian water helps produce the electricity from the dams. But the economic and social benefits from these projects were denied to the Indian Tribes. In many cases, Tribes were inadequately compensated for the loss of whole communities and valuable farmland. Invaluable cultural and spiritual resources were also destroyed.

Formal federal policy did not deny us access to federal power. In fact, federal practice discouraged Tribes from developing the institutional, management, and technical capabilities as well as the physical infrastructure to actually access the power that may have been available.

Tribes have struggled to correct these past inequities while rebuilding Tribal political, cultural and economic institutions and systems to serve our growing populations and expanding economies. For the past fifty years, the Pueblo Tribes have experienced a world class population explosion. Our population grows at a rate of 3% a year, 35% a decade and doubles every 25 years. This means that by the time the proposed Western 20-year power allocation expires in 2024, there will be nearly twice as many Pueblo Indians requiring electric service. In addition, the Pueblo economies are growing very rapidly. While still lagging behind the surrounding non-Indian economies in New Mexico, we now see Tribal economic activities becoming increasingly important to the state.

Furthermore, Tribal governments in New Mexico are taking on greater and more sophisticated governmental responsibilities; everything from law enforcement to housing, from environmental protection to regulating commerce within the Tribal jurisdictions. This is the dynamic reality that Western must bear in mind in its policy planning and development.

## COMMENTS

**All Indian reservations are currently retail choice environments, regardless of the state law that applies outside the reservation. State public utility commissions do not have regulatory jurisdiction over utility matters within reservations. Tribal councils have regulatory authority over these areas.** Until now, Tribes and Pueblos have had no incentive to develop their own regulations because there were no choices available and internal Tribal markets were small. Now there is great interest in this area as Tribal electricity loads are growing with our population and economic growth. We also recognize that our future social and economic progress will depend on our ability to secure adequate supply of electricity at reasonable rates. In this regard, access to federal power and the emergence of a competitive electricity market will help us achieve our legitimate governmental goal. Tribes are studying the ways in which they can make these choices. Just as other preference customers of Western advocate for local/state authority rather than federal control, Pueblos insist that Tribal governance be given its full recognition.

**A major issue for Tribes and the people living within reservation boundaries is quality of service.** The quality of electric service is equal in importance to cost and supply for any modern community. The 19 Pueblos of New Mexico are no different. Tribal utilities could provide the opportunity and means to use Tribal powers to improve services. This would improve the quality of life and future economic prospects for each Pueblo. Tribal infrastructure improvements, if done as part of a system wide plan, could very well reduce physical constraints in the transmission systems that would benefit our neighboring non-Indian communities.

**Western has a trust responsibility** to the Indian tribes within its service territory. This is a different and a greater responsibility than Western has to its utility and other preference customers. The trust responsibility is firmly established in the law and is the foundation of federal Indian policy. This responsibility arises from the political relationship of the Indian nations to the federal government. In accepting this responsibility, in exchange for lands and resources, the federal government assumed an obligation to assist Tribes develop economically and to protect the political integrity of the Tribes. This is the rationale for the acknowledged government-to-government relationship between the Pueblo Tribes and the U.S. Department of Energy. In electricity this means two things. First, state law and federal regulations do not extend into Tribal jurisdictions. Second, intergovernmental compacts negotiated between DOE and each Pueblo is the proper means of establishing the terms of power sales to a Tribe.

The larger issues in electricity are: How are we to achieve electricity sufficiency in supply and in service; and how are we to utilize our abundant but undeveloped renewable energy resources to help meet our electricity needs? The answer, we suggest, is developmental and requires a partnership with the Department. It is conceivable that in the longer term we will not only be able to supply ourselves with reasonably priced clean energy but supply many non-Tribal communities as well.

Because of the complex relationship between the Tribes and the federal government, we suggest that the model used in the environmental justice movement be used to put all of the electricity issues on the agenda.

**A pool of federal power equivalent to 4% of the available marketable power resources from the Colorado River Storage and Central Valley Projects does not on its face satisfy the federal trust nor the underlying issues of equity.** We ask that DOE reconsider the proposed allocation of 4% of its power to Tribes and other new CVP and CRSP customers. This 4% does not appear to be related neither to Tribal needs nor to any objective data. It appears to be a compromise to which no Pueblo or Tribe was party. This 4% allocation honors the status quo and does not consider the history of the river systems, but only considers narrowly the history of public power. It could be persuasively argued that Tribes have been excluded from participating in the wealth of these rivers for the benefit of eligible preference customers (almost exclusively non-Indian) during the past rounds of power contracts. Maintaining the current system, while slicing off a small portion for Tribal utilities (as strictly defined) is narrow-minded and misses many opportunities to further public policy goals.

**AIPC proposes a pool of not less than 6% of the available marketable resource be set aside for Indian Tribes.** Following a detailed study of Tribal electric power needs, including realistic projections of load growth over the next ten years we propose that the allocations to Pueblos and Tribes be adjusted with a maximum ceiling of 10% for the pool be set. An allocation of power is worthless without standards of service that allow Tribes to access and use that power on terms that are respectful of their rightful standing.

**AIPC proposes that Western and DOE work with each Pueblo and Tribe and assist us in becoming ready and able as well as willing to receive our power allocation.** Distribution utilities serving Indian reservations should be required to offer retail access to its customers within the reservation as a condition of receiving a preference power allocation in the future. Western must not allow the Tribes to remain landlocked.

All Pueblos in New Mexico are preference entities in the CRSP service territory. It has been Western's past history to build transmissions to serve its customers. The new regulatory structure provides the opportunity to wheel power using existing systems. Western must find ways to facilitate its new preference entities working through transmission and distribution issues.

**AIPC proposes that Tribal allocations be allowed to be accessed at any time as a Tribe is ready and able to take service.** Each Tribe needs time to work through difficult developmental issues of Tribal utility set-up and use of facilities and services negotiations. Tribes know that they must negotiate with current service providers for access to distribution facilities and services. These negotiations can create win-win situations that are acceptable and even favorable to both parties.

**Western, through its policy making can set us up for success or for failure. We ask that you set us up for success. The degree by which Western's policies reward cooperation over conflict should be the standard by which its policies are judged.**

**Our greatest issue is communication and understanding.** Tribes know how to best access the parties and individuals within the industry to make power allocations and utility operations workable. Western could work closely with Tribes to structure its power allocations in a way

that will meet Tribal needs, satisfy current customers, and meet its Trust responsibility. And, DOE could do all of that which is just for the Indian Tribes without creating undue hardship on any other class of preference customer by assisting the Pueblos and Tribes develop their own energy resources.

## Attachment D

The All Indian Pueblo Council  
&  
The Council of Energy Resource Tribes  
*presents*

# Electricity Deregulation Conference

## *Tribal Education & Strategic Directions*

**July 28-29, 1998**

Hyatt Regency  
Albuquerque, New Mexico

### AGENDA

- July 28**      **ELECTRICITY DEREGULATION EDUCATION & TRAINING**
- 8:00 am**      ***Registration & Continental Breakfast***
- 9:00 am**      ***Welcome and Invocation***  
Roy W. Bernal, Chairman  
All Indian Pueblo Council
- 9:15 am**      ***General Session*** ~ This session will provide a general history of Tribal participation in the Energy Industry and an introduction to Electricity Deregulation. Also in this session, an update on current Congressional initiatives will be presented.  
A. David Lester, Executive Director  
Council of Energy Resource Tribes  
Staff Representative  
Congressman Bill Redmond's Office
- 10:15 am**      ***Break***
- 10:30 am**      ***Consumer Panel*** ~ This session will provide an opportunity for Tribes to see how a Company, a Federal Agency and a Tribe view deregulation as energy consumers  
Governmental Affairs Representative  
Intel (*Invited*)  
Ralph Wrons, Energy Management  
Sandia National Laboratory  
Peter Pino, Tribal Administrator  
Pueblo of Zia

*AIPC/CERT Electricity Deregulation Conference*  
Governmental, Industry & Tribal Leaders Agenda  
Page Two

**July 28**     **ELECTRICITY DEREGULATION EDUCATION & TRAINING**  
*(Continued)*

**12:00 pm**     **Lunch**

CERT Education/TRIBES Presentation

◆ ◆ ◆ ◆ **BEGIN CONCURRENT SESSIONS** ◆ ◆ ◆ ◆

**1:30 pm**     **Co-op Panel** ~ This session will provide an opportunity for Local Electric Cooperatives to provide some insight on how they are preparing for Electricity Deregulation

N.W. New Mexico Electric Cooperative Group *(Invited)*

Plains Electric Generation and Transmission Cooperative, Inc. *(Invited)*

Tri-State Electric Cooperative *(Invited)*

**3:00 pm**     **Break**

**3:30 pm**     **Industry Panel** ~ This session will provide an opportunity for Industry representatives to give their insights on what effects electricity deregulation will have on generation, transmission, and delivery

Marshall Plummer, Human Resources Manager  
Arizona Public Service Company

Roger Fragua, Associate  
ENRON/ECT

Dennis Langley, President & Chief Executive Officer  
Kansas Pipeline Operating Company

**5:30 pm**     **Reception**

*Sponsored by Corporate Supporters*

**July 28**     **ELECTRICITY DEREGULATION EDUCATION & TRAINING**  
*(Continued)*

**12:00 pm**     **Lunch**

CERT Education/TRIBES Presentation

◆ ◆ ◆ ◆ **BEGIN CONCURRENT SESSIONS** ◆ ◆ ◆ ◆

**1:30 pm**     ***Opportunities From Energy Assessments*** ~ This session will provide Tribal Managers and Staff vital information for assessing facilities to accomplish conservation and costs savings based upon Tribal consumption. **Participants are asked to furnish winter and summer Tribal utility bills for assessment.** Information will also be presented on how to determine the viability of establishing a Tribal utility.

Margie Schaff, Esq., Utility Specialist  
Dames & Moore

**3:00 pm**     **Break**

**3:30 pm**     ***How Indian Tribes can Obtain a Contract for Low-Cost Electricity from Federal Dams*** ~ This session will provide Tribal Managers the information necessary to prepare their Tribe for the opportunity of receiving low-cost electricity from the Western Area Power Administration.

Margie Schaff, Esq., Utility Specialist  
Dames & Moore

Randy Manion, Manager  
Western Area Power Administration

**5:30 pm**     **Reception**

*Sponsored by Corporate Supporters*

*AIPC/CERT Electricity Deregulation Conference*  
**Tribal Leaders, Managers & Staff Agenda**

Page Four

**July 29      TRIBAL STRATEGIC OPTIONS WORKSHOP**

**8:00 am      *Registration & Breakfast***

**9:00 am      *Welcome and Invocation***

Roy W. Bernal, Chairman  
All Indian Pueblo Council

**9:15 am      *Strategic Planning Session*** ~ Tribal leaders are invited to share their perspectives and to discuss strategies for Tribes in the area of electricity and electricity deregulation. The Council of Energy Resource Tribes has been employing a process widely know as the "Technology of Participation" or *ToP Methods*. This planning process has been successfully used by CERT for Tribal planning, consensus building, and program development with over 100 Tribes, organizations and State/Federal Agencies. These methods have been tailored over the the last eight years to meet the challenges Tribes face as they attempt to balance Tribal Cultural Values and Economic Development initiatives. Your participation is key in meeting the challenges and opportunities presented to Tribes by electricity deregulation. This session is designed to maximize your efforts on this very important topic.

Kim Alire-Epley, Owner & Facilitator  
The Alire Group

Clint LeBeau, Associate Director & Facilitator  
Council of Energy Resource Tribes

Dawnette Owens, Staff Assistant & Facilitator  
Mni Sose Inter-Tribal Water Rights Coalition

**12:00 pm      *Lunch*** Keynote Speaker: Daniel Adamson, Special Assistant  
Office of the Secretary  
U. S. Department of Energy

The All Indian Pueblo Council & the Council of Energy Resource Tribes  
extends their Thanks and Appreciation to

**ENRON/ECT**

&

**Kansas Pipeline Operating Company**

for their generous financial support of this Tribal Energy Conference

**ALL INDIAN PUEBLO COUNCIL**

**ELECTRICITY DEREGULATION**

**TRIBAL EDUCATION AND  
STRATEGIC OPTIONS WORKSHOP**

**ALBUQUERQUE, NEW MEXICO  
JULY 29, 1998**

OVERVIEW & TABLE OF CONTENTS

The Tribal Strategic Options Workshop provided the opportunity for Tribal leadership, to consider the input from the electricity deregulation conference, and develop some common strategies. The group consisted of Tribal leaders, Tribal technical staff and staff from the inter-tribal organizations.

**Reflections on Conference Proceedings**

There were several approaches to reflecting on the conference and the input of the presentors. Participants answered four questions in their reflection:

- What are key learning's from the presentations done yesterday?
- What are windows of opportunity we ought to consider?
- What are possible resources we should take advantage of?
- What are potential pitfalls we need to take care to avoid?

These helped set the context for the work of developing strategies for the future.

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**Strategic Options Workshop**

Initially the the participants did a basic workshop. They brainstormed responses to the question:

*What are strategic actions Tribes can take to move forward collaboratively on energy de-regulation and development?*

Their ideas were clustered into seven focus groups. Participants choose which they wanted to work on and divided into small teams. Each team developed a strategic plan.

REPORT.....PAGE 3

**Small Team Strategy Development**

The first thing each team did was to prioritize of each actions into long-term, 2-year, and immediate actions. The next step was to decide a launch activity which would initiate work on this particular strategy. Their final task was to develop a launch action plan with dates and assignments of responsibilities.

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PARTICIPANTS LIST.....PAGES 10-11

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REFLECTION ON THE CONFERENCE PROCEEDINGS

A preliminary activity to the strategy session was to reflect on the work of the previous day. The group considered the presentations from the first day of the conference and reflected on from four different perspectives. These included Learning's, Windows of Opportunities, Possible Resources, and Potential Pitfalls. The results of their reflection are below

*What are key learning's from the presentations done yesterday?*

- Need To Do Tribal Resolutions To Consolidate Tribal Energy Load
- Assessment Of Energy Load
- Conducting Energy Audit - Conservation
- We Should Establish A Tribal Alliance
- Tribes Need to Be Sharing Knowledge

*What are windows of opportunity we ought to consider?*

- Working With Intertribal Organizations
- Exercising Tribal Sovereignty Without State Interference
- Uncharted Territory For Everyone - "Ground Floor Opportunity For Everyone"
- Economic Opportunity De-Regulation
  - Land Base - Location, Location. etc..
  - Transmission
  - Leveraging
- Co-Generation Of Electrical Power

*What are possible resources we should take advantage of?*

- Networking/Relationships - Inter-Tribal
- Partners - Joint Venture With Industry
- Education - UNM, SIFI, SFIS, Tribes/CERT etc..
- Natural Resources And Land
- Sovereignty
- Federal Resources - Funding And Human
- Customers - Population And Economic Growth

*What are potential pitfalls we need to take care to avoid?*

- Do Nothing And Being Discouraged - Over React And Move Too Soon
- Tribal Loads Can Be "Cherry Picked" Prematurely
- Failure To Plan Comprehensively
- "Lack Of" Consensus On A Timely Basis - You're Only As Fast As Your Slowest Team Mate
- Thinking To Big - Thinking Too Small

STRATEGIC PLANNING OVERVIEW

**These planning sessions...**

The Participatory Strategic Planning process is a multi-step workshop. These sessions included a basic workshop and small team strategy development.

**How the workshop process works...**

First, individually and then in small groups everyone participates in intuitive brainstorming. Second, the facilitator works with the group to weave their ideas together into clusters with an eye to new relationships. Third, the group names the clusters in an attempt to articulate their insights on each. They brainstormed responses to the question:

*What are strategic actions Tribes can take to move forward collaboratively on energy de-regulation and development?*

The group developed the following strategy clusters

- Develop Funding Partnerships To Secure Resources
- Collaborative Evaluations
- Build Tribal Capacity To Learn And Teach
- Establish Inter-Tribal Power Alliance
- Establish A Business Plan Model
- Assuring Tribal Consensus Thru Informed (Indian) Public
- Develop Comprehensive Understanding Of The Changing Political Environment

**Strategies**

They divided into small teams to work on each cluster. The small team then worked with the recommendations from the whole group. They prioritized each action into long-term, 2-year, and immediate actions. They then decided a launch activity which would initiate work on this particular strategy. Their final task was to develop a launch action plan with dates and assignments of responsibilities. Those reports follow on the next pages.

**ACTION STRATEGIES**

**STRATEGY: Develop Funding Partnerships To Secure Resources**

Immediate Actions

- Pledge Resources For Strategic Initiatives
- Use Administration Pueblo Connection To Get Money
- Use Congress Pueblo Connection To Obtain Money

2-Year Actions

- DOE Funding For 8 North, 10 South APIECE

Long Range Actions

- Corporate Intellect / Funding For AIPC "E" Board Tribal

Launch Activity

- Development Of Interest In Funding Our Efforts
- Target Funding Sources And Identify Needs
- Developing Consistent Story/Presentation
- Establishing An Energy Office

<u>Launch Steps</u>	<u>When</u>	<u>Who</u>
1. Development Of Letter And Resolution	30 Days	AIPC/CERT
2. Establish A Fiscal Agent	30 Days	AIPC/CERT

ACTION STRATEGIES

STRATEGY: Collaborative Evaluations

Immediate Actions

- Establish Information And Contact Clearing House ( Web Page)
- Conduct Energy Audit 10 Resources
- Assess Tribal And Consortium Energy Loads
- Assess Existing Easements

6-Months Actions

- Consult With A Number Of Energy Consultants
- Share / Consolidate OEDP's

Long Range Actions

- Establish GIS For Aggregated Research

Launch Activity

- Establish Information Clearing House - Web Page - Mail Service

<u>Launch Steps</u>	<u>When</u>	<u>Who</u>
1. Web Page - Passwords	By Sept. 1	AIPC or CERT
2. Distribute Flyers To Enlist Volunteer	By Sept. 1	Silicone Graphics
3. Set Energy Analysis Criterion For Web Page		
4. Audits, Easement, Resources Designer For Encryption		

ACTION STRATEGIES

STRATEGY: Build Tribal Capacity To Learn And Teach

Immediate Actions

- Develop Course At ASM At UNM On Business Opportunities
- Education And Training
- Energy Training For Pueblo Staff
- Learn Legislative Process

2 - Year Actions

- National Tribal Conference
- CERT/AIPC Seminars Quarterly

Long Range Actions

- Post De-Regulation - Success Stories - Failure Case Studies
- Develop Model For Utilities

Launch Activity

- Have The Sloan Fellows, CERT, ASM Staff And AIBA Members Work On The Development Of The Course

<u>Launch Steps</u>	<u>When</u>	<u>Who</u>
1. Management Of Key Players	9-01-98	All Of The Above
2. Draft Course Syl.	9-30-98	" "
3. Finalize Course Syl.	10-31-98	" "
4. Course Accepted By Inst.	12-31-98	UNM - ASM
5. Implement The Course	Spring 99 Seminar	UNM

**ACTION STRATEGIES**

**STRATEGY: Establish Inter-Tribal Power Alliance**

Immediate Actions

- Develop The State - Wide AIPC Tribal Mission Statement
- Development Model Tribal Consider Aggreg. In Action
- MOA Or Resolutions For Joint Ventures
- Lock And Load Tribal / AIPC Resolutions Now
- Develop An AIPC Energy Big Picture
- AIPC Energy Board Responsible For Policy Assessment
- Create AIPC Energy Board
- Define Individual Inter-Tribal Priorities
- Information Clearing House And Distribution Center
- Inter-Tribal Power Alliance

2 - Year Actions

- Develop State - Wide - AIPC Tribal Goals And Objectives
- Join CERT
- Develop Utility As The Basis For Economic Development

Long Range Actions

- Join CERT
- Develop Utility As The Basis For Economic Development

Launch Activity

7/29 Conference Participants to Present Tribal Leaders With Conference Proceeding And Draft Resolution For Consideration

<u>Launch Steps</u>	<u>Where</u>	<u>When</u>	<u>Who</u>
Conference Participants attend and present @ next meetings of 8 Northern, 10 Southern, AIPC to present conference proceedings/ Draft resolution	8 North'n 10 South'n AIPC	Aug. 17 Aug 13 Aug 20	Dennis/Bernie Jemez Gov/Roger Chair. Bernal

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**ACTION STRATEGIES**

**STRATEGY: Establish A Business Plan Model**

Immediate Actions

- Identify Tribal Tax Benefits

2 - Year Actions

- Establish Tribal Utility Authorities

Long Range Actions

- Work With Tribal Housing, Casinos, Etc. Opportunity
- Meet With National Labs As A Potential Customer
- Acquire Industrial Contracts

Launch Activity

- Host a (CERT -Done) Seminar On The Benefits Of A Tribal Utility

<u>Launch Steps</u>	<u>When</u>	<u>Who</u>
Contact CERT On Availability	Early '99	CERT, ENRON, PNM

**STRATEGY: Assuring Tribal Consensus Thru Informed (Indian) Public**

Immediate Actions

- Tribal Leaders Meeting To Ascertain Progress
- Meet With Pueblo Consort Report Conference

2 - Year Actions

- Organize Special Info/Communication Project - Aimed At - General Indian Population - Tribal Management - Tribal Councils / Gov.'s
- Develop Reporting System

Launch Activity

- Report To 8 North, 10 South, FSIP And Pueblos On The Results Of This Conference

<u>Launch Steps</u>	<u>When</u>	<u>Who</u>
1. Get On Agenda At Above Org.	Next Meeting	Peter & Others
2. Obtain Conference Report	8-1-98	CERT

**ACTION STRATEGIES**

**STRATEGY: Develop Comprehensive Understanding Of The Changing  
Political Environment**

Immediate Actions

- Richardson Meeting Now Department Secretary Indian Affairs
- Regular Meetings With New Mexico Congressional Representatives Energy
- Identify Key Legislators
- New Mexico First To Affect State Policy ( Indian And Non-Indian)

2 - Year Actions

- Bring In Other Feds
- DC - SF Watch Dogs

Long Range Actions

- Organize A Tribal Electric Policy Center For Tribal Policies

Launch Activity

- New Mexico Inter-Tribal Utility Alliance Request Meetings With DOE, New Mexico Congressional Representatives, State PRC, Members, To Begin Dialogue On Energy Policy Issues

<u>Launch Steps</u>	<u>When</u>	<u>Who</u>
Inter-Tribal Letter To Richardson, New Mexico Congressman, State PRC To Meet	ASAP Post DOE Confirmation	Chm. Bernal Other Tribal Leaders

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