

STRUCTURALISM PLURALISM AND EDITORIAL
PAGE REPRESENTATION

By

LINDA B. DE LISLE

A thesis submitted in partial fulfillment of
the requirements for the degree of

MASTERS OF ARTS IN COMMUNICATION

WASHINGTON STATE UNIVERSITY
Edward R. Murrow School of Communication

MAY 2006

To the Faculty of Washington State University:

The members of the Committee appointed to examine the dissertation/thesis of Linda B. De Lisle find it satisfactory and recommend that it be accepted.

Chair

ACKNOWLEDGMENT

This work would never have reached completion without the patience and guidance of Dr. Douglas Blanks Hindman. Dr. David Demers was a veritable fount of ideas, compelling me to broaden my understanding. Finally, but not least, Dr. Bruce Pinkleton provided a quantitative backdrop that challenged me to produce quantifiable data from a qualitative study.

To them all, I give my heartfelt gratitude.

STRUCTURAL PLURALISM AND EDITORIAL

PAGE REPRESENTATION

Abstract

by Linda B. De Lisle M.A.
Washington State University
May 2006

Chair: Douglas Blanks Hindman

The structural pluralism model pertains to differences in how metropolitan and small-town media cover news during a conflict. Local mass media respond to the sources of power within the community and this is reflected in news coverage. This case study applies the structural pluralism model to editorial coverage of a conflict covering the same environmental controversy from newspapers in Washington communities with different degrees of pluralism. Results suggest the pluralism model must be expanded to fit opinion page articles that focus only on one specific controversy. More consistent results about pluralism's effects on editorials during a specific controversy would emerge were the model expanded to include local considerations of propinquity, and the impact of Native American stakeholders on newspaper editorial page content.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
ABSTRACT	iv
LIST OF TABLES.....	vii
CHAPTER	
1. INTRODUCTION.....	1
Community Pluralism and Editorials.....	1
The Dam Issue.....	2
The Salmon Issue	3
Why Are Salmon Important?	4
The Lower Four Snake River Dams	5
Salmon and Dams	6
Why Breach the Dams?.....	8
Stakeholders	9
The Federal Caucus.....	9
Industries	11
Other Local Industries and Environmental Groups	13
2. LITERATURE REVIEW	16
Structural Pluralism.....	16
Highly Pluralistic Communities	17
Less Pluralistic Communities	18
Structural Pluralism & Environmental Controversies	20
Why Editorials?.....	22
Corporate Newspapers	22
3. METHODS	26
The Sample.....	26
Independent Variable	28

Dependent Variables	29
Coding	30
4. RESULTS AND CONCLUSIONS	33
Pluralism and Frequency of Editorials.....	33
Pluralism and Diversity of Opinion	36
Pluralism and Opinion Sources.....	38
Conclusion.....	40
REFERENCES	47
APPENDIX	
A. KEY EVENT ARTICLE	53
B. CODER INSTRUCTIONS.....	58

LIST OF TABLES

1. Newspaper Statistics	62
2. Correlation of pluralism with number of editorials	63
3. Correlation of Pluralism and Diversity	63
4. Proximity & Total of Editorials-Independent Means Test	63
5. Sources Quoted by Newspaper	64

Dedication

This thesis is dedicated to my children without whom
I would never have made it this far.

CHAPTER ONE

INTRODUCTION

Community Pluralism and Editorials

How a newspaper covers social conflict is strongly influenced by the social structure of the community. The structural pluralism theory posits that the more diverse the community, the more powerful social groups will influence the newspaper's representation and selection of issues and points of view (Tichenor, Donohue & Olien, 1980). This influenced representation then serves to influence social attitudes and beliefs (Olien, Donohue & Tichenor, 1995).

The significance is that community pluralism can influence social attitudes within the community through local newspapers. In any controversy which elicits varying viewpoints, readership perspectives can be influenced by the newspaper's presentation of that issue (Hynds, 1990). Newspaper presentation of issues affects group and individual perspectives and beliefs, and often directly and indirectly affects social change or the maintenance of the status quo. It follows then that diversity of a community's power structure indirectly affects social change or the maintenance of the status quo through the medium of the community newspaper as it responds to the diverse power sources within the community.

The purpose and objective of this study is to illuminate what effects the structural pluralism of a community may or may not have on the newspaper's editorial presentation of a controversial issue. Specifically, what effect would differing degrees of diversity

have on newspaper editorials concerning a regional controversy? This study will analyze editorials from Washington State newspapers pertaining to the issue of whether or not to breach four dams on the lower Snake River; an environmental controversy of import to communities throughout the state.

The Dam Issue

For the past ten years, people in the Pacific Northwest have struggled with an issue that has polarized regions and communities. Billboards in front yards reading *Save Our Dams* and flyers and newsletters reading *Save Our Salmon* have become almost commonplace. It is widely proposed that four main factors - harvest, hatchery, hydropower, and habitat, also known as All-H, are causing the decline of salmon populations (National Marine Fisheries Service, 1998). It is also widely proposed that breaching the dams may create serious economic problems for some of the towns that grew up around the dams, will cause a decrease in generated hydroelectric power, and create difficulties for the barging companies and industries dependent upon them (U.S. Army Corps of Engineers, 1998). What is not widely proposed, however, is a solution that will both ease the concerns of the salmon habitat supporters and the concerns of the residents dependent on the dams remaining in place. No one group says they want to lose the salmon, nor do they want to lose farms, power and recreational opportunities.

The Columbia River drains a 259,000-square-mile basin that includes territory in seven states (Oregon, Washington, Idaho, Montana, Nevada, Wyoming, and Utah) and one Canadian province. It flows for more than 1,200 miles, from the base of the Canadian

Rockies in southeastern British Columbia, to the Pacific Ocean at Astoria, Oregon, and Ilwaco, Washington. The largest of the river's major tributaries is the Snake River, itself more than 1,100 miles long.

The Columbia River basin contains thousands of dams, some only a meter or two in height and others more than 100 meters tall. The four dams in question are on the lower Snake River. The Ice Harbor, Lower Monumental, Little Goose, and Lower Granite, are located in southeast Washington, just before the Snake River flows into the Columbia River.

The Salmon Issue

Salmon are anadromous fish. The term “anadromomous” refers broadly to a habit of running upstream (Willson & Halupka, 1994). In the Pacific Northwest, the term refers to fish that are born in fresh water, spend most of their lives in the sea and return to fresh water to spawn (National Oceanic & Atmospheric Administration, 2005). The Columbia River and upstream tributaries such as the Snake River produce six species of salmon -- chinook, coho, chum, sockeye, pink and steelhead. The Pacific Northwest was once home to millions of salmon swimming 1,000 miles up the Snake River inland to Idaho, Washington, Oregon, and Montana streams. Until the 1960s the Snake River Chinook, sockeye, coho and steelhead supported an ancient culture, an extensive fishing industry and diverse inland ecosystems. Between the 1860s and 1960s, commercial fisheries annually harvested millions of pounds of fish, especially five species of salmon. Since the 1950s, the combined consequences of dams, increased ocean fishing,

deterioration of stream and river habitats, and changing river conditions have made the Columbia less and less habitable for anadromous fish. Snake River coho were declared extinct in 1985 by the Endangered Species Act and by the 1990s; the U.S. Endangered Species Act listed 26 species of salmon as either endangered or threatened (National Oceanic & Atmospheric Administration, 2005).

Why are Salmon Important?

Salmon are a keystone species to the productivity and biodiversity of the ecosystems of the North Pacific basin. A keystone species is a one on which the existence of a large number of other species in the ecosystem depend. Pacific salmon are unique in that they die after they reproduce. Through their decomposing carcasses, salmon offer a vital source of food for more than 137 species of fish and wildlife- 41 are mammals including orcas, bears and river otters, 89 are birds, including bald eagles, five are reptiles and two are amphibians (Washington State Department of Fish & Wildlife, 2001).

Also important to the issue is that salmon are considered an indicator species by scientists and environmentalists, that is, the health of the salmon reflect the health of the ecosystem in which they are found (USDA Forestry Service, 2004). They are extremely sensitive to changes in water quality, upstream perturbations to the river flow, turbidity and temperature. Juvenile salmonids feed on freshwater invertebrates that are also indicators of water quality. Generally, the more pristine, diverse and productive the

freshwater ecosystem is, the healthier the salmon stocks. Declines in the capacity of a watershed to grow juvenile salmonids can indicate declining ecosystem health (Willson, 1995).

In the Pacific Northwest, salmon have been an integral cultural component for Native American Tribes. Salmon, and the act of catching them with nets, have been a long cultural symbol for tribes as well as a means for income. In 1974, Judge George Boldt decided in *United States v. Washington* that the Yakama Treaty provision of 1855 to fish in common with non-Indians meant that tribes were entitled to the opportunity to catch up to fifty percent of the harvestable fish (Center for the Columbia River History, 2005). This ruling, along with the potential extinction of a cultural symbol, has led tribal communities to voice their rights and concern regarding salmon.

The Lower Four Snake River Dams

The first dam on the lower Snake River was completed in 1962 and the last dam was finished in 1975. These four lower dams were built by the U.S. Army Corps of Engineers and are part of the Snake River Basin and the Columbia River Basin. One of the main reasons for construction of the lower Snake River dams was for additional power generation for the Northwest. The four dams produce about 5% of the Northwest's power. Without them, residential electric users could see monthly bills raise \$4 to \$6 a month (U. S. Army Corps of Engineers, 1999b).

The second main reason for the construction of the dams was to create an extension to the Columbia River navigational channel by making Lewiston, Idaho an

inland port. At 465 miles from the ocean, the port at Lewiston is the most inland seaport on the West Coast. Feed grain, wheat and forest products are the majority of the goods that are barged to the sea.

Not initially a primary reason for building the dams, irrigation for farming became a function of the Ice Harbor dam. Currently, the Ice Harbor dam, the first of the four dams built, supplies water to 13 farms totaling approximately 37,000 acres of farmland. This is only about .0056% of the total acreage in the state of Washington (U. S. Army Corps of Engineers, 1999a).

Recreation has always been a part of the Columbia and Snake Rivers. Flat-water recreation, such as motor boating, swimming, and fishing, has specifically been enabled by the four dams' reservoirs. The recreation industry has provided revenues and many jobs for the Snake River region (U. S. Army Corps of Engineers, 1999a).

Whether the dams are considered an asset or a hindrance, the costs for having them in place are significant. Taxpayers and electric power users will spend \$77 million per year over the next decade on operations and maintenance costs. Transportation subsidies for the barging industry are approximately \$35 million per year and close to \$200 million are spent annually on salmon mitigation measures on both the Columbia and Snake Rivers (U. S. Army Corps of Engineers, 1999a).

Salmon and Dams

The Army Corps of Engineers transports juvenile fish from the Snake River dams to below the Bonneville dam, the lowest dam on the Columbia River. The juvenile

bypass system is in place at all four Snake River dams to prevent a high mortality rate as juveniles get caught in the turbines. In this program, fish are guided away from turbines by screens and into a holding area for loading onto barges or trucks for transport below the four Columbia River dams (U. S. Army Corps of Engineers, 1999a). There is a greater mortality rate of juvenile salmon as they migrate downriver through the four dams on the Snake River compared to migrating through the four dams on the Columbia. An average of mortality rate of downstream migrating salmon taken during 1994-1999 by the National Marine Fisheries Service illustrated that as juvenile salmon migrated downriver, 72% of juvenile salmon died during the migration through the four dams and four reservoirs on the Snake River, and 31% died migrating through the four dams and four reservoirs on the Columbia River (National Marine Fisheries Service, 2000). A report by the Independent Scientific Advisory Board (ISAB) to provide scientific evidence on salmon recovery found that data are inconclusive regarding adult return rates from juvenile salmon barged and trucked around the dams. The Independent Scientific Advisory Board, convened by the National Marine Fisheries Service and the Northwest Power Planning Council, recommended a suspension of trucking juvenile salmon as it appeared to have negative affects on salmon homing instincts (Northwest Power and Conservation Council, 2005).

The return trip from the ocean to their spawning sites has proven to be hazardous to the salmon since the construction of the dams. Returning adult sockeye counted at the Lower Granite Dam, the last of the four Snake River Dams, has declined steadily from 1977 to 2003. The Fish Passage Center figures by the Government Counting Office

indicate a high of 458 in 1977 to 12 in 2003 (Government Accounting Office, 2005).

Salmon survive in cold water and as they reach each dam, they encounter a slack-water reservoir with warmer water temperatures than the rest of the river. Under these conditions, salmon then must navigate the fish ladders. This occurs eight times for each dam and reservoir. However, Anderson attributes the steady decline of salmon on changing ocean conditions and indicates that barging and efficient dam passage can mitigate the high mortality rates (Anderson, 1995).

Why Breach the Dams?

‘Breaching the dams’ means to carve holes through their earthen flanks thereby leaving the supporting concrete abutments intact. This will decommission their use for hydropower as the river is allowed to flow freely around the concrete structures. The breaching proposal was presented by the Army Corps of Engineers (Corps) as one of their four options for mitigating the salmon population decline (U. S. Army Corps of Engineers, 1999a). They first introduced this proposal as they studied the relationship between the four dams on the lower Snake River and their effects on the migration of smolts (juvenile salmon) to the ocean. The Corps began this study in 1995 with the cooperation of other agencies, such as the EPA, Bureau of Reclamation, Bonneville Power Administration, National Marine Fisheries Service and the U.S. Fish and Wildlife Service (U. S. Army Corps of Engineers, 1999a).

The four options that the Corps proposed were: 1) do nothing, maintain the status quo where river operations stay the same and no further actions are taken to restore salmon; 2) maximize the transport of juvenile salmon, where more fish are taken out of the river and barged downstream; 3) major system improvements, make necessary repairs and adjustments for water quality and increased water flow; four) partial dam removal, breaching dams by removing the dirt portions thus creating 140 miles of free-flowing river (U. S. Army Corps of Engineers, 1999a).

Stakeholders

There are many stakeholders interested in what does or does not happen to the dams. The following are some of the major players, some of whom have conjoined in alliances to consolidate efforts and perspectives. The stakeholders fall into several major classifications: federal agencies, local industry, environmental groups and sport fisheries, and residents.

The Federal Caucus

The Federal Caucus is a group of eight agencies operating in the Columbia River Basin that have natural resource responsibilities related to the Endangered Species Act (ESA). The members are the Army Corps of Engineers (against breaching), the Bonneville Power Administration (against breaching), the Bureau of Indian Affairs (for breaching), the Bureau of Land Management (neutral), the Bureau of Reclamation (neutral), the Environmental Protection Agency (for breaching), the Fish and Wildlife

Service, and the Forest Service. Federal Caucus activities include coordination on recovery of listed fish and protections for them. The Federal Caucus has been working on the All-H plan - harvest, hatchery, hydropower, and habitat- for salmon recovery with mixed results as illustrated by the 2005 count of adult Chinook at the Bonneville Dam. The spring Chinook run is down to 97K from a ten-year average of 161K whereas the summer Chinook run is up to 55K from a ten-year average of 39K (Federal Caucus, 2005). It should be remembered that this count is taken at the first dam on the Columbia River. From there, the salmon must navigate an additional seven reservoirs and seven dams.

Even with the varying perspectives on breaching or not breaching, all federal agencies are committed to the recovery of Endangered Species Act-listed species.

The U.S. Army Corps of Engineers has a wide range responsibility regarding the dams. After much research, they have created four alternatives to resolve the issue, one of which is breaching the dams. They are, however, against breaching the dams.

The Bureau of Reclamation built most of the Western dams for irrigation and flood control, paid for by the power that dams provide. They are not heavily involved or vested in this case and have remained neutral.

The Bureau of Indian Affairs is supposed to act in the best interests of the Indian tribes in terms of protecting their resources under treaty. Where the tribes are for breaching the dams, the BIA has not stated whether they support breaching or not breaching.

Bureau of Land Management (BLM) - BLM operates other dams along the Columbia River and is not directly involved in this case. They have remained neutral.

The U.S. Fish and Wildlife Service administers the Endangered Species Act and as such, are responsible for the conservation of all species and habitat.

The U.S. Forest Service manages federal forestland for lumber production thus impacting both salmon habitat and water quality. They have remained neutral.

The Northwest Power Planning Council is designed to settle power issues. It also has a mandate to protect fish and wildlife—or at least to mitigate the negative effects of power production.

The National Oceanic and Atmospheric Administration (formerly National Marine Fisheries Service) answers to several political forces. They are supporting various alternatives while still acknowledging that breaching would be best.

The Environmental Protection Agency enforces the Clean Water Act. Dam operations place the Columbia in violation of this Act as the warmer temperatures are especially detrimental to salmon. They are negative concerning the Army Corps conclusion and support breaching the dams.

Industries

The aluminum companies such as Alcoa/Reynolds, the Bonneville Power Administration (BPA), the navigation and barging industry, agribusiness and local farmers are some of the major industries interested in the fate of the dams. These

industries are heavily dependent upon the dams remaining in place and are against breaching as an alternative.

The Bonneville Power Administration is a federal agency under the U.S. Department of Energy. They operate power generators, and market wholesale electrical power at cost to utility companies and industries. They have a responsibility for stewardship in the region to maintain river habitat. They are against breaching the dams.

The aluminum companies (Alcoa/Reynolds, Goldendale, Vanalco) are large, influential, and major users of BPA power. This industry was developed during World War II to support Boeing and other industries with the inexpensive electrical power supplied by BPA. They want the power supply to remain inexpensive and dependable and do not want the dams breached.

The barging industry cannot operate without the dams to raise and control water levels. Also, if barging the juvenile salmon downriver continues, they will get the business. They are against breaching the dams.

Local agribusiness is generally opposed to breaching or removing dams because it would drive up costs of irrigation, pumps, transportation of crops. Interestingly, many originally protested building the dams because they flooded rich bottomland soils.

Local farmers are dependent on irrigation waters and cheap barging. They too originally resisted the dams because they flooded the fertile bottomlands around the Snake River. They are against breaching the dams.

The lumber industry benefits from the lower cost of barging their products. They do not support removing or breaching the dams.

The pulp and paper industry depends on wood products and the cheapest supply arrives by barge. They are against breaching the dams.

Other Local Industries and Environmental Groups

Before the dams flooded the Snake floodplain, ranchers used it for grazing. They would eventually benefit from breaching.

Commercial Fishermen, both individuals and companies have also been blamed for the demise of the salmon runs. However, fishermen are quite outspoken in blaming the dams. Not only do they not want to lose their livelihood, they may also wish to shift blame from themselves. The Save Our Wild Salmon Coalition (SOS) is a nationwide coalition of 54 conservation organizations, commercial and sport fishing associations, businesses, and river groups working to restore self-sustaining, healthy, harvestable, and abundant wild salmon to the rivers and streams of the Pacific Northwest. The core group working on the Snake River Dam issue includes, among others, the Sierra Club, American Rivers, Earthjustice, Friends of the Earth, Idaho Rivers United, the National Wildlife Federation, Taxpayers for Common Sense and the Northwest Energy Coalition. They support breaching the four Lower Snake River dams.

Trucking and railroads industries will likely benefit if barging is halted. They would support breaching the dams.

Sports Fishermen feel that wild rivers will better produce and maintain healthy stocks of salmon for fishing. Therefore, if breaching will maintain the fish, these people will definitely support it.

The Nez Perce Tribe, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Confederated Tribes and Bands of the Yakama Indian Nation are the only tribes in the Columbia Basin to have reserved rights to anadromous fish in 1855 treaties with the United States. These tribes feel that their souls and spirits are were and are inextricably tied to the natural world and to the millions of anadromous fish in the Columbia basin's rivers and streams. Wy-Kan-Ush-Mi Wa-Kish-Wit, The Spirit of the Salmon, is CRITFC's Columbia River anadromous fish restoration plan where the goal of this plan is to put fish back in the rivers and protect the rivers where the fish live. CRITFC supports enough water running in the rivers for the fish to live (Columbia River Inter-Tribal Fish Commission, 2005).

The residents of the towns whose town businesses and livelihoods began with the construction of the dams also have a vested interest in maintaining the dams. However, according to the Army Corps of Engineers, breaching the four dams will create a 6.5% increase- or about 20,000 jobs- in short-term construction, recreation, transportation, and electric power jobs over a period of years. Initial estimates put the long term job increases at about .5% overall or about 1400 jobs (U. S. Army Corps of Engineers, 1999b).

The power structures within a community are the focal points and foundations upon which a newspaper depends for information and preservation. The perspectives reflected in editorials and journalistic content represent the various power structures. The stakeholders in this controversy represent potential sources of organized social and

economic sources of power in the communities which newspapers would be expected to be responsive.

CHAPTER TWO

LITERATURE REVIEW

This study will examine editorials in newspapers in Washington State about an environmental controversy to determine if the structural pluralist model can explain differences in numbers of and diversity of viewpoints present in the editorials. This theory maintains that local newspapers in communities will represent perspectives corresponding to the cultural or economic sources of power present in the community.

Structural Pluralism

Structural pluralism is defined as the degree of differentiation in the social system along institutional and specialized interest group lines, in ways that determine the potential sources of organized social power (Tichenor, Donohue & Olien, 1980). A structurally pluralistic community is one with a greater diversity of economic sources, and a greater number of centers of power. The Tichenor, Donohue, and Olien conflict model illustrates the role that structuralism pluralism plays in media coverage patterns when communities are faced with conflict. It is based on the theme that conflict plays an integral role in maintaining community stability by stimulating insights into social problems (Tichenor, Donohue & Olien, 1980). News media, particularly those in larger, more pluralistic communities, aid in the maintenance and stability of a community through a “feedback” role- drawing attention to local problems through reports of conflict

(Tichenor, Donohue & Olien, 1980). In smaller, less pluralistic communities with more concentrated power structures, the news media tend to aid in the maintenance and stability of the community through distribution control by reporting controversies only after the issue is settled (Tichenor, Donohue & Olien, 1980).

Conflict is a major component in social change, and the diverse power structures within a community affect a newspaper's representation of that conflict.

Highly pluralistic communities

In larger, more pluralistic communities, conflict is a positive social process leading to greater citizen participation. News media report conflicts that arise as powerful interest groups in these communities compete for media attention and control. "Such emphasis on conflict is not necessarily disruptive, but is part of the process of resolving conflicts and managing them at more tolerable levels" (Tichenor, Donohue & Olien, 1980). Additionally, newspapers from these communities often present perspectives from more powerful groups in the community, thereby giving them more legitimacy over other, less powerful groups (Hindman, 1999). In a content analysis of newspaper coverage from 85 communities in Minnesota, Hindman found that newspapers in more pluralistic communities devoted more space to reporting conflict reflecting the greater number of groups competing for power and resources (Hindman, 1996). Thus, in the larger, more diverse communities, newspapers covering the lower Snake River dam-breaching conflict should print a large number of articles representing a high degree of

diversity of opinion given the larger numbers of stakeholders competing for power and influence on this issue.

Less pluralistic communities

Smaller, more homogeneous communities, with one center of control and with similar values and attitudes, tend to work in an atmosphere of consensus and tradition. News media in these communities function to legitimize the status quo, build consensus, and portray the town in its best light (Donohue, Olien, & Tichenor, 1980). However, in conflicts involving non-local sources that present a threat from outside, less pluralistic communities will report greater numbers of reports increasing internal cohesion of the community (Hindman, 1996). In this manner, a newspaper can function as a guard dog for the community where “the press is conditioned, like a guard dog, to be suspicious of all potential intruders, and it sometimes raises an in inexplicable howl” (Olien, Donohue & Tichenor, 1995, p. 306). In a Minnesota study, Hindman found that newspapers in less pluralistic communities reported a higher percentage of conflict in response to threats from non-local groups, “perhaps because this type of conflict does not threaten the consensual nature of the community” (Hindman, 1996, p. 717). The dam-breaching controversy is rife with sources external to small, less pluralistic communities that may be dependent in some manner on dam retention. Thus, these smaller communities may find themselves pitted against a number of nationally based environmental groups or non-local groups with an interest in more natural river conditions.

Geographic isolation experienced by smaller rural communities has traditionally presented a barrier to social change (Hindman, 1999). With the advent of the information age, time and progress in communication and transportation technologies may have broken through the geographic barriers leading to a different journalistic response to controversy. While some rural communities are attaining varying degrees of connectivity to communication and transportation thereby potentially mitigating the restrictive constraints experienced through isolation (Hindman, 1999) not all rural communities have the same resources with which to form connections to the same degree as other communities. Thus newspapers in rural communities will likely continue to report local power sources when faced with external threats (Hindman, 1999). A look at rural communities' use of quoted sources in editorials may reveal a change in degrees of connectivity and lessening isolation. Therefore, since the numbers of interested and vested parties is numerous and diverse, the choice to whether or not to use a source as support for a position should be tracked and examined and, given the diversity of stakeholders involved and the potential of official sources to quote, a research question may determine if there is a the degree of pluralism has an impact on the uses and types of quoted sources.

RQ1: How might the degree of structural pluralism impact the numbers and types of quotes used in editorials regarding the dam breaching issue?

Structural Pluralism & Environmental Controversies

Research into environmental controversies and structural pluralistic influences on newspaper coverage has not shown any propensity towards a change in journalistic response. The degree of pluralism of a community continues to be the dominant influence regardless of whether or not it is an environmental controversy with potential trans-border or trans-national consequences.

Indeed, Tichenor and Neuzil have noted that although many media outlets today employ environmental journalists with expertise in physical sciences as well as reporting, they may be reporting environmental issues more frequently, but they are not necessarily advocating for environmentalists, a less powerful group within the community (Tichenor & Neuzil, 1996).

Supporting the theory, studies of three Superfund sites in Wisconsin, Dunwoody and Griffin observed that newspapers in smaller, less pluralistic communities were more likely to support community stability while news coverage by papers in more pluralistic communities was more likely to challenge the prevailing community power structure (Dunwoody & Griffin, 1993).

A study of a one community's response to an environmental conflict indicated that the local press coverage in a small but pluralistic community favored local businesses and power sources over the non-local activist groups. This community was unique in that it was small in population but had a high degree of pluralism. Although the structural pluralism theory would indicate that the community would represent a greater diversity of perspectives in local newspapers, this community's response followed that of a less

pluralistic community responding to threats from non-local sources (Taylor, Lee, and Davie, 2000). While interesting, the study researches only one community and a look at other small, but highly pluralistic communities would be necessary to establish whether this exception is noteworthy.

The Hetch Hetchy dam controversy around the turn of the 20th century has been regarded as a keynote environmental issue. It was the first environmental issue to capture national attention and press coverage. It was a political and social fight about water, national parks, and public utilities between the city of San Francisco, competing private interests, political groups and environmentalists. Not surprisingly, newspapers in San Francisco supported local elites as the city had been running low on water for almost 50 years. The damming of the Hetch Hetchy in Yosemite National Park was critical to the town's survival (Neuzil & Kovarik, 1996). In 1882, San Francisco was ethnically highly diverse, had a great number of businesses and social clubs and presumably, many different perspectives regarding any controversies that may have arisen. These characteristics would likely represent measures of a high degree of pluralism (San Francisco Genealogy, 2005); however, according to Neuzil and Kovarik, the community supported the local power elites in its newspaper coverage of the Hetch Hetchy controversy. Much as a less pluralistic community, they presented a united front against a non-local source, in this case, environmentalists from the national organization the Sierra Club.

Why Editorials?

Editorials are being used in this study to measure the representation of the chosen sources of power within the community during a conflict. Editorials have been defined as the ‘institutionalized voice of the newspaper, the anonymous, unsigned voice of the publisher and early editorials were highly personalized and rhetoric-laden (Hynds, 1990). However, a Hynds’ study of three major newspapers found that their editorials have changed from the rhetoric-laden editorial of the 19th century, to editorials with increased relevance, readability, and effectiveness in the late 20th century. As we entered the 1980s, editorials became more forceful, better researched and documented (Hynds, p. 302). Comparing editorials at the Los Angeles Times, the New York Times and the Chicago Tribune between 1955 and 1985, Hynds found that by 1985, even though there were fewer editorials, editors were using more argumentative devices such as evidence to present their cases more effectively, were taking more forceful stands, and were expressing opinions without using the editorial ‘we’ or ‘this newspaper’ (Hynds, 1990, p. 311). This research reveals an increasing sense of editorial efficacy.

Corporate Newspapers

Along with the advent of and increase in corporatization over the past century came fears that editors would lose autonomy, would present the powerful corporate owner’s opinions and no other. Demers’ research refutes this assertion in his studies by illustrating that along with corporatization came a greater division of labor and better educated managerial staff. As communities grew and became more diverse, newspaper

corporations grew, often from single family owners, to diversified ownership in which the owners are less involved in the day to day decisions of the newspaper. Thus, decisions of content were left more and more often to the highly educated editors and the increasingly complex hierarchy of employees as indicated by a managerial model asserts.

If the corporate newspaper is a function of structural pluralism as Demer's analytical model of corporate newspaper structure demonstrates, then rather than constraining editors to presenting corporate owner's perspectives, there would be an increase of diversity of opinions represented in the paper according to the structural pluralism theory. Demers' research shows an increase in editorialist autonomy within corporate newspapers (Demers, 1994a). Additional research has also shown that editors in pluralistic communities become more critical of traditional ways and established institutions to reflect, to some degree, the diversity of the communities they serve (Demers, 1996a; Hynds, 1990). Thus, concerns that corporate newspapers in highly pluralistic communities will not reflect the diversity of the community may be groundless.

If as this research indicates, editors are emerging as a powerful voice and are representing critical and diverse opinions, are they having any impact? According to a Hynds and Archibald study, more than a third of all newspaper readers self-reported that they read editorial pages regularly, and another 43 percent said they read them at least superficially (Hynds & Archibald, 1996). Editors in this survey reported that they believe their editorials have a 'moderate to much' (76 percent) influence on political campaigns and officials, and 75 percent indicated they have a 'moderate to much' influence on

social issues. Additionally, another 60 percent feel they have a ‘moderate to much’ influence on moral issues in their communities (Hynds & Archibald, 1996). In another study, editors of larger news organizations say they are more likely to advocate activist positions because they perceive themselves to be in powerful positions (Akhavan-Majid & Boudreau, 1995). Indeed, a national probability survey of daily newspapers illustrated that corporate newspapers publish more local editorials and a larger number and proportion of editorials that are critical of mainstream groups and institutions, supporting the theory that the pace of social change increases as structural pluralism increases (Demers, 1996a).

Thus, this research indicates that editors under corporate ownership perceive they have more autonomy, feel more insulated from community pressures, take forceful stands more often than in the past, will advocate activist positions and feel they have a distinct influence on the opinions of their readership. Also, during times of conflict and social controversy, a community’s stability can be aided through the local newspaper’s representation of issues and perspectives, drawing attention to social problems and acting as a public forum (Olien, Donohue & Tichenor, 1995).

Studying editorials in this controversy may provide an important insight into the influences on community members as they decide the fate of a complex environmental issue.

This study will extend that the structural pluralism of a community is affecting newspaper editorial representation of controversies. The impact it has on the frequencies of editorials and their valence is the question that is core to this research.

For this study, two hypotheses predict that:

H₁: The greater the pluralism, the greater the frequency of newspaper editorials regarding the Lower Snake River dam-breaching issue.

H₂: The greater the pluralism, the greater the diversity of opinion in editorials regarding the Lower Snake River dam-breaching issue.

CHAPTER THREE

METHODS

Communities rely on media for information, and media rely on sources of power within the community for their information. This study will examine the relation between the degree of structural pluralism of communities, which is an indication of the sources of power within a community, and newspaper editorial content in Washington State during an environmental issue.

The Sample

Data for this study will be derived via a content analysis of editorials selected from purposively sampled newspapers from Washington State (see Table 1). This purposive sample, selected for its timeliness in relation to a specific event, and for the archival availability of editorials from specific communities, represents 57% of 23 Washington State communities having daily newspapers, through 58% of the 24 daily newspapers in those communities. The two major dailies in Seattle, the *Seattle Times* and *The Seattle Post-Intelligencer*, have both been sampled for the time period and added together for the purpose of measuring the variables. The 13 communities represent 70% of Washington State's total population. As a purposive sample, the results were not generalizable to the population of U.S. newspapers. However, conclusions regarding relationships among newspaper content and the characteristics of the communities being studied here can be drawn.

The newspapers have been selected for their accessibility and regional representation. For this study, a single event has been selected for its significance on the Snake River dam-breaching/salmon issue as well as for its scope of impact. On July 19, 2000, approximately 4 years after the beginning of the controversy, the Clinton Administration stated that the Administration would recommend to Congress that all the lower Snake River dams remain in place and that alternatives to breaching should be pursued (Pope & McClure, 2000). This event is significant in that environmentalists had expectations that this administration would prove supportive of breaching the dams to save the salmon. The 'Save the Dam' groups also believed the same of this Democratic administration. The decision had much impact, as it was the first definitive recommendation from the government to Congress since the beginning of the controversy.

To present a complete representation of perspectives, all the editorials will be selected from the purposively selected newspapers for a period of six months before and six months after the event. The editorials will then be analyzed and coded for their stance to either save the dams, breach the dams, with a third category coded as neutral for those editorials not expressing a definitive save or breach position. The twelve month time span will allow for a varied sample that will adequately represent positions from newspapers in communities with dissimilar degrees of structural pluralism. The Lexis-Nexis database and select newspaper archival databases will be used to generate the units of observation for this proposed study.

For the purpose of this study, the units of observation are the communities in

which the newspapers are published, and the units of analyses will be the editorials contained in the newspapers during the specified period.

Independent Variable

The first independent variable is community structural pluralism. Structural pluralism is defined as the degree of differentiation and specialization that can determine potential sources of power within a community (Tichenor, Donohue & Olien, 1980). For this study, a measure will be created using an additive index comprised of standardized measures of county population, number of individuals with a bachelor's degree or higher education level and a measure of industrial heterogeneity. The measure of education combined with the other measures represents the potential for the development of additional social power sources (Hindman, Ernst, & Richardson, 2001, 156).

The measure of industrial heterogeneity is an indicator of the degree to which the community has diversified the local economy beyond a basic dependence on one industry (Hindman, Ernst & Richardson, 2001, 156). Following Blau, (1977), industrial heterogeneity will be measured as one minus the sum of the squared fraction of the population in each group, $1 - \sum p_i^2$. This will result in a measure ranging from 0 to 1 with scores approaching 0 representing greater homogeneity and scores approaching 1 representing greater heterogeneity. P_i represents the fraction of the population in each group (Blau, 1977, 78). This measure of heterogeneity indicates the likelihood that two randomly chosen persons from a population do not share the same socio-demographic

characteristic (Rotolo 2000, 276). Thus, for this study, Heterogeneity = $1 - [(AFFM)^2 + (FIRE)^2 + (Service)^2 \dots]$, where AFFM is number of residents employed in the agricultural, forestry, and fishery and mining industries, and FIRE includes residents employed in finance, insurance, real estate and education industries. The industrial heterogeneity index includes 13 indicators from the industrial employment data in the 2000 U.S. Census data. Traditionally, measures of heterogeneity exclude employment statistics from the agriculture, forestry, fisheries and mining sectors because communities that are dependent on agriculture are less likely to have the diversified economies that will foster differentiation along occupational lines (Hindman, 1996). However, for this study, many of the stakeholders involved may be very dependent on either the dams remaining in place or being breached. Thus, these sectors represent an organized power source within communities with perspectives that are integral to this issue. For this reason, all industries are included in the industrial heterogeneity measure. All data are obtained from 2000 U.S. Census Bureau information.

The industrial heterogeneity indices are added to measures of population and the percentage of residents with a Bachelors degree or higher. Alpha for this index was $\alpha = .73$.

Dependent Variables

One dependent variable will be the frequency of editorials on the editorial or opinion page related to the chosen event. Editorials will include those written by the

editorial staff as well guest editorials. Editorials from news wire services will be excluded as their origins may dilute the results.

A second dependent variable will be the diversity of opinion expressed within the editorials. Diversity of opinions will be measured using the Blau,(1977) formula in which the percentage of editorials to save the dams, breach the dams, and neutral will be scored: $\text{Diversity of Opinion} = 1 - [(\text{save})^2 + (\text{breach})^2 + (\text{neutral})^2]$. Coders who are unfamiliar with the theory and hypotheses will each analyze half the editorials. A coding system is designed to categorize those editorials that express a perspective to save the dams, those that want to breach the dams, and those with no specifically defined bias coded as neutral.

Coding

The editorials will be thematically analyzed to be categorized as save, breach, or neutral towards the dams depending upon the frequency of words or phrases that are unsupportive or supportive as well as on the basis of the intonation of the editorial as a whole.

A “save the dams” perspective can express concern for salmon and habitat just as strongly as can a “breach the dams” perspective. Therefore, an emphasis on identifying “breaching” or “saving” themes and not on rhetoric about saving the salmon or habitat is necessary to determine whether the editorials can be categorized “save”, “breach”, or “neutral”.

Each editorial will be analyzed through two readings. A first reading should

provide a sense of overall tone; a second reading should provide more depth of concepts and key terms which will be individually coded and summed to provide a determination of category. An editorial is coded for 'save' if there are more statements within the editorial that specifically state that saving the dams is the best decision. An editorial is coded for 'breach' if there are more statements within the editorial that specifically state that breaching the dams is the best decision and an editorial is coded neutral if the number of statements contained is equally balanced, or if no specific perspective is stated.

Two trained volunteers each coded all the editorials with results then subjected to a reliability statistical test. The intercoder reliability of the measure of agreement was 92%. The coefficient of reliability used was the ratio of coding agreements to the total number of coding decisions ($CR = \text{Number of Agreements} \times 2 / [N1 + N2]$) (Wimmer & Dominick, 2003). When coded using Scott's Pi reliability test, a 77% intercoder reliability resulted from the observed measure of agreement minus the chance expected agreement.

A third reading of editorials will also code for direct and indirect source quote frequencies. A *mainstream* source will be those agencies representing local, state or federal government such as the police, Congress, the President, mayor, state agencies, or city council members etc. An *environmental* source will be the Sierra Club, Save Our Dams etc. An *expert* source will be scientific studies or professional research, and *industry* sources will be barging companies, logging companies, and electric companies

for example (Demers, 1996b, 289). The numbers of sources quoted will be summed and assigned to the newspaper representing each community.

CHAPTER FOUR

RESULTS AND CONCLUSION

Pluralism and Frequency of Editorials

The first hypothesis posits that the greater the pluralism of a community, the greater the frequency of editorials regarding a controversy. Table 2 shows the hypothesis was not supported. There was not a strong correlation between the degree of community pluralism and the numbers of editorials although the correlation was in the hypothesized direction. A natural log transformation of the independent variable failed to correct for the skewed data and the correlations were similar for both hypotheses.

The literature (Olien, Donohue & Tichenor, 1968; Hindman, 1996) suggests that newspapers in communities with greater degrees of pluralism will print a more articles and a greater proportion of newshole on an issue that is a source of community conflict and controversy.

This study applied the pluralism model to the question of editorial coverage during a controversy, the Lower Snake River dam-breaching issue in Washington State. Results in this study would seem to indicate that controversy and conflict over the Lower Snake River dam-breaching issue was, in general, not present in great enough magnitude throughout the state to result in a frequent editorial page submissions.

Seattle, the major urban center in Washington State, has the greatest degree of pluralism. As shown in Table 1, however, Seattle's two major newspapers, the Times and the Post-Intelligencer, had only four more editorials than did Lewiston/Clarkston, and 13 less than Walla Walla--the two communities with the lowest degrees of pluralism in Washington State.

Bellingham, another community with a low degree of pluralism surprisingly weighed in almost as heavily as Lewiston and Clarkston (Table 1) with just a few less editorials. The reason for this may not be that Bellingham residents feel directly threatened by the dams staying or going on the Snake River, but that they are experiencing their own local controversy of a similar nature. Farmers and environmentalists in Whatcom County are at odds over breaching dams on the Skagit River. This may explain why residents in Bellingham have taken such an interest in a controversy hundreds of miles away, and were vocal about it in the editorial page of their local newspaper. It is possible that residents of Whatcom County may feel that the results of this Snake River dam-breaching controversy may carry over to influence their community's dam-breaching controversy.

Spokane, the largest urban center in Eastern Washington with a high degree of pluralism, remained curiously silent. Eastern Washington is where the drama is taking place, yet this community's newspaper contributed only 4 editorials on the dam-breaching issue for the entire year (Table 1). No reason for this lack of interest is readily apparent except that it must not affect the community in any life-altering way.

For determining whether structural pluralism has an impact on the frequency of editorials in this study, at least one issue seems to be a moderating factor; communities' geographic proximity to the Snake River along with some elements of economic dependency. Yet an analysis of the percentage of the work force in each of the 13 industries from the heterogeneity measure showed that no one industry was significantly correlated with editorial numbers or opinion diversity. However, 13% of the residents in the communities closest to the river were employed in agricultural, forestry, fishing, or mining industries, where only 3% of the population from the other communities was employed in the same industries. This would indicate an economic factor, but there is no correlation between AFFM and any measure of frequency of articles. Thus, the communities closest have a high percent of their workforce in occupations that use the Snake for transporting their products, but the economic health of the area may not be dependent on those industries or any one industry.

These results seem to indicate that the degree of community pluralism may not be always be the dominant factor in determining whether a newspaper will weigh in heavily on an issue. The Lower Snake River dam-breaching issue emerges as an important controversy primarily in those communities in close geographic proximity to the Snake River (Table 4) and Table 1 illustrates how the communities with the greatest mean numbers of editorials regarding this issue are the two communities directly on the river (17.3 versus 5.3, $p < .05$).

The fact that these two communities directly on the Snake contributed so many articles on the issue tends to skew the data. Without the two anomalous communities, pluralism and frequency of articles is ($r=.80, p< .05$).

There may be a need to modify the pluralism model to include considerations of propinquity, partiality concerning editorials about place-bound controversies, ethnic measures and perhaps to examine relevance and visibility. The literature actually indicates that the pluralism model concerned all forms of coverage, editorial page and journalistic, that is reprinted in newspapers. These findings show that opinion page articles may not function similarly and also that focusing on one specific controversy may erase pluralism effects.

Pluralism and Diversity of Opinion

The second hypothesis posits that newspapers in more pluralistic communities will exhibit a greater diversity of opinion in editorials regarding a controversy than will newspapers in less pluralistic communities. Table 3 shows that the hypothesis is not supported. Again, a natural log transformation failed to correct for the skewed data and the correlations were similar.

Table 2 does indicate, however, a high correlation between pluralism and the numbers of 'Breach' articles ($r=.80, p<.05$). Breach articles could be considered representative of the diversity of a community as they would represent support for change in the status quo. There were not many votes to 'Breach' the dams; but of those, most came from newspapers in highly pluralistic communities.

Several of the less pluralistic communities had high opinion diversity which may be indicative of an intervening factor. Lewiston/Clarkston, one of the least pluralistic communities in the study but has a port located directly on the Snake River, demonstrated a high opinion diversity yet Walla Walla, also with a Port directly on the Snake River, had very low opinion diversity. The difference may lie in the difference of ethnic diversity in the two communities. Lewiston/Clarkston is home to a powerful Native American community, the Nez Perce, who have ancient and deep cultural ties to salmon. In one opinion piece, Jim Fisher of the Lewiston Tribune writes:

Despite what the historically blind Indian fighters in this region say, the government's treaties with tribes like the Nez Perce are no less binding today than they were when they were signed 145 years ago. That means there will be fish in the river, or there will be hell to pay.

Quote of note:

'If it turns out the wrong decision is made, the tribes will litigate with more force and power than has been seen in this region since the Treaty of 1855.'

Rick George, program manager for the Confederated Tribes of the Umatilla Indian Reservation, speaking in Astoria in February (Fisher, 2000).

Walla Walla, true to the model of a homogeneous community representing the local power sources when threatened by non-local sources (Hindman, 1996), printed the

most editorials of any single community newspaper sampled, yet demonstrated one of the lowest opinion diversity.

Ethnic diversity as a measure might provide insight as to whether this is indeed the reason why two homogeneous communities on the river have such different levels of opinion diversity.

Pluralism and Opinion Sources

Communities that are rural, isolated and not connected to mainstream culture tend to quote local sources of power as support for their stand when they are faced with external threats (Hindman 1996). The question arises whether the recent explosion of digital connectivity will influence rural community response to threats from external sources. Thus, instead of mainly quoting local power sources when facing external threats, will these communities reach outside their local sphere to find support for their positions?

In this study, two communities with low pluralism, Lewiston/Clarkston can be considered the most geographically isolated. They are not on the ‘beaten path’ so to speak and both have demonstrated they are threatened by the repercussions of breaching the Lower Snake River dams in Washington State.

Lewiston and its twin city Clarkston are located at the confluence of the Snake River and Lewiston, Idaho. Both Lewiston and Clarkston have a variety of businesses dependent on the Lewiston port. Walla Walla, located 200 miles from the nearest major

urban center, also has a port with businesses that would not exist in their present form if the dams are removed. As Table 5 demonstrates, the communities closest to the Snake River contributed 38% of all the four types of sources quoted by the 13 communities. 30% of those were mainstream state and national level government sources, primarily agencies and politicians. Industry sources were used more by those communities not close to the river—primarily hydroelectric power--and environmental and expert sources were barely used. Considering that the communities close to the Snake River rank the lowest in pluralism, they used a large number of non-local sources of support.

Two influences may be at work here. These communities' economic health is due in part to the building of the four Lower Snake dams in the 1960s and they have become increasingly connected with the 'outside world'. Additionally, this connectivity is likely essential in the maintenance of their continued economic health. In this locally threatening situation, these communities are responding not as isolated rural communities in quoting their local officials and power groups; they are citing state-wide and national leaders and groups that support their position.

This battle involves non-local sources threatening the stability of local communities, and it is these specialized, non-local sources that have gathered the necessary information regarding this issue. The information is readily available for all sides of the issue in these small communities to take, and use as they must.

For these two rural communities, two factors, available resources to promote connectivity, and an economic and educational need for continued and increasing contact with the 'outside world', may be influencing the types and numbers of sources quoted by

community members and editorial staff in support of their opinions. A study of more isolated, more homogeneous communities could provide a greater scope of data from which to draw conclusions.

Conclusion

Limitations

Because content analysts have full control over the definition and choice of variables, there is always the danger that associations within content analysis results are an artifact of the recording instrument. Traditional tests of the statistical significance or relations within the results of a content analysis may mean nothing more than that the researcher defined his or her instrument that way. Under these conditions, correlation coefficients become uninterpretable (Krippendorff, 1980). This content analysis was designed using a convenience sample and, as such, may not produce interpretable results using traditional tests of statistical significance or relations.

The study was purposely designed to determine if editors are as influenced by the power groups within their community when faced with a controversial issue as the structural pluralism model indicates is the case with total journalistic content. Only one issue was chosen, an environmental controversy, and this proved a limitation as there was no comparative data to measure proximity as a moderating variable in various issues. Also, research on the structural pluralism model included total journalistic content.

Further research should continue to test this model on editorial page content, and expand it to include all journalistic content on a multitude of issues.

Future research should include a tally of which editorials were written by the editorial board of the newspaper and which were guest editorials, as well as any letters to the editor. This will provide depth and breadth to the representation of perspectives on any issue.

Thus, three main conditions, the period of time limiting the numbers of editorials, the limited number of communities sampled and having only one issue, and just using editorials, limited the generalizability of the findings.

Although the 13 of the 23 communities sampled represent a good percentage of the population in Washington State, the small number of communities and issues did not provide enough variance of community pluralism and community propinquity.

Discussion

Newspapers' roles in community conflicts can contribute to social change or function to maintain community stability. Regardless of which role is foremost, media must be responsive to the community in which they exist as they are dependent on local business and social groups for their information as well as their survival as a business. When confronted by external threats to a community's well-being and stability, research indicates that media in smaller, more homogeneous communities will present a unified front, primarily reporting perspectives from local power sources (Hindman, 1996). In larger, more diverse communities, research shows that media are more likely to present

greater numbers of articles and more diverse views from the numerous power sources within the community (Tichenor, Donohue & Olien, 1980).

This case study uses the structural pluralism model to examine the relationships between community pluralism and media representation in newspaper editorials about breaching or not breaching the four dams on the Lower Snake River in Washington State.

Structural pluralism was a weak predictor of the frequency of editorials. As Table 4 indicates, proximity to the Lower Snake River appears to be more relevant to the numbers of editorials than community pluralism. Two of the least pluralistic communities produced the highest numbers of editorials and are both unities directly on the Snake River. In this specific issue, geographic proximity is a stronger predictor of frequency than community pluralism.

Structural pluralism was also not a strong predictor of opinion diversity. The only area pluralism is related to diversity is that it is highly correlated with the number of pro-breach articles. This is likely owing to the articles from the Seattle community. One anomaly must be noted. One of the two homogeneous communities on the Snake River exhibited high opinion diversity. This is contrary to the model's expectation that it would present a unified front to external threats as did the other homogeneous community on the Snake River. This community, however, has a strong Native American presence which may be an indication of an ethnic diversity component. The addition of an ethnic diversity indicator may have added clarification to this speculation that, in this issue, ethnic diversity may also be a predictor of opinion diversity; one that can override community pluralism. A 1999 study that adds an ethnic diversity element to the

traditional structural pluralism model found that, editors that have a source of news from an ethnic minority, will value news about that ethnic group (Hindman, Littlefield, Preston & Neuman, 1999). In this case, the newspaper from the community in question routinely includes news, features and editorials about the local Native American group.

Economic dependence was not included in this study as a direct indicator. It may be proposed that those communities that the communities on the Snake River were economically dependent on business that require the dams to remain in place. However, correlations of the industrial heterogeneity measure did not produce any relationship to any variable, nor did a breakout of manufacturing, wholesale and retail trade, or agricultural, farming and fishing, those particular industries expected to be impacted by this issue.

A 1999 study of the spotted owl controversy in Washington State found that economic connections and physical distance were predictors of numbers and lengths of stories in the major dailies in the state (Bendix & Liebler, 1999). Results from a study of newspaper coverage of an oil spill in California find geographic proximity and economic dependence as predictors of more local coverage over national coverage. However, geographic proximity alone as a predictor was superseded by economic dependence as demonstrated in a Molotch & Lester study of a Utah nerve gas leak. Here, because of the community's dependence on the defense department contract, there was much less local coverage than would be expected in a community that had a nerve gas leak (Molotch & Lester, 1997). Because both these studies examined local coverage versus national coverage, comparisons to this study are not necessary applicable, but do indicate a pattern

of geographic proximity and economic dependence as predictors of local coverage in environmental issues.

These findings indicate that the use of the structural pluralism model may not be finely tuned enough in this case to explore the effects of community pluralism on editorial opinion pertaining to this specific type of issue. Environmental controversies are often localized; e.g. a business is dumping waste into a lake or river, a local manufacturer's smoke stacks are emitting too high a level of a certain toxic chemical. In these cases, the communities most directly and critically impacted are in close geographic proximity to the issue and of course they are likely to be more concerned.

It is interesting to note that, other than those communities close to the Snake River, it was metropolitan newspapers from Western Washington that printed the most editorials on this issue. The role of metropolitan newspapers may be to more fully integrate the state and local controversies with external editorial opinions. Notable, however, is the absence of a strong editorial presence from Spokane. This newspaper did not contribute diverse and frequent editorials as would be expected from a highly pluralistic community, nor did they function as a metropolitan newspaper incorporating non-local state opinions into local controversies. Indeed, as the only newspaper from the only major urban center in Eastern Washington, the site of the Snake River dams in question, residents may have expected this newspaper to function as the pluralistic model suggests and represent the diverse opinions present regarding this question. Further research into the newspaper's owner/publishers has, to date, failed to establish any explicit or even speculative explanations for this unexpected response. It is possible the

editorial policy of the newspaper superseded any traditional role expected to occur in a newspaper from a large community. The owner of the newspaper, the Cowles Company, is an umbrella company of forest products, insurance, and real estate. Further research into their holdings may provide some further insight into the unexpected absence of great numbers of editorials on this subject. Additionally, examination of the newspaper's journalistic coverage to include all content might shed some further light into this anomalous situation.

An overarching question arises from this study. Are local environmental controversies that, in actuality, span both local and national borders, going to be decided on a local level using the conventional levels and types of information and opinions that are traditionally presented in local newspapers? As this study reveals, it is newspapers in those communities most closely tied to the issue, both geographically and psychologically, that are most vocal about the issue. Residents in those communities can be expected to rise up and be heard when something threatens the stability of their community. Unfortunately, this coverage will often present just a knee-jerk, protective stance, not allowing for the broadness of the problem and its potential future implications. In these cases, it becomes imperative that more diverse coverage be presented to help avoid polarized assessments of the situation. If newspapers cannot provide a diversity of opinion, they could better serve their readers by at least informing them that a local, short-term resolution of the problem is not necessarily the best long-term solution for their children and grandchildren. If newspapers in communities geographically and psychologically close to the issue cannot even address this, then it

falls to communities ‘outside’ the affected areas to present newspaper content that can inform their readership of the broader issues at stake; not just present polarized, jobs vs. salmon; jobs vs. spotted owl types of coverage.

Studies of which social structures influence media representation of environmental controversies will provide answers to how a community views a problem, how willing they may be to listen to other perspectives, how open they may be to alternate solutions, and many other concerns that must be faced. When attempting environmental dispute resolution, ethnic and economic, risk, geographic and psychological concerns and their representation in news media must be understood in order to better develop effective environmental education programs.

Dealing with environmental issues is new to American society. Environmental issues are far too complex and too critical to be handled with a spate of opinion pieces and a few feature articles, and then left up to locally affected communities to decide on issues which affect the future health and well-being of entire regions. The manner in which environmental controversies are covered in the media, can and will have dramatic impact on whether resolutions are merely quick-fix band aid solutions, or are viable, long-term, valuable solutions that will serve the future of entire regions and all its inhabitants.

REFERENCES

- Akhavan-Majid, Roya & Boudreau, Timothy. (1995). Chain ownership, organizational size, and editorial role perceptions. *Journalism and Mass Communication Quarterly*, 72, 4, 863-873.
- Anderson, James. (1995) *Decline and Recovery of the Snake River Salmon Testimony presented before the Subcommittee on Water and Power of the US House of Representatives Committee on Resources*. June 1995 Washington D.C. Retrieved June 20, 2005.
<http://www.cqs.washington.edu/papers/jim/testimonies/house.june.95.pdf>
- Bendix, Jacob & Liebler, Carol M. (1999). Place, Distance, and Environmental News: Geographic variation in newspaper coverage of the spotted owl conflict. *Annals of the Association of American Geographers*, 89(4), 1999, 658-676.
- Blau, Peter M. (1977). *Inequality and heterogeneity, a primitive theory of social structure*. New York, Macmillan Publishing Co., Inc, The Free Press.
- Breed, Warren. (1958). *Social control in the newsroom: A functional analysis*. *Social Forces*, 33, 326-355. (Reprinted in Berkowitz, 1997, 107-122)
- Center for Columbia River History. (2005). *The Tribal Right to Harvest-Treaties and Cases*. Retrieved June 20, 2005. <http://www.ccrh.org/comm/river/harvest.htm>
- Columbia River Inter-Tribal Fish Commission. (2005). Retrieved on Nov. 1, 2005. Available from: <http://www.critfc.org/text/tribes.html>
- Demers, David Pearce. (1994a). Effect of organizational size on job satisfaction of top editors at U. S. dailies. *Journalism Quarterly*, 71, 4. 914-925.
- Demers, David Pearce. (1996a). Corporate newspaper structure, editorial page vigor, and social change. *Journalism and Mass Communication Quarterly*, 73, 4. 857-877.
- Demers, David Pearce. (1996b). *The menace of the corporate newspaper: fact or fiction?* Ames, Iowa: Iowa State University Press.
- Donohue, George A., Tichenor, Phillip J. & Olien, Clarice N. (1995). A guard dog perspective on the role of media. *Journal of Communication*. 45, 2, 115-132.

- Dunwoody, Sharon & Griffin, R.J. (1993). Journalistic strategies for reporting long-term environmental issues: a case study of three Superfund sites. In Hansen, Anders (Ed) *The Mass Media and Environmental Issues*. (22-50). London: Leicester University Press.
- Federal Caucus. (2005). Protecting Salmon: Highlights: Endangered Species Act Federal Columbia River Power System. 2004 Progress Report. Retrieved on Oct. 27, 2005 from http://www.salmonrecovery.gov/reports_and_papers/biop_implementation/docs/Final_2004_Progress_Report.pdf.
- Fisher, Jim. (2000, July 23). Extinction will cost a lot more than the loss of salmon. *Lewiston Morning Tribune*, pg. 1F.
- Griffin, R. J. & Dunwoody, S.; Gehrman, C. (1995). The effects of community pluralism on press coverage of health risks from local environmental contamination. *Risk Analysis*, 15, 4, 449-458.
- Griffin, Robert J. & Dunwoody, Sharon. (1997). Community structure and science framing of news about local environment risks. *Science Communication*, 18, 4, 362-384.
- Government Accounting Office, GAO-02-612, *Count the Fish*. Appendix VII, p.75. Salmon and Steelhead Recovery Efforts, 1977-2002. Retrieved on July 20, 2005 from <http://www.bluefish.org/countfpc.htm>.
- Hindman, Douglas Blanks. (1996). Community newspaper, community structural pluralism and local conflict with non-local groups. *Journalism Quarterly*, 73, 708-721.
- Hindman, Douglas Blanks. (1999). Social control, social change and local mass media. In Demers, David & Viswanath, K (Eds) *Mass media, social control, and social change: a macrosocial perspective*. Ames: Iowa State University Press. (99-116).
- Hindman, Douglas Blanks; Ernst; Stan & Richardson, Mavis. (2001). The rural-urban gap in community newspaper editors' use of information technologies. *Mass Communication & Society*, 2001. 4(2), 149-164.
- Hindman, Douglas Blanks; Littlefield, Robert; Preston, Ann & Neumann, Dennis. (1999). Structural pluralism, ethnic pluralism, and community newspapers. *Journalism and Mass Communication Quarterly*, 1999. 76, 2, 250-263.

- Hynds, Ernest C. (1990). Changes in editorials: A study of three newspapers, 1955-1985. *Journalism Quarterly*, 67, 2, 302-312.
- Hynds, Ernest C. & Archibald, Erika. (1996). Improved editorial pages can help papers, communities. *Newspaper Research Journal*, 17, 1/2, 4-4.
- Krippendorff, Klaus. (1980). *Content Analysis: An Introduction to Its Methodology*. Beverly Hills, California 90212 Sage Publications, Inc.
- Molotch H. & Lester. (1975). Accidental news: The great oil spill as local occurrence and national event. *American Journal of Sociology*, 81, 235-260 (Reprinted in Berkowitz, 1997).
- National Marine Fisheries Service. (1998). *Factors Contributing to the Decline of Chinook Salmon: An Addendum to the 1996 West Coast Steelhead Factors For Decline Report*. Portland, Oregon. June, 1998. Retrieved on June 20, 2005 from <http://www.nwr.noaa.gov/1salmon/salmesa/pubs/chinffd.pdf>
- National Oceanic & Atmospheric Administration. (2005). NOAA Fisheries—Endangered Species [Data file]. Available from National Oceanic & Atmospheric Administration Web Site, <http://www.nmfs.noaa.gov/pr/species/fish/>
- Neuzil, Mark & Kovarik, William. (1996). *Mass media & environmental conflict. America's green crusades*. Thousand Oaks, Ca. Sage Publications, Inc.
- Northwest Power and Conservation Council. (2005). *Response to the Questions of the Implementation Team Regarding Juvenile Salmon Transportation in the 1998 Season*. ISAB Report 98-2. Retrieved on Oct. 25, 2005 from <http://www.nwcouncil.org/library/isab/isab98-2.htm>
- Olien, C. N. & Donohue, G. A. & Tichenor, P. J. (1995). Conflict, consensus, and public opinion. In T. L. Glasser & C. T. Salmon (Eds) *Public opinion and the communication of consent*. (301-322). New York: Guilford.
- Olien, Clarice. N. & Donohue, George. A. & Tichenor, Phillip. J. (1968). The Community Editor's Power and the Reporting of Conflict. *Journalism Quarterly*, 45, 243-252.
- Pope, Charles & McClure, Robert. (2000, July 20). Dams will stand-For now; Breaching would be a last resort if agencies can't revive Snake River salmon in 10 years. *Seattle Post-Intelligencer*, p B1.

- Rahr, Guido. Why is Salmon Conservation Important? *The Wild Salmon Center*
Retrieved August 10, 2005. <http://www.wildsalmoncenter.org/why.php>
- Rotolo, Thomas. (2000). Town Heterogeneity and affiliation: A multilevel analysis of voluntary association membership. *Sociological Perspectives*, 43-2, 271-289.
- San Francisco Genealogy. 2005. Retrieved on Nov 12, 2005. Available from:
<http://www.sfgenealogy.com/sf/sfdata.htm#cen1870>.
- Save Our Wild Salmon. (2005). Retrieved on Nov. 5, 2005. Available from:
<http://www.wildsalmon.org/about/member-groups.cfm>.
- Taylor, C. E., Lee, J. S. & Davie, W. R. (2000). Local press coverage of environmental conflict. *Journalism and Mass Communication Quarterly*, 77, 1, 175-192.
- Tichenor, P. J., Donohue, G. A. & Olien, C. (1980). *Community conflict & the press*. Beverly Hills, Ca: Sage Publications, Inc.
- Tichenor, Phillip J. & Neuzil, Mark. (1996). Advocacy, the uncomfortable issue. *Nieman Reports* , 50, 4. 41-44.
- U. S. Army Corps of Engineers, Walla Walla District (1999a). *Lower Snake River Juvenile Salmon Migration Feasibility Study: Draft Social Analysis Report*. Retrieved on June 20, 2005. Available from <http://www.nww.usace.army.mil/lsr/REPORTS/regional/regchap.pdf>.
- U. S. Army Corps of Engineers, Walla Walla District (1999b). *Lower Snake River Juvenile Salmon Migration Feasibility Study: Draft Social Analysis Report*. Retrieved on June 20, 2005. Available from: http://www.nww.usace.army.mil/lsr/final_fseis/study_kit/Main_Report/chap5.htm#5.10
- U.S. Department of Agriculture Forestry Service. (200four). *Environmental Assessment for the Proposed Amendments to the Management Indicator Species List for the Salmon and Chehallis Land and Resource Management Plans*. Retrieved on July 12, 2005. Available from: www.fs.fed.us/r4/sc/projects/mis/ea.pdf.
- Washington State Department of Fisheries and Wildlife. (2001). *Pacific Salmon and Wildlife-Ecological Contexts, Relationships, and Implications for Management. Special Edition Technological Report*. Retrieved on July 2, 2005. Available from: <http://wdfw.wa.gov/hab/salmonwild/salmonwild2.pdf>.

Willson, Mary F. & Halupka, Karl C. 1995. Anadromous fish as a keystone species in vertebrate communities. *Conservation Biology* 9, 3. 489-497.

Wimmer, Roger D. & Dominick, Joseph R. (2003). *Mass Media Research*. Wadsworth/Thomson Learning, Belmont Ca.

APPENDIX

APPENDIX A

Key Event Article

LexisNexis™ Academic

Copyright 2000 Seattle Post-Intelligencer

SEATTLE POST-INTELLIGENCER

July 20, 2000, Thursday, FINAL

SECTION: NEWS, Pg. B1

LENGTH: 909 words

HEADLINE: DAMS WILL STAND - FOR NOW; BREACHING WOULD BE A LAST
RESORT IF AGENCIES CAN'T REVIVE SNAKE RIVER SALMON IN 10 YEARS

BYLINE: CHARLES POPE AND ROBERT McCLURE P-I reporters

DATELINE: WASHINGTON

BODY: The Clinton administration said yesterday that four large dams on the Lower Snake River would remain untouched for at least a decade because science does not support tearing them down to restore salmon runs.

Instead, federal officials will spend the next several years trying to coax the endangered fish back to a sustainable population by improving hatchery operations, limiting harvests and increasing stream flows. If those efforts fail, breaching the dams could re-emerge as

an option, the officials said.

"Dam breaching is one step among many others that holds promise for helping restore Snake River stocks," said George Frampton, acting chairman of the White House Council on Environmental Quality and President's Clinton's highest-ranking advisor on environmental questions.

"Breaching clearly would help those fish. It may or may not prove to be necessary to achieve their recovery. But the science is clear that breaching is not the solution itself for Snake River stocks," Frampton said in remarks prepared for a Senate committee hearing. The hearing was cancelled because of an unrelated matter, but Frampton's remarks were released.

If the fish populations haven't recovered sufficiently in eight years, the government would again consider breaching the dams. But even if they decided then to do so, it would take at least another two years to accomplish that, said Will Stelle, Northwest regional director of the National Marine Fisheries Service.

The announcement drew sharp criticism from all sides, reflecting the passion the issue invokes among politicians, environmentalists, fishing interests and others.

In a conference call with reporters elaborating on Frampton's testimony, Stelle said it is

wrong to focus exclusively on dam removal as the only solution to a complex problem.

"Just as there are multiple causes (for the decline of salmon), there must be multiple solutions," he said. "There is no single bullet here to fix the salmon problem.

"Let us resist the temptation to focus on removal of the four Snake River dams alone as a silver bullet because removal alone is not the answer."

Removing the dams, for example, would do nothing to recover imperiled salmon in the Columbia River downstream, some of which are at a greater risk than the Snake River stocks, Frampton said in his testimony.

The question of how to stop the decline of salmon, and specifically whether that answer includes removing the four dams, has been one of the Northwest's most politically volatile questions over the past five years. It involves such combustible issues as property and water rights, tribal treaties, and environmental protection as well as powerful interests on both sides. All of it is mixed with inconclusive science.

The matter bubbled into the presidential race yesterday. Republican George W. Bush, who opposes removing the dams, criticized Democrat Al Gore for not taking a position.

"Al Gore should take a stand," Bush said in statement. "I say we can use technology to

save the salmon, without leaving the door open to destroying these dams."

Gore responded by saying he would base a decision on the best science available and not allow political considerations to influence it. "We must save the salmon and build the economy of the Pacific Northwest. The way to achieve these ends is through an objective, science-based process - not by rushing to rash judgments," he said in a statement.

Despite the go-slow approach on dam removal, Republicans from the Northwest said they were concerned because Frampton said planning for removal would proceed.

Frampton said that step was being taken so that if the science later calls for breaching the dams, there would be no unnecessary delay.

The agencies "are masking their true intentions," said Sen. Slade Gorton, R-Wash., a vocal critic of dam removal. "Their agenda is clear and they want to keep the door open on dam removal even in the face of incredible runs of spring chinook. This spring, over 200,000 spring chinook salmon and 38,000 steelhead passed through Bonneville Dam. But I want to be clear: there will be no money for dam-removal studies on my watch," he said.

Reaction from the other side was equally blunt.

"We're shocked and disappointed by the lack of vision evident in the administration's

decision to oppose breaching the lower Snake River dams," said Mark Van Putten, president of the National Wildlife Federation.

"The president is telling Congress it's OK to let the fuse keep burning on the extinction bomb instead of stopping it while there's still time."

Jeff Curtis, western conservation director of Trout Unlimited, characterized the administration position as "We're going to be aggressive, but not aggressive on dam breaching."

Environmentalists had hoped for what they called an "off-ramp" approach in which the administration would presume the breaching was needed, but would leave an option open to "get off the highway" if the fish rebound because of other measures.

"We knew for some time they were moving in this direction, but we thought there was some hope they would come out and say 'We're going toward dam breaching, but we're doing a whole bunch of other things, too.'"

"This thing says, no, we're going to do a whole bunch of other things and in five years we're going to look at this again," he said. P-I reporter Charles Pope can be reached at 202-943-9229 or charliepope@seattle-pi.com

LOAD-DATE: July 21, 2000

APPENDIX B

Coder Instructions

Coder:

The controversy to be looked at is whether or not to **breach** four dams on the Lower Snake River. Breaching the dams would require partial removal of the earthen portion of the dams to allow for more direct flow of water.

The coder will only code those instances where the author has specifically addressed or stated their opinion as to **whether to save or to breach the dams**. Rhetoric as to salmon versus jobs, hydropower etc, or the presentation of alternative options is not to be coded. Only those statements **directly addressing the question of whether to save or to breach the dams will be coded**.

Each editorial will be analyzed and coded through at least two readings, specifically, an initial reading and one subsequent re-reading. In the first reading, the coder will attempt to determine the position of the author, specifically *Save the Dams* (S), *Breach the Dams* (B), or *Neutral*. The coder will next read the article to further illuminate concepts and ideas that are directly referring to the opinion of the author with respect to the controversy.

These concepts and ideas will be used in further categorizing each editorial as *Save the Dams*, *Neutral*, or *Breach the Dams*.

Save the Dams means to be in favor of keeping the dams completely intact.

Breach the Dams means to support the removal of a portion of the earthen part, or the removal of the dams in their entirety.

Neutral will be indicated by either no state position or a balanced representation of the opposing perspectives.

These three categories are exclusive, that is, an editorial can only be situated in one of the three categories.

Coders will identify such concepts and ideas by underlining and marking with a “S” for *Save* the Dams, or a “B” for *Breach* the Dams. These concepts can be summed as to determinations of one specific perspective over another or if an equal number occurs, then it will be determined to be *Neutral*.

The concepts will be considered only if they state the opinion of the author, not if the author is stating the position of another.

For example, the following would not be coded, because, although it was chosen by the author, it expresses the opinion of the politicians, not of the author.

I was not surprised that Sen. Gordon Smith R-Ore., and two of his Republican colleagues from Idaho defended Snake River dams after a hearing in Hood River this week.

The following would not be coded for the same reason.

All of the fisheries biologists who have looked at the idea seem to support it.

If more “S”s for *Save* the dam concepts are identified, then the editorial can be categorized under “*Save*”. If more “B”s for *Breach* the dam concepts are identified, then the editorial can be categorized under “*Breach*”.

If an equal number of “S” and “B” concepts and ideas are identified, then an editorial can be categorized as *Neutral*.

Examples:

Example #1

Any debate on whether to take out the dams should end now. The dams must stay where (S) they are, continuing to provide needed energy, water, flood control and transportation for the region. I’m confident we can continue to see salmon stocks increase while we protect the dams (S).

Editorial #	Save	Neutral	Breach
?	2		

An “X” would be placed in the *Save* the dams category in the Master Table.

Example #2

We have all the science we need to make the decision—and all the definitive science we’re ever going to get.

What we don’t have are people in authority with the will to cut to the chase and make an up-or-down decision and accept responsibility for the consequences of that decision.

A regional Fish and Wildlife Service administrator says that, biologically, the value of removing the dams is a “no brainer”.

But NMFS apparently disagrees. If there’s really no worthwhile fish recovery to be gained by removing the dams, now is the time for those charged with making the call to do so.

The U.S. Army Corp of Engineers was about to say just that in a cost-benefit report last December when orders from senior Defense Department officials inexplicably erased their recommendation that the dams remain standing.

But Interior Secretary Bruce Babbitt has told dam-breaching foe Sen. Slade Gorton of WA that a decision on dismantling the dams “will not – and should not- be made on my watch.”

What we really need is a meeting of the minds, that is, some common ground upon which to make the best decision that best addresses the problems both of the salmon and of the people whose lives will be affected by any decision.

Editorial #	Save	Neutral	Breach
?		X	

An “X” would be placed in the *Neutral* (no stand) category in the Master Table.

Example #3

As we debate now to keep the benefits of Columbia and Snake River resources flowing to the Northwest in the future, we can’t ignore the here and now. Hovering at the brink of extinction, Snake River salmon need a plan now to help them survive a lethal gauntlet of hydropower dams. And the best available science tells us to begin partial removal of the four Lower Snake River dams without delay (B). If we allow salmon to go extinct to save pennies-a-day on what are already the nation’s lowest electricity bills, we will play right into the hands of those who want to take away our access to low-cost federal power.

Editorial #	Save	Neutral	Breach
?			1

Table 1
Newspaper Statistics

Communities	Newspaper	Plural Index ^a	Opinion Diversity ^b	Save ^c	Neutral ^d	Breach ^e	Total
Aberdeen	World	95.63	.00	0	0	0	0
Moscow/Pullman	Daily News	98.72	.44	2	4	0	6
Walla Walla	Union Bulletin	99.06	.12	30	2	0	32
Mt Vernon	Skagit Valley Herald	99.34	.00	0	0	0	0
Lewiston/Clarkston	Morning Tribune	99.35	.57	4	8	2	14
Everett	Herald	99.44	.44	2	1	0	3
Bellingham	Herald	99.75	.64	4	4	2	10
Yakima	Daily News	99.83	.20	8	1	0	9
Olympia	Olympian	99.87	.00	0	1	0	1
Vancouver	Columbian	100.35	.63	1	2	1	4
Spokane	Spokesman Review	100.55	.00	4	0	0	4
Tacoma	News Tribune	101.42	.38	3	1	0	4
Seattle	PI & Times	106.69	.66	6	6	7	19

^a Plural Index refers to the degree of structural pluralism measured by thirteen industry indicators, plus population and education. ^b Opinion Diversity is a measure of the three categories of editorials: save, neutral and breach. ^c 'Save' is one of the three coded themes from editorials meaning 'Save the Dams'. ^d 'Neutral' refers to one the three themes meaning that no definitive opinion was expressed within the editorial. ^e 'Breach' refers to one of the three themes meaning to 'Breach the Dams'.

Table 2
Correlation of Pluralism with Numbers of Editorials

	<i>N</i>	Pluralism Index <i>r</i>	Population <i>r</i>	Education <i>r</i>	Industrial Heterogeneity <i>r</i>
Breach	13	.83**	.82**	.89**	.20
Neutral	13	.53	.31	.39	.24
Save	13	.08	-.02	.001	.13
Total articles	13	.31	.24	.30	.22

** $p < .01$

Table 3
Correlation of Pluralism and Opinion Diversity

	Pluralism Index <i>r</i>	Population <i>r</i>	Education <i>r</i>	Industrial Heterogeneity ^a <i>r</i>
Opinion Diversity	.33	.31	.34	.16
<i>n</i>	11	11	11	11

^a Industrial Heterogeneity is an index of structural pluralism measured without the population and education indicators.

Table 4
Proximity to Snake River & Mean Numbers of Editorials

	<i>df</i>	Close to Snake River <i>n</i> =3	Not Close to Snake River <i>n</i> =10	<i>t</i>
Editorials <i>m</i>	11	17.3	5.3	2.4*
<i>N</i>		106	106	

* $p < .05$

Table 5
Sources Quoted in Editorials by Proximity to Snake River

Sources	Close ^a	Not Close	Total
Mainstream	78%	82%	80%
Environmental	5%	3%	4%
Expert	5%	3%	4%
Industry	11%	11%	11%
<i>N</i>	55	87	142

^a 'Close' communities are those either right on the Snake River or within 30 miles.