Project Report Rev

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Draft ONLY : ***NOT FOR ATTRIBUTION***

ADD

Subheads

Pull quotes

charts

Photos

NOTE: Included are suggested headlines. At the end of the document are included graphs, available in an excel file. These CAN be included, but are not essential.

[TITLE]

Report on News Framing and Public Opinion

The Salmon and Sea Lion Conflict on the Columbia River

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[about the author]

Cynthia-Lou Coleman is an associate professor of communication at Portland State University, where she studies science, health and risk communication. Dr. Coleman explores how scientific discourse unfolds in conflicts that impact American Indian communities. Her work has included examination of mining in Indian Country, social effects of drug advertising, and the controversy surrounding the repatriation of Kennewick Man--a 9200-year-old skeleton discovered at the Columbia River. She has held fellowships with the Smithsonian National Museum of the American Indian and with the Centers for Disease Control and Prevention. She is an enrolled member of the Osage Tribe.

[The Conflict over Salmon and Sea Lions at the Columbia River]

THE STORY

The setting for the research is the Columbia River in the Pacific Northwest. The river is fundamental to the lives of American Indians in the region, where salmon are integral to their spiritual and cultural identity.

The river, a symbol of life and replenishment for the tribes, became a symbol of progress for other residents in the 1930s when Franklin D. Roosevelt’s administration harnessed the river with a dam built to fuel jobs and industry, and to bring hydroelectric power to the region. “Your power is turning our darkness to dawn,” is how singer Woody Guthrie described the project in his song, *Roll on Columbia, Roll on.*

According to a local historian, the advent of electricity was “seductive” and served as the promise of “enrichment and ascendancy.” But the dam irrevocably altered the lives of tribal people who lived along the Columbia. And the dams extracted a high price among the native people who lost access and intimacy with the river.

Bonneville Dam, completed in 1938, diminished salmon populations dramatically. Ever since, tribes worked diligently to restore the fisheries.

Fishermen noticed—about a decade ago—more and more sea lions swimming up the river to Bonneville Dam. Sea lions eat the fish that are returning to spawn, and scientists estimated that between two and three percent of the salmon run was consumed annually by sea lions.

Efforts to remove the sea lions have been controversial, and the current project looks at news coverage and public opinion surrounding the issue.

[the report]

The report summarizes a two-part study that examined news coverage and public opinion surrounding the conflict over sea lion management at the Columbia River.

[Research Questions]

The study focused on the following research questions:

* Which frames dominated news coverage?
* Which news frames were reflected in residents’ attitudes?
* Which stakeholders were most prominent in news coverage?
* Which stakeholders did residents say had the greatest stake in the issue?
* What types of environmental attitudes are held by local residents?
* Do residents favor lethal or non-lethal removal of sea lion?
* How do residents characterize Native American involvement in the issue?

[News Coverage Summary]

[Part 1]

We examined coverage in Alaska, California, Idaho, Montana, Oregon and Washington from January 1, 2003, to June 21, 2010, for news related to sea lions and the Bonneville Dam. The search yielded 161 news stories (and 223 editorials, letters to the editor, and opinions).

Looking at news stories, we found the most prevalent themes (we call them “frames”) centered on **blame, laws, successful solutions** and **failed solutions**.

Looking at the four most prominent frames, **blame** occurred most frequently (31% of all frames), followed by **law** frames (29%) and **successful solutions** (24%). **Failed solutions** accounted for 11% of frames.

**Blame** most commonly focused on the sea lions: 47% of the “blame” stories said sea lions caused the salmon decline with another 14% crediting Bonneville Dam for the problem. About 9% of blame frames focused on fishing and 5% mentioned environmental reasons as the cause.

**Law** frames tended to mention protection of species, including both salmon and sea lions. The frame was also used to discuss the Humane Society’s legal actions to halt killing of sea lions.

**Successful solutions** and **failed solutions** typically featured the same issue: the removal of sea lions. In “successful” cases the stories reported that trapping sea lions prevents them from eating salmon. In contrast, some stories noted that trapping or hazing sea lions could be ineffective in removing them, and were characterized as “failed” solutions.

[SOURCES]

We also examined the types of sources quoted in news stories. Most sources (75%) in the timeframe were officials who represented the federal government and the states of Oregon and Washington.

Advocacy groups such as the US Humane Society, the Sea Lion Defense Brigade and American Rivers were included as sources about 18% of the time, while tribal sources appeared in about 8% of stories.

[PART 2]

The second part of the study featured an attitude survey of residents of the Columbia River in December 2010. A random sample of 389 residents (55% women, 45% men) was selected. Average age was 58. Most (90%) considered their ethnicity as white, with the remaining stating their ethnicity as Native American, African, Asian, Latino or other. About 17% graduated from high school, and 80% had some college experience (40% graduated from college). About 11% earned $20,000 or less a year and 25% had an income between $20,000 and $50,000. About 54% had an income of $50,000 or higher.

[Stakeholders]

The news study showed that government sources (federal and state) were the most likely to be quoted (followed, with much less frequency, by advocacy sources and tribal sources). Residents, however, most frequently mentioned **Native American tribes** and **commercial fishermen** as key sources engaged in the issue: not government sources as noted in news stories. However, spokespeople from the state of **Oregon** and the State of **Washington** were mentioned with the next greatest frequency by local residents.

Residents responded that **sports fishermen**, **scientists** and the **Federal Government** had a stake in the issue, although only moderately. The last three stakeholders—the **Humane Society**, **politicians** and **news reporters**—were thought to have less interest in the issue.

[Who’s to Blame?]

We asked residents their opinions about who is to blame for the decrease in salmon populations.

Residents listed six factors affecting salmon decline: **sea lions, politicians, Bonneville Dam, commercial fishing,** the **federal government** and **environmental laws.** Note that the responses aligned with some aspects of news coverage, which blamed sea lions, dams, fishing and environmental factors. Residents also blamed salmon loss partly on **local government, farming, Native American fishermen** and **Native American governments**. To a lesser extent, **global warming,** the **news media,** the **economy,** and **birds** were blamed for the salmon decrease.

[Environmental attitudes]

The study asked residents nine questions that measured environmental attitudes, ranging from views that human relationships with nature should be “balanced” to the idea that humans should “control nature.” Attitudes tended to align with balancing nature or controlling nature.

[Are attitudes associated with judgments?]

We found attitudes about managing sea lions differed dramatically among residents. Those who favored **balancing nature** were more likely to blame **global warming,** the **economy** and **Bonneville Dam** for salmon depletion. They favored relocating sea lions and were opposed to lethal removal.

In contrast, residents who leaned toward **controlling nature** blamed the **sea lions** and were significantly **less** likely to blame **Bonneville Dam, farming** or **global warming**. They favored **lethal removal** of sea lions.

[Where do residents get their news?]

L**ocal TV news** was used significantly more than any other information source. Other frequently used outlets included national **TV news,** the **internet** and **local newspapers**. Residents occasionally turned to **Facebook** and **radio** talk shows, seldom read **national newspapers** and seldom **talked** with friends about the issue.

[Summary or Conclusions]

In summary, we found that news reporters from mainstream press favored official sources when covering the salmon and sea lion issue at the Columbia River. Other organizations—such as the Humane Society—were quoted less often, with Native American sources quoted infrequently. Because the river, fish and wildlife are managed by federal and state agencies in concert with the tribes, it is reasonable that government sources would be quoted often in the press. However, the preponderance of official sources makes for less balanced coverage overall. We noted American Indian spokespeople are referenced infrequently, despite their stake in the Columbia River fisheries.

The conflictual nature of the issue resulted in news story frames that highlighted blame, laws and solutions (both successful and failed solutions). We found that the locus of blame centered on sea lions eating salmon at the Columbia River, while law frames focused on protection of species and the lawsuits over sea lion removal. Solution frames highlighted the duel between agencies that claimed measures had been effective in managing the sea lions and special interest groups that claimed the measures had failed.

In some cases, the news coverage aligned with public opinion about the issue, while in other cases, opinion diverged from coverage. For example, both news and public opinion blamed sea lions as the cause of the conflict. Legal issues—noted in news coverage—were also mentioned by local residents as salient. Residents’ opinions went beyond the news coverage. They blamed politicians, Bonneville Dam, commercial fishing, the federal and local government, farming, Native American fishermen and Native American governments for the salmon decline.

Stakeholder groups most often mentioned in news coverage represented government agencies. Local residents, however, saw the most prominent stakeholders as Native American tribes and commercial fishermen, followed by Oregon and Washington officials. The US Humane Society—which brought legal action against the sea lion removal—was low on the list of stakeholders engaged in the issue, according to the public opinion survey.

Views about sea lion management align along environmental attitudes. Residents who endorsed environmental protection blamed global warming, the economy and Bonneville Dam and were opposed to killing sea lions. In contrast, residents who believed in controlling nature blamed the sea lions and favored lethal removal.

The studies demonstrate that mainstream news coverage surrounding sea lions at the Columbia River was treated in conflictual ways and that residents who live in proximity of the river—in Oregon and Washington—mirror the coverage in some ways and diverge in others. Residents were likely to agree with the news that sea lions were responsible for salmon depletion and, to a lesser extent, the dam, but residents also blamed politicians, commercial fishing, the federal government and environmental laws, which received scant coverage.

In other words, press coverage does not appear to be a reliable indicator of public opinion of residents who live near the Columbia River. Attitudes about nature and the environment appear to be a promising indicator of attribution of blame concerning salmon depletion and beliefs about sea lion management.

[GRAPHS, CHARTS, ETC.: SEE EXCEL FILE]

***NOTE: The following sections can be considered “filler”***

**Following are the two types of viewpoints that reflect attitudes of residents, who were divided on balancing nature versus controlling nature.**

**Balance Nature**

SURVEY QUESTIONS

* Humans, animals and plants depend equally on each other
* The balance of nature is delicate
* Humans are responsible for protecting nature

**Control Nature**

SURVEY QUESTIONS

* Humans are meant to rule over the rest of nature
* Environmental regulations place a burden on industry
* Plants and animals exist primarily to be used by humans
* Our economy is more competitive when we control nature
* Humans have the right to modify nature to suit our needs
* The balance of nature is strong enough to cope with the impacts of industrialized nations

**The following chart shows the factor loadings on the two environmental attitude dimensions: Controlling Nature and Balancing Nature.**

**ENVIRONMENTAL ATTITUDES**

Survey question

Control Nature Balance Nature

Plants and animals exist primarily

to be used by humans **.798** -.036

Humans are meant to rule

over the rest of nature **.783** -.050

Humans have the right to modify

nature to suit our needs **.706** -.103

Our economy in more competitive

when we control nature **.678** .069

The balance of nature is strong enough to cope

with the impacts of industrialized nations **.555** -.345

Environmental regulations

place a burden on industry **.546** -.108

The balance of nature is delicate -.162 **.789**

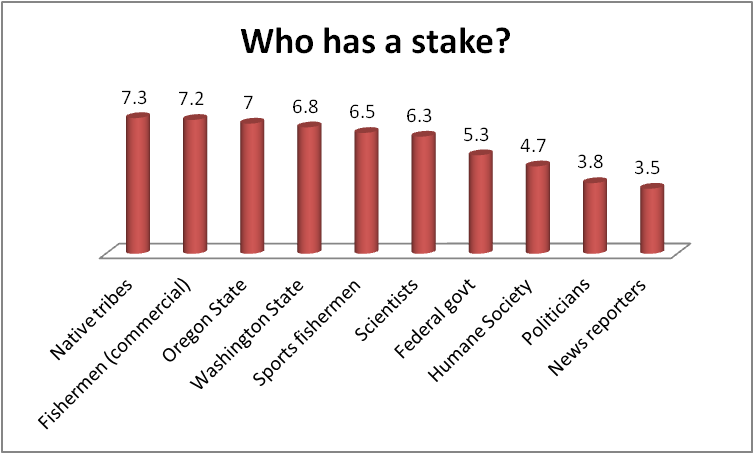
Humans, animals and plants

depend equally on each other -.096 **.743**

Humans are responsible

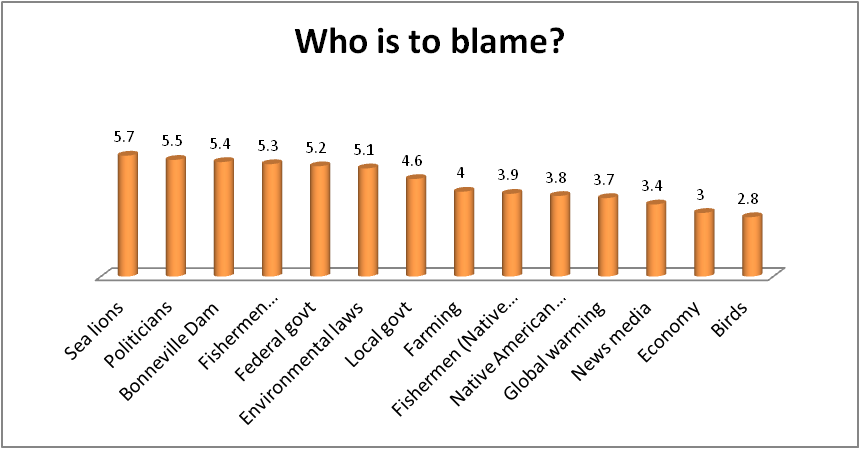
for protecting nature .039 **.592**

Note: The nine variables were subjected to a principal component factor analysis using varimax rotation to examine underlying dimensions. The Kaiser-Meyer-Olkin Measure of sampling adequacy was .754 with a significant chi-square of 733 (p=.000, df=36). Two factors (with eigenvalues greater than 1) emerged, accounting for 50% of the overall variance.

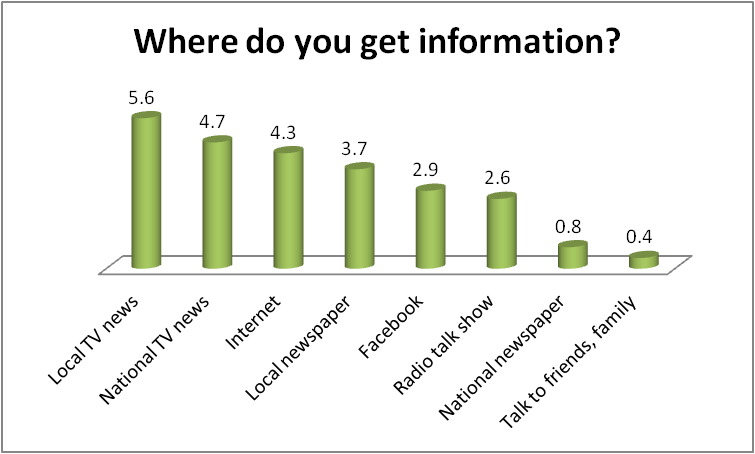


Question: which groups have a stake in the in the salmon and sea lion issue?

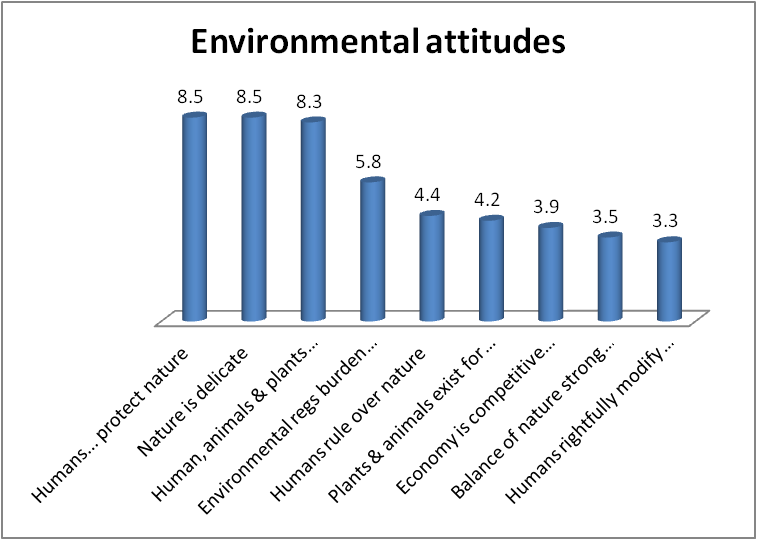
Range: none (1) to a great deal (10). Mean responses are graphed. Note: responses about Native American tribes and commercial fishermen are significantly higher than other responses.



Question: how much is each group to blame for the decrease in the salmon population at the Columbia River? Range: none (1) to a great deal (10). Mean responses are graphed. Note: sea lion blame was significantly higher than blame of other groups.



Question asked how often respondents received information & news. Responses were based on the "number of times in the past week" each source was used. Mean responses are graphed. Note: Average use of local TV news was significantly higher than other use.



All questions are from the New Ecological Paradigm scale (Dunlap & Van Liere, 1978; Dunlap, Van Liere, Mertig & Jones, 2000). Range: strongly disagree (1) to strongly agree (10). Mean responses are graphed. Note: reverse-coded questions have been adjusted for the scale.