

A Media Needs Assessment:
**Bridging the Gap Between
Science and the Media**

for the

G U L F O F
MEXICO
A L L I A N C E

Produced by the
Florida Department of Environmental Protection's
Office of Coastal and Aquatic Managed Areas
Staff members represent the Rookery Bay and Apalachicola
National Estuarine Research Reserves



June 2009

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I. Introduction

The purpose of this project was to better understand Florida’s Gulf Coast journalists and to assess their needs in covering science and Gulf of Mexico-related issues. The project will result in a media strategy, including tools and resources for journalists, such as the online Gulf of Mexico Media Center to help increase the quantity and accuracy of Gulf-related coverage.

Partnering with the media is one strategy for raising public awareness about the Gulf of Mexico and Gulf-related issues. Most adults in the United States get their information from the media. One study reports that children get 83% of their environmental information from the media.¹ With the media’s increased use of digital technology, more people – especially the younger, more “tech-savvy” generations – have access to more information.

The Gulf of Mexico Alliance works to bridge the gap between many diverse stakeholders. Community members have specifically asked that the Alliance reach more people in its efforts to enhance the economic and environmental health of the Gulf of Mexico. The media reaches audiences that Alliance scientists and educators may not reach. By partnering with the media and by offering tools for covering issues related to the Gulf of Mexico, the Alliance can more effectively raise awareness, ideally resulting in increased stewardship of this important resource.

In order to partner with the media, it is important to first understand journalists, including how they work, and any influences or challenges that affect what they cover and how they cover stories. It is also important to understand why or why not journalists are covering science-related issues, where they get their scientific information, and which stories related to the Gulf of Mexico are most relevant for their communities.

| This report includes a summary of current trends in the media, a snapshot of Gulf of Mexico news coverage, comments from journalists interviewed and suggested tools and resources for both the Alliance team members and Gulf-coast journalists.

This project was funded by the United States Environmental Protection Agency, Gulf of Mexico Program, under Assistance Agreement Number MX-964795 awarded to the Florida Department of Environmental Protection. The contents of this document do not necessarily represent the views and policies of the Environmental Protection Agency, nor does the mention of trade names or commercial products constitute an endorsement or recommendation.

This report is one result of a multi-year grant-funded effort to increase public awareness through pilot projects in Florida and to provide Florida with personnel to fully engage in the Alliance.

¹ Hayes, Richard and Daniel Grossman, “A Scientist’s Guide to Talking with the Media,” Rutgers University Press: New Brunswick, 2006. p.XI.

II. Background

The Gulf of Mexico Alliance partnership was initiated in 2005 with the leadership of the five U.S. Gulf State Governors. The Alliance includes representatives of the five U.S. Gulf States of Alabama, Florida, Louisiana, Mississippi, and Texas and thirteen federal agencies. Also supporting establishment of the Alliance was the Bush Administration's 2004 U.S. Ocean Action Plan, which highlighted the need for increased integration of resources, knowledge and expertise to support the governors' initiative. In 2005, a series of devastating storms impacted many of the Gulf States and revealed the vulnerability of coastal communities to storm events. Since that time, the Alliance has made strides to significantly increase regional collaboration in order to enhance the environmental and economic health of the Gulf Region.

The Alliance released the *Governors' Action Plan for Healthy and Resilient Coasts* on March 28, 2006. To date, 90 percent of the original Action Blueprint Steps are either underway or complete.

The Alliance also promotes resource sharing and collaboration for a healthy and resilient Gulf of Mexico by coordinating closely with several Caribbean nations and the Gulf of Mexico States Accord in order to strengthen its relationship with the six Mexican Gulf States.

Alliance Priority Issue Teams were established to address the following six regionally significant issues and to merge local, state and federal efforts:

- Water quality for healthy beaches and shellfish beds(WQ);
- Habitat conservation and restoration (HCRT);
- Environmental education (EE);
- Ecosystem integration and assessment (EIA);
- Reducing nutrient inputs to coastal ecosystems(NR); and
- Coastal community resiliency(CR)

In June 2007, staff from the Florida Department of Environmental Protection in the Office of Coastal and Aquatic Managed Areas received an Alliance grant from the U.S. Environmental Protection Agency's Gulf of Mexico Program. Applicants were Gary Lytton, Director of the Rookery Bay National Estuarine Research Reserve in Naples, Tabitha Whalen Stadler, Coastal Training Coordinator, Rookery Bay, and Seth Blich, Director of the Apalachicola National Estuarine Research Reserve in Apalachicola. The purpose of the grant was to support educational objectives of the Alliance by galvanizing local communities and raising public awareness. One element of the project was to partner with the media to raise public awareness about the Gulf of Mexico and Gulf issues. In February 2008, two Florida Gulf Alliance Educators were hired under this grant.

To better understand the needs of the media in covering science, and specifically in covering the Gulf of Mexico, the Florida Gulf Alliance Educators designed an assessment that resulted in a literature review, a website review, a Google News Review, and interviews with journalists. Information collected will guide the work of the Florida Alliance Network and will assist Priority Issue Teams in their work with the media.

III. Goals and Methodology

Goals:

The goals of the media needs assessment are targeted toward advancing the efforts of the Gulf of Mexico Alliance in its outreach and public awareness efforts by increasing the quantity and accuracy of Gulf-related media coverage.

Goals of the needs assessment are listed here, in two categories:

Increase understanding

- To bridge the gap between scientists and journalists
- To better understand journalists, our target audience, and their needs
- To better understand current trends in the media
- To identify the scientific sources of information used by journalists

Create strategies and tools

- To create an overall strategy for supporting Gulf of Mexico media coverage
- To gather resources to help journalists better cover Alliance-related topics
- To identify tools for increasing accuracy and quantity of Gulf Coast issues
- To build an effective online “Gulf of Mexico Media Center” on Florida’s Gulf Alliance website: www.supportthegulf.org
- To create tipsheets for Alliance team members working with the media

Methodology:

Literature Review

Current literature related to science and the media was reviewed online and in print. Important sources of information included the *State of the News Media Report (2008)*, found online at the Project for Excellence in Journalism’s website (www.journalism.org); *A Scientist’s Guide to Talking with the Media* (Hayes and Grossman: 2006); and *A Field Guide for Science Writers* (Ed. Blum, Knudson, Marantz Henig: 2006). Other studies, reports, and commentaries were found online through Google searches such as “Gulf of Mexico,” “Gulf of Mexico News,” “Science and the Media,” “Environmental Journalism,” and “Ocean Science.”

Website Review

Websites related to the Gulf of Mexico, Gulf of Mexico Alliance, and Gulf of Mexico news were reviewed for this report. Over 75 additional websites related to ocean science, ocean advocacy, and environmental advocacy were also reviewed. These sites supported the decision to create an online “Gulf of Mexico Media Center” for Florida journalists on the site: www.supportthegulf.org.

Media-related websites were reviewed from around Florida’s Gulf Coast, including TV-station and newspaper-affiliated sites. The review included online editions of small, local papers such as the *Cedar Key News* and the *Apalachicola Times* as well as larger, broader-reaching papers such as the *Tampa Tribune* and the *St. Petersburg Times*.

Newspaper Review

In addition to the online research, over 50 printed news publications from Florida's Gulf Coast were collected and reviewed. The newspapers are now catalogued at Rookery Bay National Estuarine Research Reserve Headquarters in Naples, Florida.

Google News Review

"Google News Alerts" related to the Gulf of Mexico were collected for five months (10/16/08-2/16/09). The free Google News Alert service (found at www.google.com) searches all online media outlets for the key phrase selected, and sends an email once per day, seven days a week, of all news articles containing the designated phrase.

The daily searches resulted in nearly 1,000 Gulf of Mexico news stories. For the purposes of this report, news stories were divided into the following categories: oil/gas and energy infrastructure, science, weather, tourism, crime, real estate and development, accidents, hurricanes, and the navy. It is important to note that the analysis was not conducted during hurricane season, which may or may not influence the results.

Interview Strategy

Two rounds of informal interviews were conducted with journalists to decide on the most effective strategy for reaching journalists in this study. Journalists interviewed suggested using phone or in-person interviews rather than electronic surveys at this stage.

In addition, Lee Yokel, Coordinator of the Gulf of Mexico Alliance Environmental Education Network, was interviewed over the phone about her use of the Google News Alert Service.

Tabitha Stadler, grant manager of this project and coordinator of the Science and the Media 2008 Conference in St. Petersburg, Florida, and Renee Wilson, media liaison at Rookery Bay National Estuarine Research Reserve, helped guide the development of the media needs assessment. Renee Wilson assisted as a liaison to the Florida Department of Environmental Protection's (FL DEP) Press Office during the year.

Journalist Interviews

Interviews were conducted with ten journalists from around Florida's Gulf Coast. Participants included newspaper reporters from Key West, Naples, Fort Myers, St. Petersburg, Apalachicola, and Panama City. Two of the journalists were radio news reporters (Apalachicola and Tampa). No TV reporters were interviewed for this report. All but one interview was conducted over the phone. The interview with Oyster Radio was conducted in person in Apalachicola. Interviews were limited to 12 open-ended questions.

Alliance Interviews

In a separate series of interviews of Alliance Priority Issue Team Members (2008 *Priority Issue Team Needs Assessment*), Alliance team members were asked about working with the media and were encouraged to give suggestions for improvement. Those strategies are included in Appendix A.

IV. Bridging the Gap: Science and the Media

What Is Science?

This report specifically looks at how the media covers science. In its broadest sense, science is defined as “knowledge or a system of knowledge covering general truths or the operation of general laws especially as obtained and tested through scientific method.”² Media coverage of science often includes medicine/health, environment, technology, weather, energy, space, and discovery.

Why Science?

All of the Gulf of Mexico Alliance Priority Issue Teams are focused on scientific research and understanding. Water quality for healthy shellfish beds and beaches, reducing nutrient inputs in coastal waterways, restoring coastal wetlands and other coastal habitats, identifying and mapping coastal habitats, environmental education and building resilient coastal communities are all important issues for the Alliance. In order to protect the Gulf of Mexico, it is important for coastal residents to understand why the Gulf is valuable, how Gulf ecosystems work, why special habitats protect communities from storms, how marine ecosystems depend upon a delicate balance of interconnected species, and why too many nutrients cause problems in our coastal waters. Media coverage can influence how Gulf coast residents think about these issues, and ultimately how they choose to behave.

Science in the Media: Challenges

The media often avoids covering science when stories do not appear to have direct relevance to its audience. The complexity of scientific stories, the need to “translate” them, and a lack of urgent headlines are also barriers to media coverage. Some journalists avoid science news because of the risk of controversy or making “claims” before the research is complete. Scientists often complain of inaccurate reporting when journalists do take the risk of printing a major headline without sufficient evidence, especially in the fields of medicine or health. Uncertainty is a primary reason for not covering the issue of climate change, according to New York Times’ science writer Andrew C. Revkin, as stated here in one of his blog entries:

...implicit uncertainty is one reason global warming remains a bad fit for conventional media. Nuance does not make for a fat headline or big front-page play...you don’t get extra space in a newspaper or time on a broadcast because climate science is more complex.³

² Merriam-Webster’s Online Dictionary: <http://www.merriam-webster.com/dictionary/science>.

³ Revkin, Andrew C. “Vanishing Frogs, Climate, and the Front Page,” Dot Earth, March 24, 2008.

V. The Context: National Trends in the Media

The Media Business

In general, the media business is suffering. Media outlets are experiencing the same economic downturns as the rest of U.S. businesses in today's financial crisis. According to the Project for Excellence in Journalism's 2008 State of the News Media Report, newspapers, television news, and magazines are all on the decline, competing with online technology and higher-priced advertising.⁴ Specifically, the report states that, "advertising isn't migrating online with the consumer."⁵ Also, classified advertising in print is nearly vanishing.

Of all media outlets, the hardest hit have been newspapers. Between 2001 and 2007, "newspapers have dropped 8.4% in daily circulation and 11.4% in Sunday circulation."⁶ Since 2007, those trends have accelerated. The *Seattle Post-Intelligencer* was put up for sale in January 2009 by its parent company, The Hearst Corp., after delivering news to Seattle residents for 146 years. "Hearst said the P-I lost about \$14 million in 2008."⁷ Even *The Washington Post* is in "survival mode," as explained here in an excerpt from Fortune Magazine:

Newspapers are dying. At the Washington Post Co., CEO Donald Graham is banking on the Internet to save serious journalism. If he can't figure it out, nobody can.⁸

Large numbers of journalists are being laid off. As of 2007, 85% of media outlets with daily newspapers of circulations over 100,000 have cut newsroom staff in the last three years.⁹ The website "Paper Cuts" tracks layoffs and buyouts at US newspapers, showing 2,755 jobs lost in the first two months of 2009 alone.¹⁰ E.W. Scripps Co. announces that The Rocky Mountain News will close its 150-year-old newsroom during the writing of this report.¹¹ In January 2009, the Charlotte Sun, covering news in Charlotte Harbor, Florida laid off 30 employees. Eighteen newsroom employees from the Tampa Tribune were laid off in November of 2008.¹²

Decline in Traditional Science Journalism

As media outlets downsize, science coverage is in steep decline. The Cable News Network (CNN) shut down its entire science department in December 2008 and laid off its science, environment, and technology news staff, as well as Peter Dykstra and five other executive producers. CNN reports that science news is now integrated into other stories and is adequately covered by Anderson Cooper's annual "Planet in Peril" documentary series. Cynthia George,

⁴ State of the News Media Report, 2008, Project for Excellence in Journalism, www.journalism.org

⁵ State of the News Media Report, 2008, Project for Excellence in Journalism, www.journalism.org

⁶ State of the News Media Report, 2008, Project for Excellence in Journalism, www.journalism.org

⁷ Richman, Dan and Andrea James, "For Sale: The P-I," *Seattle Post-Intelligencer*, January 9, 2009, <http://seattlepi.nwsource.com/printer2/index.asp?ploc=t&refer=...>

⁸ Gunther, Marc, "Can the Washington Post survive?" *Fortune Magazine*, appearing on CNN.com, July 26, 2007. <http://cnmoneyprintthis.clickability.com/pt/cpt?action=cpt&title=From+print+to+Web%3A+The+W...>

⁹ State of the News Media Report, 2008, Project for Excellence in Journalism, www.journalism.org

¹⁰ Paper Cuts website: <http://graphicdesignr.net/papercuts/>

¹¹ "Rocky Mountain News to close, publish final edition Friday,"

<http://www.rockymountainnews.com/news/2009/feb/26/rocky-mountain-news-closes-friday-final-edition/>

¹² Paper Cuts website: <http://graphicdesignr.net/papercuts/>

the president of Society of Environmental Journalists, calls CNN's decision "disheartening."¹³ Other journalists are also concerned about CNN's decision. Deborah Blum, science journalist and former President of the National Association of Science Writers, is boycotting CNN. Blum comments:

We will only invest our time in news operations, including the one I'm writing for now, which are smart enough to know that informed science coverage is absolutely an essential part of the news of the day.¹⁴

In fact, the four leading science journalism organizations (National Association of Science Writers, the Council for the Advancement of Science Writing, Society of Environmental Journalists and World Federation of Science Journalists) wrote a letter to CNN expressing their concern. The following is an excerpt of their letter to CNN:

The environment, energy technology, space exploration, and biotechnology are crucial ongoing stories that will have growing prominence as a new American president takes office and nations confront a wide range of science-based global issues. As the impacts of climate change intensify, shows like 'Planet in Peril' cannot make up for informed daily coverage of this important issue and other science topics in the public eye. As with political and policy reporting, it is important that the underlying science be covered by journalists with the skills and knowledge to sort out competing claims.¹⁵

In a similar move, NBC Universal cut the entire staff of "Forecast Earth," an environmental program on the Weather Channel, in November 2008. Keith Cowing, who runs NASAWatch.com, explained how he was "shocked that at a time when science and technology should be on everybody's lips, this expertise is suddenly not in demand."¹⁶ The following research confirms that science coverage in the news is in decline:

Research conducted by Cristine Russell of the Shorenstein Center on the state of science journalism estimates that of the 95 newspapers that published special science sections in the 1980s, only about 35 still do so today. If editor enthusiasm is any measure, a reversal of this trend seems unlikely. Only 10% of editors responding to the PEJ survey said they considered science and technology reporting "very essential" to the quality of their news product.¹⁷

The same research reports that 24% of newspapers decreased their science reporting, while only 8% increased their science reporting over that period.

¹³ Brainard, Curtis, "CNN cuts entire science, tech team."

http://www.cjr.org/the_observatory/cnn_cuts_entire_science_tech_t.php

¹⁴ Blum, Deborah, "Why my dog (and I) no longer watch CNN." http://www.huffingtonpost.com/deborah-blum/why-my-dog-and-i-no-longer_b_150857.html.

¹⁵ "NASW joins protest of CNN science unit cuts," <http://www.nasw.org/mt-archives/2008/12/nasw-joins-protest-of-cnn-scie.htm>

¹⁶ Brainard, Curtis, "CNN cuts entire science, tech team."

http://www.cjr.org/the_observatory/cnn_cuts_entire_science_tech_t.php

¹⁷ State of the News Media Report, 2008, Project for Excellence in Journalism, www.journalism.org

Digital Technology (Multimedia)

Digital technology in the media is on the rise. Instead of getting news from traditional sources, such as newspapers or the nightly news, people now turn to websites, podcasts, videocasts, RSS feeds, electronic newsletters, and blogs for often up-to-the-minute headlines. The Naples Daily News, for example, in Southwest Florida, posts stories and updates on their website as they receive the information. Naples viewers can also tune in to Studio 55, the paper's twice-daily "webcast" of local news and features. The Naples Daily News website offers videocasts of classified ads and active blogs, where readers post nearly uncensored comments about the paper's top stories. In fact, the following research suggests that online videos are becoming more popular:

The Pew Internet & American Life Project's first major report on online video shows that, as of March 2007, 57% of online adults had used the Internet to watch or download video, and 19% did so on a typical day. For those with broadband connections at home or work, 74% report having watched video online.¹⁸

The New York Times has an entire section of its website devoted to science called "Dot Earth." Started in 2007, Dot Earth features world-renown science journalist Andrew C. Revkin's daily blog about climate change, renewable energy, and anything related to science. Dot Earth also includes slide shows, videos, and lists of science-related news feeds and websites. Reporting on the environment for the New York Times since 1995, Revkin recently won a John Chancellor Award for "Excellence in Journalism" for his fair and sustained coverage of global warming on Dot Earth. The blog site receives hundreds of hits per day.¹⁹

Anderson Cooper's *Planet in Peril: Battle Lines* documentary has a corresponding interactive website, where viewers can find more information on each segment of the two-hour series, video podcasts, tools for educators, and Vlogs – blog-style video segments from reporters in the field. The CNN Planet in Peril site also includes a new feature called Impact Your World, where viewers can select a current environmental story and then see options for how to help or make a difference in that specific situation.

The Washington Post, published in our nation's capital - the most affluent and educated region of the country – has been investing millions of dollars in online journalism since the mid-1990's. Readers "can join a lively global debate about religious faith, read hyperlocal coverage of a fast-growing Virginia county or watch daily video programs from the digital magazine *Slate*."²⁰

A Northern California public media network, KQED, uses their website to produce a series on science called QUEST. QUEST is described on their website as "a new multimedia series about the people behind San Francisco Bay area science and environmental issues and how their work is changing the way we live."²¹ Web visitors can participate in a Community Science Blog, read

¹⁸ 2008 State of the News Media Report, Project for Excellence in Journalism, www.journalism.org

¹⁹ Bloom, Dan, "Dot Earth Science Blog Wins Journalism Prize for Global Warming Focus," <http://www.rushprnews.com/2008/09/22/dot-earth-science-blog-wins-journalism-prize-for-global-warming-focus/>

²⁰ Gunther, Marc, "Can the Washington Post survive?" *Fortune Magazine*, appearing on CNN.com, July 26, 2007. <http://cnnmoney.printthis.clickability.com/pt/cpt?action=cpt&title=From+print+to+Web%3A+The+W...>

²¹ KQED website: <http://www.kqed.org/quest/>

feature stories from KQED's TV and radio programs, join a Flickr photo group, find a list of Explorations in state parks and local beaches, and access podcasts on how climate change will affect San Francisco Bay, educator guides on water pollution, and even high-tech, Google Earth maps showing local trails and parks.

By late 2007, websites were considered the most important source of news.

At that time, 81% of Americans polled turning to websites for news, followed by television (78%), radio (73%), newspapers (69%), magazines (38%) with blogs rated as the least important news source.²²

Americans spent an average of 11 hours per week online in 2007, according to the Project for Excellence in Journalism's State of the News Media Report. The same survey reported that 37% of Internet users went online for news in 2007, up from 26% in 2002.²³ As of 2007, the most popular news website was Yahoo News (32.6 million unique visitors per month), followed by MSNBC.com (29.2 million), CNN.com (29.1 million), and AOL news (20 million). All four top news sites experienced double-digit growth in 2007.²⁴

"Nearly all local television stations (97%) now have web sites and the majority (98%) include local news," according to 2006 survey data.²⁵ Four out of five editors surveyed said their newspaper and website were part of the same product.²⁶ The trends show a convergence of multimedia in the news.

Partnerships are increasingly important for media outlets. In 2007, ABCNews.com formed a partnership with Facebook, the popular social networking site. MSNBC.com partnered with the New York Times and National Journal, and CBSNews.com teamed up with Digg, an online user-submitted news site where viewers vote for their favorite content.

Blogs

The term "blog" came originally from the term "web log," where journalists would keep track of their work in an informal, online format for other readers to view. Blogs have become extremely popular in the newsroom, as seen in this excerpt from the State of the News Media Report (2008):

Fully 70% of the newspapers participating in the survey run staff-written blogs on their websites, with nearly one-third of those papers now publishing 10 or more. And, interviews with senior newsroom managers suggest the genre is likely to grow further in the future. More than a quarter of those from newspapers with 100,000-plus circulations said they hosted 30 or more staff blogs.²⁷

²² Overview, State of the News Media Report, 2008, Project for Excellence in Journalism, p.12, www.journalism.org

²³ Overview, State of the News Media Report, 2008, Project for Excellence in Journalism, p.10, www.journalism.org

²⁴ Overview, State of the News Media Report, 2008, Project for Excellence in Journalism, p. 11, www.journalism.org

²⁵ Overview, State of the News Media Report, 2008, Project for Excellence in Journalism, p.18, www.journalism.org

²⁶ State of the News Media Report, 2008, Project for Excellence in Journalism, www.journalism.org

²⁷ State of the News Media Report, 2008, Project for Excellence in Journalism, www.journalism.org

St. Petersburg Times reporter, Craig Pittman uses a blog format as part of his science and environment reporting. Called “The Fueling Station,” Pittman’s blog features his responses to the latest developments in renewable energy technology. The Fueling Station blog can be found online at <http://blogs.tampabay.com/energy/>.

As more people turn to blogs as a source of news or news-related information, the *State of the News Media Report (2008)* suggests a possible reason for concern.

Despite—or perhaps because of—their proliferation, these blogs are not getting nearly the kind of supervision or editing of the rest of the newspaper. Over half of all editors and two-thirds of those editing larger papers, said that these blogs were only edited after publication, if at all.²⁸

As stated here, additional concerns with blogs include the accuracy and credibility of information published.

User-submitted Work and Interactive Features

User-submitted work has made websites very interactive. Website visitors can now post comments, photos, or even short stories, poems and artwork to many websites. As stated earlier, reader comments to headline stories are an important feature on the *Naples Daily News*’ website, and are often posted nearly un-censored. Other new, interactive features of websites include *share this*, or *post this* functions for Facebook, MySpace, digg, Twitter, and web browsers, where web users can send or post their favorite news stories on social networking sites. Web users can also now customize their entire web browser, with news updates from RSS news feeds of their choice posting directly to their home page.

Environmental advocacy groups have made interactive features a major focus of their websites. Web visitors can help save the rainforest by joining the “lil’ green patch” application on Facebook. Visitors to the Ocean Conservancy home page are encouraged to send free e-greeting cards with ocean themes to their friends. Most advocacy sites offer visitors an opportunity to take action, make a donation, or purchase items from the store.

As user-submitted work and interactive features become more popular on advocacy websites and others, we can expect to see an increase in these trends on media outlet sites as well.

News Shifts from Product to Service

The news story is no longer a final destination for information. With the advance of technology, viewers or readers can find up-to-the-minute headlines from a variety of sources, and reporting becomes more of a continuous process of “updates” rather than a series of well-planned articles or nightly news reports. As explained in the *State of the Media News Report (2008)*,

Audiences are moving toward information on demand, to media platforms and outlets that can tell them what they want to know when they want to know it.²⁹

²⁸ State of the News Media Report, 2008, Project for Excellence in Journalism, www.journalism.org

²⁹ State of the News Media Report, 2008, Project for Excellence in Journalism, www.journalism.org

The Changing Newsroom

News rooms are becoming places of risk and innovation.³⁰ As stated earlier, editors of *The Washington Post* and other major American newspapers are struggling to stay afloat. Media trends illustrate an increase in hiring of younger, more tech-savvy reporters. In fact, 90% of editors surveyed said multimedia skills were essential in the newsroom.³¹ Marc Gunther, in writing about the Washington Post's survival mode, candidly describes the new newsroom:

Today a small army of bloggers, podcasters, chatroom hosts, radio voices and TV talking heads, as well as a few old-fashioned ink-stained wretches, populates the newsroom at the 131-year-old *Post*.³²

Many newspapers are finding a need for “Mo Jo’s”, or mobile journalists, on their staff. Mo Jo’s carry cell phones, laptops, digital and video cameras with them in order to produce web content and repeated updates quickly. When interviewed for the State of the News Media Report (2008), editors were divided on the value of mobile journalists. However,

The News-Press in Fort Myers, Florida, judged an initial experiment so productive that all the paper’s reporters have since been converted into “Mo Jo’s” with considerable success.³³

The 2008 State of the News Media Report illustrates that these changes in the newsroom do have trade-offs. When asked what newsroom loss has hurt the most, editors reported: “Loss of talent and experience, followed by loss of staff.”³⁴

Local/Hyper-Local News

While traditional journalism and even science journalism are declining, local and now “hyper-local” news are growing. Hyper-local means news that relates to someone’s specific neighborhood or community – a step beyond traditional local news. According to the State of the News Media Report (2008), 62% of American newspapers experienced an increase in community news and 49% of papers increased their state and local news coverage. Smaller papers increased their community news by even more – 67%.³⁵ The Report confirms that editors rely on local news as an essential component of their reporting:

A whopping 97% of editors rated local news “very essential” to their news product—by far the highest percentage of any news category. Even America’s largest newspapers—those with the greatest reach—gave their highest “very essential” rating (94%) to local news.³⁶

³⁰ State of the News Media Report, 2008, Project for Excellence in Journalism, www.journalism.org

³¹ State of the News Media Report, 2008, Project for Excellence in Journalism, www.journalism.org

³² Gunther, Marc, “Can the Washington Post survive?” *Fortune Magazine*, appearing on CNN.com, July 26, 2007. <http://cnmoneyprintthis.clickability.com/pt/cpt?action=cpt&title=From+print+to+Web%3A+The+W...>

³³ State of the News Media Report, 2008, Project for Excellence in Journalism, www.journalism.org

³⁴ State of the News Media Report, 2008, Project for Excellence in Journalism, www.journalism.org

³⁵ State of the News Media Report, 2008, Project for Excellence in Journalism, www.journalism.org

³⁶ State of the News Media Report, 2008, Project for Excellence in Journalism, www.journalism.org

Conclusions

National trends in the media must be considered when reaching out to partner with journalists. This literature and website review supported the decision to design an online Gulf of Mexico Media Center, for Florida's Alliance team - with podcasts, video casts, a photobank, and even a Facebook page to reach out to journalists. The analysis of current trends in the media also helped shape questions for phone interviews and an electronic survey directed at journalists.

See the Recommendations report in this document for more specific ideas about how the Alliance can benefit from this information.

VI. The Gulf of Mexico in the News

Defining “Gulf of Mexico Coverage”

Early in the media needs assessment process, several questions were raised: “What is Gulf of Mexico news coverage?” What does “Gulf-coverage” consist of? Is it anything that specifically mentions the Gulf of Mexico in its story? If this statement were true, then we find numerous stories related to oil or gas pricing, drug cartels, or missing fishermen, as illustrated with the Google News Alert study (see below).

Or is it anything *related* to the Gulf, even if the Gulf of Mexico is not specifically mentioned? If the second statement were true, then all stories about runoff, coastal development, even migratory birds or forestry could be related to the Gulf – but with enough explanation, almost anything could be linked in some way to the Gulf of Mexico, and news coverage becomes difficult to track, analyze and influence.

Hopefully this report will help shape this discussion, and will encourage Alliance team members to further define Gulf of Mexico news coverage.

Google News Alert Results: “Gulf of Mexico”

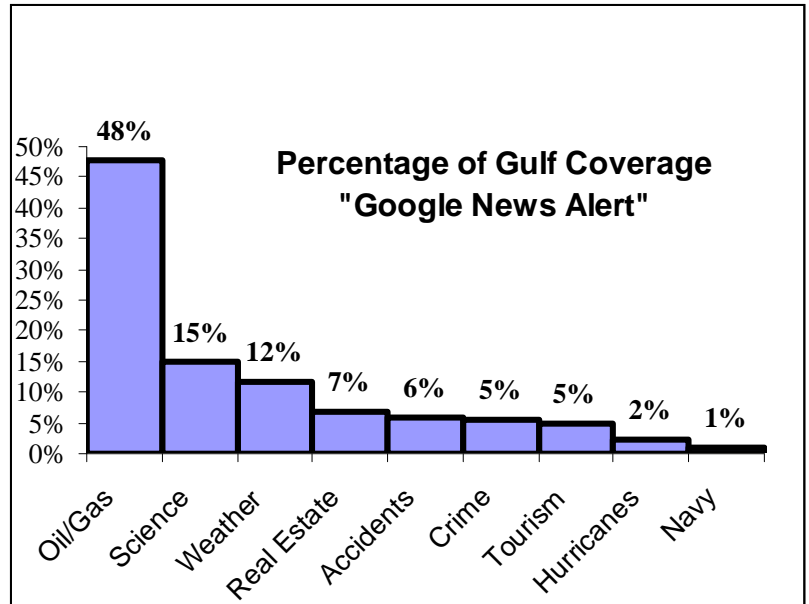
Is the Gulf of Mexico currently covered in the news? *Yes*. Five months of Google News Alerts related to the Gulf of Mexico (10/16/08-2/16/09) were collected and reviewed for the purposes of this report. The free Google News Alert service (found at www.google.com) searches all online media outlets for the key phrase selected, and sends an email list once per day, seven days a week, of all news articles including the designated phrase. For this study, the News Alert service searched the key phrase: Gulf of Mexico.

Nearly 1,000 Gulf of Mexico news stories were categorized into the following topics: oil/gas and energy infrastructure, science, weather, tourism, crime, real estate and development, accidents, hurricanes, and the navy. The daily results included news articles from many different media outlets around the world, including Forbes, MarketWatch, and EnergyCurrent. Most of the Gulf-related news articles found were published in media outlets throughout the Gulf Coast, including the Houston Chronicle, the Panama City News Journal, and the Naples Daily News.

Gulf of Mexico Coverage

Of all news stories related to the Gulf of Mexico, nearly half (48%) were about oil and gas or Gulf energy infrastructure. Many of these were published in the Houston Chronicle, EnergyCurrent, “Energy Industry Today” or business journals. For more information on this topic, the website “Rigzone.com: Your Gateway to the Oil and Gas Industry” actually lists industry headlines and other oil/gas news related to the Gulf of Mexico when sorted by region.

The second most popular category was science, accounting for only 15% of the news stories. “Science” topics included fisheries, the Dead Zone, and anything else related to Gulf science (see list below). When combined with hurricanes (2%), weather (12%) was covered almost as often as science (14% total). If weather and hurricanes were included in the “science” category, science coverage would have increased to 29% - still far below the 48% for oil and gas. Other Gulf of Mexico - related topics combined were covered less than 10% in the news: real estate, accidents, crime, tourism and the navy.

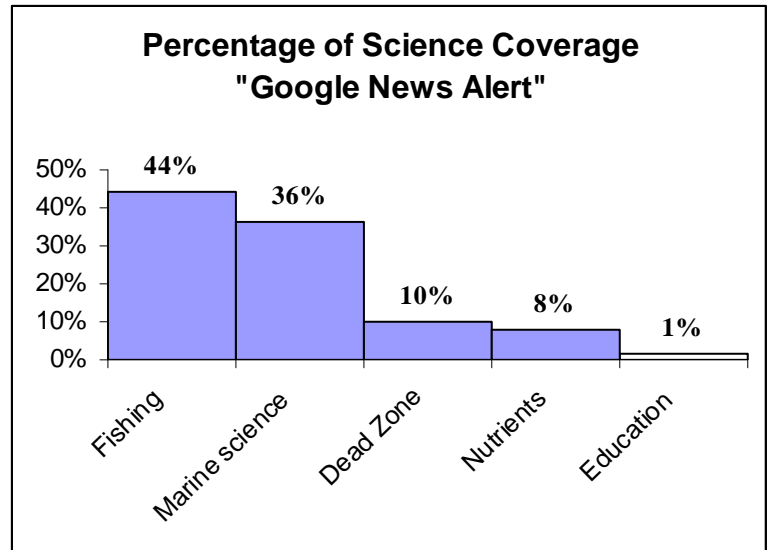


The “Gulf of Mexico” news categories included stories on the following topics:

- **Oil/gas:** Oil/gas exploration, Cuba’s oil interests, drilling results, losses due to damaged Gulf platforms in hurricanes, the drilling debate, 3D seismic surveys, pricing.
- **Weather:** Cold fronts, storms, moisture from the Gulf affecting the rest of the United States.
- **Hurricanes/tropical storms:** Actual hurricane or tropical storm activity, hurricane preparedness, storm surge, barriers and infrastructure, underwater damage, hurricane damage to businesses.
- **Tourism:** History, lighthouses, arts, literature, features on specific destinations, retirees living on their sailboats.
- **Real estate and development:** Parade of Homes, individual home listings, beach lighting ordinances, erosion protection, seawalls.
- **The navy:** Sonar training, accidents.
- **Crime:** Drug cartels, crime in Mexico
- **Accidents:** Missing fishermen or boaters, helicopter crashes, missing cruise passengers
- **Science:** Fisheries, the Dead Zone, nutrients, environmental education, and *marine science*, including topics such as rare bird sightings, climate change, red tide, and marine sanctuaries.

Science Coverage

Within the *science* category, nearly half (44%) of the news stories were about fishing, fisheries management or aquaculture. Thirty-six percent of Gulf-related science stories were categorized into general *marine science*, including the topics listed below in the chart (sea turtles, whale sharks, etc.). Stories about the Dead Zone (10%) and nutrients (8%) were often published in papers “upstream” from the Gulf, such as the Lexington Herald-Leader in Kentucky. The following is an opening statement in their online news article published earlier this year:



Kentucky is a significant contributor to a large dead zone in the Gulf of Mexico, according to the keynote speaker at a weekend conference on water quality.³⁷

Environmental education was only mentioned in two of the stories found (about 1% of the news coverage). Please see the table and graphs below for detailed information.

List of *Science-Related* Stories Found in Gulf of Mexico Google News Alerts 10/16/08-2/16/09 (5-month period)

of Stories Gulf-related Topic

- (62) **Fishing, aquaculture, or fisheries management**
- (14) **The Dead Zone**
- (11) **Nutrients**
- (6) Sea turtles
- (4) Whale sharks
- (4) Migratory songbirds
- (4) Small crustaceans
- (3) Marine sanctuary
- (2) Shipwreck/archaeology
- (2) Erosion
- (2) Killer whales
- (2) Hummingbirds

³⁷ Mead, Andy, “Kentucky said to help feed Gulf area ‘dead zone,’” Lexington Herald-Leader, Kentucky.com, 1/22/09. <http://www.kentucky.com/news/state/v-print/story/667006.html>.

- (2) Drinking Gulf water
- (2) Energy coast
- (2) Red tide research
- (2) **Environmental education**

- (1) Squid
- (1) Jellyfish swarms
- (1) Gulf currents
- (1) Sea level rise
- (1) Comet
- (1) Shark populations
- (1) Deepwater corals
- (1) Watershed group
- (1) “Traveling Tuna”
- (1) Dolphin monitoring
- (1) Rare bird sighting
- (1) Mercury toxicity
- (1) Manatees
- (1) Bald eagles
- (1) Rays
- (1) Climate change

Note: “Marine science” includes all other topics mentioned in the list to the left.

(140) Total number of science-related Gulf of Mexico news stories³⁸ (out of 946)

Note: Gulf of Mexico Alliance mentioned once
 Gulf of Mexico Program mentioned four times

The Google News Alert analysis indicates an emphasis on oil, gas and energy infrastructure in traditional media coverage related to the Gulf of Mexico. Gulf science and weather were the next most popular categories in the Gulf of Mexico news search after oil and gas. As stated earlier, within the category of *Gulf science*, the most widely covered topic was fisheries, which included fisheries management, aquaculture, and actual fishing tips or reports. The general category of *marine science* was the second most popular topic covered within Gulf science, as described in the table above. Many of the marine science stories were about a Gulf species, such as sea turtles, crustaceans, sharks, or rays. Surprisingly, climate change and sea level rise each only appeared once in the 946 stories found. After *marine science*, nutrient pollution and the Dead Zone were the next most popular - appearing in a total of 25 stories.

It is important to keep in mind that even though *marine science* and nutrient pollution made up nearly half of the science news stories related to the Gulf of Mexico, the results of this study show relatively low amounts of science coverage when compared to all news on the Gulf of Mexico. Nutrient pollution and the Dead Zone accounted for 18% of the science stories, but

³⁸ Science-related stories in this list do not include those related to weather, hurricanes or tropical storms, tourism, oil/gas or energy infrastructure, real estate and coastal development, crime, Gulf business, or the Navy. These stories are listed separately in the report.

were only found in 25 out of 946 stories over a 5-month period - just under 3% of total Gulf of Mexico stories in this search.

When interviewed over the phone about the Google News Alert service, Lee Yokel, Coordinator of the Gulf of Mexico Alliance Environmental Education Network, explained she uses the Google News Alert service to track Gulf news. She has the service search “Gulf of Mexico Alliance,” and also “Ocean Science.” Ms. Yokel recalled stories related to red tide, maritime observation systems and earthquakes. She finds the service to be comprehensive and helpful, and a valuable free service in comparison to the sometimes costly clipping services, that pay individuals to review print editions of daily newspapers and cut out anything related to the topic requested. She also commented that the News Alert service is a good way to track what kind of news is actually being published, rather than which press releases have been written. Simply tracking press releases – about the Gulf or about the Alliance – is not an accurate representation of what ends up being covered in the news, said Ms. Yokel.

Ms. Yokel recommended trying different things with the searches, such as putting the key phrase in parentheses to make sure the stories contain the actual key phrase rather than each word separately in the article. This could ensure results more closely focused on the Gulf of Mexico, and could eliminate some of our findings related to oil, gas, and the drug cartels.

Ms. Yokel also suggested trying the Yahoo News Alert service, although she stated that she could not recall a significant difference between the two services.

Other Sources of Gulf News

In addition to the Google News Alerts, a variety of other sources for news related to the Gulf of Mexico were analyzed. Other sources of Gulf news include the Naples Daily News 2003 The Gulf in Peril Special Report, local newspapers not usually found online, information from state and federal agencies, and publications by environmental advocacy groups.

“Deep Trouble: The Gulf in Peril” Series

Deep Trouble: The Gulf in Peril was a 15-day series printed in the Naples Daily News. The series covered topics as diverse as fisheries management, drilling in the Gulf, Superfund sites, and the Everglades Restoration project. The clear conclusion from the series was that the Gulf is, in fact, in peril. Agricultural runoff, pollution, beach closings, overcrowding, and dying fish are at the center of these Gulf stories, as described on the front page of the website:

The Gulf of Mexico is sick. A \$700 million-a-year fishing industry is reeling. Red tide threatens to choke a \$20-billion-a-year tourism industry. Growth and pollution are snuffing out nurseries that sustain sea life. Famous coral reefs in the Florida Keys are devastated. The coastline is sinking. The list goes on.³⁹

The series brought attention to many important issues. The final segment, on Day 15, focused on solutions. The series is now available online at <http://web.naplesnews.com/deeptrouble/deeptrouble.html>.

³⁹ “Deep Trouble: The Gulf in Peril” Series website: <http://web.naplesnews.com/deeptrouble/deeptrouble.html>.

Naples Daily News staff were contacted to pursue the production of a “Gulf in Peril Two” Series, but this project is on hold at this time. A Coastal Characters video documentary of the coastal residents featured in Gulf in Peril, is currently being explored with freelance reporters.

Local Newspapers

Smaller, local newspapers around Florida’s Gulf Coast tend to feature stories frequently in their printed editions about the Gulf of Mexico or a Gulf-related issue. Many of the smaller Gulf Coast towns, such as Carrabelle or Cedar Key, rely on Gulf-related tourism as a primary source of revenue, and include anything from feature stories on local seafood restaurants to updates on water quality monitoring in their news. *The Oyster*, published in Apalachicola, is a newspaper designed to reach visitors and tourists in the Panhandle. This local paper focuses on the coastal environment, marine life, and stewardship messages. This paper does not yet have a website, but expects to offer an online edition within a year.

State and Federal Agencies

Other sources of Gulf News that are not as far-reaching to traditional audiences include the bi-monthly *Gulf of Mexico News* electronic newsletter, produced by NOAA (National Oceanic and Atmospheric Association) for state and federal agencies. The CSO (Coastal States Organization) Report is a weekly summary of coastal legislative news and other events, forwarded to state and federal agencies via electronic newsletter. Many of the entries in the CSO directly or indirectly pertain to the Gulf of Mexico. More information is available on their website at www.coastalstates.org.

The Harte Research Institute (HRI) for Gulf of Mexico Studies publishes an electronic newsletter with updates from HRI scientists and their Gulf-related research. Web site visitors can subscribe to the newsletter for free at www.hartheresearchinstitute.org. The Northern Gulf Institute (NGI) is a cooperative venture between NOAA and Mississippi State University, located in southern Mississippi. The NGI posts Gulf news and events on their website: www.northerngulfstitute.org, focusing primarily on updates from Gulf researchers and scientists.

Florida’s Department of Environmental Protection (FDEP) publishes a weekly electronic newsletter, *The Post*, which features agency-related stories about Gulf water quality, coastal tourism, and other Gulf-related topics in the context of all FDEP News. The US Environmental Protection Agency also publishes a daily electronic news digest for the southeast region.

Advocacy Groups

Environmental advocacy groups are also becoming a source of news, offering news digests on their websites, daily electronic newsletters, and RSS feeds. The Gulf Restoration Network lists Gulf-related news and updates under the heading “hot topics” on their homepage, but press releases listed there are often written by environmental advocacy groups promoting a specific agenda. The Ocean Conservancy also generates press releases that sometimes focus on the Gulf of Mexico. These articles are also written from an advocacy standpoint with the goal of influencing legislation or raising awareness about specific issues, and accuracy and credibility may be a concern.

Gulf of Mexico Alliance in the News

The Gulf of Mexico Alliance was only mentioned once in the stories found in the Google News Alert analysis. However, the Alliance did receive press coverage, during its fourth community workshop in Florida, held in Tampa January 14, 2009. Calendar announcements and a press release were drafted for the FDEP Press Office in Tallahassee to distribute to its Tampa media outlets. The Gulf Restoration Network, a Gulf-wide environmental advocacy group, also held an unexpected press conference the morning of the workshop, claiming that the Alliance was not adequately addressing the issue of climate change in its new Action Plan. The Gulf Restoration Network's press conference resulted in an AP (Associated Press) press release, and at least six separate radio, newspaper, and online news stories on the Gulf Alliance.

Gulf of Mexico Program in the News

The Environmental Protection Agency's (EPA) Gulf of Mexico Program was mentioned four times in the stories found by the Google News Alert over the 5-month analysis period. Most of these stories featured the Program's Gulf Guardian Award winners from around the Gulf Coast.

VII. Interviewing Florida's Gulf Coast Journalists

The Journalists

Ten journalists were interviewed from Florida's Gulf Coast region. Nine were interviewed over the phone, and one was interviewed in person. Journalists represented the following media outlets: *The Key West Citizen Daily* (15-20,000 readers), *The Naples Daily News* (60-100,000 readers), *The News-Press* (Fort Myers) (100-120,000 readers), *The Herald Tribune* (Sarasota) (100,000 readers), *The St. Petersburg Times* (350-430,000 readers), WUSF Radio in Tampa (170,000 listeners), *The Apalachicola/Carabelle Times* (4500 readers), *The Panama City News Herald* (64,000 readers), and Oyster Radio (Apalachicola and Franklin County). Attempts were made to reach the *Pensacola News Journal*, the *Cedar Key News*, and the *Tampa Tribune*, but journalists at these outlets were not available for interview at the time.

Most journalists interviewed were staff or senior writers, and were specifically assigned to cover science or environmental reporting. Journalists had various levels of experience in reporting, but several did mention they were native Floridians and had been covering Gulf issues for nearly twenty years. The journalist interviewed from St. Petersburg recently published a book entitled *Paving Paradise: Florida's Vanishing Wetlands and the Failure of No Net Loss*, and in 2004 won the Waldo Profitt Award for Distinguished Environmental Journalism in Florida.

Interview Questions

Journalists were asked twelve open-ended questions during the brief phone interviews. Eric Staats, of the Naples Daily News, advised that journalists would be more likely to answer a few brief questions over the phone than respond to an electronic survey or commit to an hour-long in-person interview. Mark Walters, of the University of South Florida in St. Petersburg, also advised to keep the interviews brief. The following questions were asked of all journalists:

1. What is the name of your newspaper or media outlet?
2. How many readers or listeners does your media outlet reach?
3. What is your job title?
4. Do you have any science-related training?
5. How do you decide which topics to cover and where do you get your story ideas?
6. How often do you cover stories related to science?
7. Which sources do you use for your science-related stories?
8. Do you ever work directly with scientists for your reporting? Why or why not?
9. Are there strategies in working with scientists that are effective for you?
10. How often do you cover stories related to the Gulf of Mexico?
11. Are there any features in an online “Gulf of Mexico Media Center” that would help you in your reporting?
12. Are there any Gulf-related topics you would like to learn more about?

Science-Related Training

Although most journalists interviewed referred to themselves as science and/or environment reporters, only one of them had any formal academic science training – a reporter from the *Apalachicola/Carrabelle Times* (the smallest media outlet surveyed) has a PhD in entomology. Only one journalist stated that he attended two week-long science and journalism immersion training sessions. One training session he attended was through the University of Rhode Island under a MetCalf fellowship, and the other was through Florida Atlantic University. He said both were intensive science-related trainings for journalists, and were extremely worthwhile. He is considering attending a similar week-long program at Woods Hole, related to ocean science. All of the other journalists have received their science-related training on-the-job, learning as they go.

Deciding What to Cover

The majority of journalists interviewed were specifically tasked with covering science and/or the environment, and generally sought out stories related to those topics. Although they did use press releases for information and story ideas, surprisingly, most journalists cited people (“tips from the community,” “word of mouth,” or “my contacts call me”) as the most common source of story ideas.

Journalists also cited the following sources for story ideas: Florida Fish and Wildlife Conservation Commission (FWC) press releases, email lists, blogs, police scanners, meeting schedules, government decisions, public notices, public hearings, “observation,” “driving around,” “seeing interesting things,” calendars, announcements, public meetings, nonprofit organizations, city and county commission meetings, local fishermen sending articles, and in one case, the Apalachicola National Estuarine Research Reserve staff.

Covering Science and the Gulf of Mexico

Science coverage and coverage related to the Gulf of Mexico varied by region. Most journalists interviewed reported that they cover science at least once or twice per week.

The journalist in the Florida Keys explained that he covers science daily, and talks with scientists on a regular basis, as he lives and works within the National Marine Sanctuary. His science

reporting is mostly focused on the local environment, covering topics such as water quality, whales, dolphins, corals, fisheries, lobsters, and stone crabs. In Panama City, the reporter said he covered science topics at least weekly, focusing recently on groundwater supplies for drinking water, drilling in the Gulf, and the Apalachicola-Atlanta water wars.

The *St. Petersburg Times* reporter was the only journalist interviewed who covered statewide environmental issues. He covers all issues related to the environment, published a special report that has since been published as a book on Florida's wetlands, and co-writes a blog called "The Fueling Station," focused on renewable energy. As stated earlier, he won a prestigious Florida journalism award in 2004 for his reporting on the environment. He said occasionally he writes a "gee whiz" science story, to focus on an interesting aspect of science that readers might not be as familiar with, such as a profile on a specific dolphin species. He said his goal with those stories is to "humanize science."

The reporter from the *News-Press* stated that in addition to covering environmental issues, he also writes about other scientific fields, such as astronomy or even paleontology. One reporter in Apalachicola focuses at least half of his science writing on the local wildlife, including black bears, alligators, bald eagles, and sea turtles. He also writes often about fishing and new regulations, receiving tips and even entire articles from local fishermen. Another reporter from Apalachicola writes a byline called "What's Bugging You?," featuring stories on the local water wars, St. George Island pollution, sewage and water effluent, the human-animal interface, and prescribed burns.

Topics covered by the Panama City journalist specifically related to the Gulf of Mexico include fishing, drilling, diving, beach erosion, and restoration. In Naples, the environment reporter covers issues related to water quality, red tide, fisheries, manatees, and coastal living. In the Keys, Gulf fishing rules, and anything related to the Gulf Fisheries Management Council are the most popular Gulf-related stories covered by the journalist interviewed. The reporter in the Keys also writes about coral bleaching, climate change, and rising sea temperatures, and how those issues affect the local community.

In addition to his state-wide reporting on environmental issues, the journalist interviewed at the *St. Petersburg Times* covers the following Gulf-related topics for his local community: red tide, offshore drilling, hurricanes, and climate change. At Sarasota's *Herald Tribune*, the journalist interviewed covers some Gulf-related stories about sea turtles, the impacts from fisheries decisions, and annual updates on the Dead Zone. The radio journalist at WUSF also covers an annual update on red tide and the Dead Zone, and reports at least once a month on the fishing crisis, offshore drilling, climate change, sea level rise, or other science-related issues. The Fort Myers reporter interviewed talked about covering a large amount of Gulf- and estuary-related news in the 19 years he has been with the *News-Press*. He focuses on red tide, algal blooms, artificial reefs, fisheries, and Florida Bay. He also writes often about water quality in the Gulf, and how Lake Okeechobee pours into their local estuaries, contributing to eutrophication, red tide, and fish kills.

In Apalachicola, two reporters had covered Gulf of Mexico Alliance meetings held there, as well as issues related to red tide and tourism throughout Franklin County. The reporter from Oyster

Radio, also in Apalachicola, covered a great deal of stories on wildlife and local fisheries. Other stories in Apalachicola related to the Gulf included features on overpopulation in coastal areas, loss of biodiversity, and the Coast Guard.

Sources of Information

Journalists referred to press releases and tips from the community to get information on science-related stories. In Naples, the environment reporter specifically mentioned using the Society of Environmental Journalists (SEJ) news service. The SEJ website offers daily stories in a “news digest,” as well as tip sheets and other resources for journalists. None of the journalists interviewed mentioned using a Google or Yahoo News Alert service for story ideas or information, although the Naples reporter did find a majority of his information online.

The reporter in the Keys relies heavily on National Marine Sanctuary scientists for his information. The National Marine Fisheries Service, NOAA, and the FDEP are also valuable sources of science-related information for his reporting.

The St. Petersburg reporter said it really depends on the story, especially since he covers state-wide issues. He refers to the public relations folks at the sugar companies or the South Florida Water Management District staff, legislators, or scientists directly depending on the story. Another reporter in Sarasota uses press releases from NOAA, FWC, or the Fish and Wildlife Research Institute (FWRI) to get more information for her stories.

Quite a few of the journalists cited experts as an important source of information. Apalachicola reporters refer to University of Florida researchers, FDEP or FWC staff, St. Vincent Wildlife Refuge staff, the Apalachicola National Estuarine Research Reserve staff, or other experts. One reporter from Apalachicola also refers regularly to the NOAA website for information. In Panama City, the reporter refers to the local airforce base and local colleges for additional information.

Working with Scientists

Several of the journalists said they work directly with scientists in their reporting. The journalists with the most experience tended to rely more on scientists, as they had developed a list of trustworthy researchers to consult over the years. Also, the reporter in the Florida Keys worked more closely with scientists, as he worked directly within the National Marine Sanctuary.

| Those that do not work with scientists on a regular basis said they occasionally consult with the scientific community for specific technical information or data interpretation.

A strategy that works well for one reporter is to ask as many questions as possible. He advised other reporters not to be shy with scientists. In contrast, two other journalists said they read everything possible on the subject before talking to the scientist, so they go into the interview informed while not asking basic questions.

Online Gulf of Mexico Media Center Features

Florida's Gulf Coast journalists said the following features in an online Gulf of Mexico Media Center would be helpful to them in their reporting:

- Photos, "especially of things we can't get to" (6 journalists)
- Aerial or underwater photos
- Maps (2)
- Charts
- Graphs
- Graphics to illustrate stories
- Contact numbers for officials (2)
- Directory of people to call for each issue (2)
- Raw data (3)
- List of scientists who produced the data
- Scientific information
- Scientific databases
- Statistical information
- Any published studies related to the Gulf, especially those focused on fishing
- Background information
- Consistent red tide updates (in addition to those already out there)
- Story ideas or topics (best to contact journalists directly)
- Articles about fishing, restrictions, new regulations, deep sea fishing
- Quotes from people
- Scientific information or reports that have been digested for reporters, so they don't have to sift through long papers

Topics to Learn More About

When asked, Florida's Gulf Coast journalists said they would like to learn more about the following Gulf-related topics:

- How the current economic situation is affecting commercial fishermen and shrimpers
- Shellfish harvesting rules
- Red tide
- Ocean acidification
- Global warming
- Marine life
- Fishery management issues – specifically related to snapper and gag grouper populations
- Gulf currents – and how they affect pollutants and algal blooms
- Deepwater Gulf issues, including deepwater corals and other species
- Fishing and new regulations
- Sea turtles
- Sea level rise
- Offshore drilling

As a result of this project, journalists received relevant news stories and/or background documents within a day of their interview. Florida's Gulf Alliance Educators will continue to build relationships with these journalists and others around the Gulf Coast.

VIII. Recommendations

Media Strategy

The Google News analysis and literature review conducted in this study indicate a lack of sufficient media coverage on science and Gulf-related issues. The Gulf Coast journalists interviewed in Florida demonstrate a stronger commitment to these topics, but they may be an exception. A more in-depth study around the Gulf Coast would reveal a clearer trend.

This research suggests that the Alliance continue to support media coverage of science and Gulf-related issues. The following steps can also be taken to more effectively partner with the media to raise awareness about the Gulf of Mexico.

Support More Science News Around the Gulf

As traditional science news declines, the Alliance can fill a gap by supporting science news around the Gulf. Creating databases, forums or events for connecting journalists and scientists according to their areas of interest can lead to published stories and improve accuracy. Also providing resources for covering specific Gulf-related topics may be helpful.

As a result of this research, the Florida Alliance Network is now building a Gulf Coast Media Network, to bridge the gap between scientists and journalists. Gulf coast scientists and media professionals will be able to connect with each other through the online Media Center on Florida's Alliance website, finding contact information, areas of interest, and resources for covering specific topics about Gulf science.

Develop Partnerships

Partnerships are increasingly important in the media. As stated earlier, the larger news networks rely heavily on their partnerships to stay afloat in difficult economic times – even with social networking sites including Facebook and Twitter. Florida's Gulf Alliance Educators currently partner with WGPU, the local NPR-affiliate radio station in southwest Florida, to air the *Gulf of Mexico Minute* radio series, and EarthGauge, the environmental information service for broadcast meteorologists, in writing the *Gulf of Mexico Minute* messages.

The Alliance can create partnerships with local, regional or national media outlets or with other organizations, such as Earth Gauge or BLUE Ocean Film Fest to gain access and contribute information. Another successful partnership that could benefit the Alliance is COPUS, the Coalition on the Public Understanding for Science. COPUS is a grassroots organization aimed at engaging sectors of the public in science to increase their understanding of the nature of science and its value to society.⁴⁰

⁴⁰ COPUS website: <http://www.copusproject.org/index.php>

As a result of this research, Alliance team members are encouraged to reach out to media organizations to develop partnerships. Partnerships are an effective strategy for bridging the gap between science and the media, and for reaching a variety of stakeholders.

Support Sound Journalism

The Gulf of Mexico Alliance will benefit from supporting accurate, sound journalism. In the age of financial challenges, a decline in traditional journalism, a decline in science coverage, minute-by-minute multimedia news updates, user-submitted work, and nearly un-edited blogs becoming sources of information, the need for sound journalism is more important now than ever before.

In 1997, editors of America’s top newspapers, television and radio reporters, and nationally-recognized authors formed the Committee of Concerned Journalists to address this problem of “journalism disappearing inside the larger world of communications.”⁴¹ In response to what they saw as serious concerns about their profession, the Committee released nine principles of journalism, and later expanded upon the principles to write a book called The Elements of Journalism: What Newspeople Should Know and the Public Should Expect. These principles, such as reporting the truth and being loyal to citizens, are posted on the www.supportthegulf.org website.

Develop Personal Relationships with Journalists

When interviewed, most of the journalists said they refer to “people in the community,” “their contacts,” or “tips from around town” for their story ideas and information. Developing personal relationships with journalists seems to be an effective strategy for increasing the coverage of Gulf science, and was a primary recommendation for bridging the gap in the 2008 Science and Media Conference in St. Petersburg. This research suggests that Alliance scientists and team members would benefit from reaching out to journalists with phone calls or personal meetings.

Increase Fisheries Information

Both the Gulf of Mexico Google News Alert results and the journalist interviews indicated that fisheries is one of the most important Gulf-related issues for coastal residents, central to both the economic and environmental health of the Gulf. Media outlets will benefit from articles, scientific reports, data, community updates, and photos related to fisheries.

Develop Multimedia Tools

Websites, radio spots, podcasts, Gulf-related films and film festivals, blogs, vlogs, and web videos can all reach journalists and other target audiences effectively. Media trends suggest a multimedia approach is most effective for reaching a broader audience around the Gulf of Mexico watershed, including a younger, more tech-savvy generation.

- **Radio Messages and Podcasts**

As a result of the initial research in this study, 40 *Gulf of Mexico Minute* radio messages were produced for the southwest Florida NPR-affiliate, WFCU. The radio messages are 90 seconds in length, and cover a variety of Gulf-related topics, including manatees, hurricane preparedness, and the National Estuarine Research Reserve system. The radio

⁴¹ Kovach, Bill and Tom Rosenstiel, Introduction, “The Elements of Journalism,” www.journalism.org.

messages, or public service announcements, are also posted as podcasts on the www.supportthegulf.org website, and have had over 350 subscribers at a time.

The series will continue and will be packaged on a CD, distributed around the Gulf, and translated into Spanish (see below).

- **Films**

Films about the Gulf or ocean science are becoming popular. Some are animated short films, such as “Once Upon a Tide,” (<http://www.healthyocean.org>), and others are longer documentaries. A Gulf of Mexico or Ocean Awareness Film Festival could be a valuable tool for raising awareness, as seen with the “Blue Film Fest,” held in June 2009 in Savannah and the “San Francisco Ocean Film Festival,” held in February of 2009.

Free films could also be gathered and distributed around the Gulf Coast for educational purposes, or made available in a list on the website. Gulf-related films could also be shown in popular locations like BassPro shops or Boaters World.

- **Online “Gulf of Mexico” Media Center**

The new Florida website, www.supportthegulf.org, will highlight Florida’s contribution to the Gulf of Mexico Alliance, and may serve as a model for other Gulf States in their public awareness campaigns. A primary target audience for the new site is the media. The online “Gulf of Mexico Media Center” includes some of the following features below, based on the results of this needs assessment. Other features suggested here by journalists can be added to the website in the future.

- Gulf News
- Photobank
- Web casts or videos
- User-submitted work
- Background information
- Raw data
- Contact information – scientists, experts
- Interactive features
- Maps
- Charts and graphs
- Graphics
- Scientific databases
- Scientific studies and reports
- Articles on fishing
- “Digested” scientific reports
- Quotes
- Press Releases
- Vlogs, or “video logs from the field”
- Professional Resources
- Podcasts

Develop Multi-Lingual Resources

Trends in the media show that ethnic media is on the rise and demographics are changing. The following statistics are from the *State of the News Media Report (2008)*:

In 2006, the last year for which numbers are available, ad revenues for Spanish-language papers broke the \$1 billion mark for the first time, hitting \$1.12 billion, a 13% increase.

Weeklies were responsible for the biggest jump — 25%, to \$434 million, from \$346 million in 2005. In broadcast, Univision’s revenues increased 8% in 2007, to \$2.5 billion.⁴²

Developing tools in Spanish, or other languages as regionally appropriate, will be increasingly important for reaching diverse media outlets and underserved and under-represented audiences. Partnering with organizations like the Southwest Florida Latino Environmental Education Network, Telemundo and others, will help the Alliance develop appropriate tools.

Twenty of the *Gulf of Mexico Minute* podcasts have been translated into Spanish and can be made available around the Gulf. The *Gulf at a Glance*, the *Governors’ Action Plan*, and Alliance websites could also be offered in Spanish, or other languages including French, Creole, and Haitian.

Phase Two: Media Needs Assessment

This year-long research has led to important recommendations for how to move forward with media partnerships. However, if needed, Phase Two of this Media Needs Assessment could provide a more in-depth study of how to bridge the gap between science and the media with journalists around the Gulf Coast. Additional survey questions might include an evaluation of the new www.supportthegulf.org website and options for professional development opportunities, such as science and media trainings.

Media liaisons, or public relations professionals from major state and federal agencies, such as Florida’s Department of Environmental Protection (FDEP) Press Office, the Fish and Wildlife Research Institute (FWRI), and the Florida Fish and Wildlife Conservation Commission (FWC), could also be contacted to expand on this research. Many of the journalists interviewed cited these press offices or media liaisons as sources of information for their stories.

Other Tools and Resources

Professional Resources for Journalists

A sample list of professional resources for journalists who cover science and environment issues is available here in Appendix B. These professional resources include websites, annual conferences, education and training opportunities, and daily tip sheets. The initial list of resources is posted on the new www.supportthegulf.org website.

Tips: Writing for Radio

“Tips for Writing for the Radio,” developed during the production of the *Gulf of Mexico Minute* series, can be found in Appendix C and is posted on the new www.supportthegulf.org website. Scientists, educators, and journalists around the Gulf Coast have expressed interest in either reproducing the *Gulf of Mexico Minute* series in their local community, or creating their own.

The *State of the News Media Report (2008)* claims that the radio audience is rising – both for news and other information.⁴³ The research suggests that Alliance team members and journalists could benefit by increasing their use of radio to raise public awareness about Gulf science.

⁴² State of the News Media Report, 2008, Project for Excellence in Journalism, http://www.stateofthenewsmedia.org/2008/narrative_overview_economics.php?cat=4&media=1

⁴³ State of the News Media Report, 2008, Project for Excellence in Journalism, www.journalism.org.

IX. Conclusions

Findings in this document have helped to guide the work plan of the Florida Gulf Alliance Educators and will assist Priority Issue Teams in their work with the media. The findings here will also help to shape tools for the media with the goal of increasing accuracy and quantity of Gulf of Mexico coverage.

In addition to the recommendations listed above and the tools provided here and on the new website, the Alliance may benefit from targeting a younger generation, or thinking about science in a different light. New York Times writer Andrew Revkin offers these comments:

My guess is that until a new generation is engaged in the importance and possibilities of science from the bottom up, science journalists will remain a threatened, if not endangered, species.⁴⁴

| In a recent “DotEarth” blog entry, Revkin adds:

One reason I aimed my third book on the environment (co-published by The Times) at younger readers was in hopes that it might kindle a bit of excitement in science as a journey and adventure, and not a static set of facts.⁴⁵

What can the Gulf of Mexico Alliance do to help make Gulf science a journey and adventure, rather than a static set of facts? Are there ways to influence the media to re-ignite an overall excitement about science? Are there strategies the Alliance can use to make science fun in its public outreach efforts? How can the Alliance support citizen scientists? These questions may be important for the Alliance as it develops an overall strategy to partner with the media and reach diverse audiences.

X. Acknowledgements

Specific thanks go to the U.S. Environmental Protection Agency’s Gulf of Mexico Program and their wonderful support staff.

Thanks again to the following people for your contributions to this project: Tabitha Stadler, Renee Wilson, Bridget Washburn, Lee Yokel, Mark Walters, Rick Plessinger, Eric Staats, Craig Pittman, Will Glover, Tim O’Hara, Kate Spinner, Kevin Lollar, David Adlerstein, Lois Swaboda, and Steve Newborn.

This document may be found online at <http://www2.nos.noaa.gov/gomex/welcome.html>. For more information about this assessment, the grant or its contributors, contact Tabitha Whalen Stadler at tabitha.stadler@dep.state.fl.us or phone 239-417-5310 ext. 209.

⁴⁴ Nuijens, Frank, “Science journalism layoffs are on,” World Federation of Science Journalists, <http://www.wfsj.org/blogs/wfsj/post.php?print=1&id=44>

⁴⁵ Revkin, Andrew C. “Science Journalism Implosion, CNN and Beyond,” Dot Earth, December 4, 2008.

Appendix A: Media Successes and Strategies Results from the Alliance Priority Issue Team Report, 2008

The results in this section will be used to help identify media outreach successes and strategies for replication. During interviews, Alliance Priority Issue Team Members shared knowledge gained through many combined years of experience. This section captures thoughts and ideas stated by interviewees, and provides examples of successful model programs or media outreach strategies.

Water Quality

- An example public website showcases the University of Southern Mississippi's Bacterial Contamination Beach Monitoring Program.
- Produce information such as the "Hill Brief" to inform Congress and the legislature about Alliance events and successes.
- Use www.supportthegulf.org as a "one stop media shop" and link to the Alliance Working Website.
- Lake Pontchartrain Basin Foundation has worked fairly extensively with the media to produce local television ads, press releases and a website.
- An extensive media campaign for the Red Fish Bay State Scientific Area documents efforts to reduce prop scarring with radio, magazine and internet outreach.
- A useful website could be interactive. Scientific information and viewpoints could be posted on a topic and provide the public with an opportunity to respond – how do they view the topic and what concerns them the most about it.
- There is a great need for workshops addressing science translation. Contrasting schools-of-thought make communication with the media difficult. One view is that scientists who advocate for a cause are "biased" and therefore cannot be trusted, and the other is that scientists should communicate what they are learning, even if it is controversial.
- The Department of Health maintains the "Healthy Beaches" website and public beach signage.

Habitat Conservation and Restoration

- Read *Rising Tide* by John Barry.
- Talk with Mark Grunwald, author of *The Swamp* about future media coverage.
- Replicate and get press coverage of Living Shorelines workshops.
- The Coastal Planning and Restoration Act supports community restoration and gives the media an opportunity to cover local communities' restoration projects.
- Start with the local press and expand from there. Learn who will print timely and accurate stories and focus on developing those relationships.
- Include contact information in any press release.
- Alert press about interesting events, such as the "BioBlitz" program, which included 24 hours of biological surveys, guided walks, etc. and was well received by the press and community at Crystal River Aquatic Preserve.

Environmental Education

- “It Takes Two” Jacksonville water campaign.
- “The first 72 are on you!” Alabama Hurricane Preparedness.
- NOAA and Earth Gauge messages will be used in the Smithsonian’s Ocean Hall scheduled to open November 2008.
- The Alliance should pursue television coverage. Earth Gauge has identified 2 stations in FL that will air their messaging at prime time (6 am/pm and 10 pm).

Ecosystem Integration and Assessment

- “Seagrass Status and Trends Report” received widespread media coverage.
- Speak at Saturday markets or fishing tournaments (successful in Tampa).
- Relate health of the Gulf to economics, human health, water supply and quality, saving time, money and the social norm.
- “Scuba-naughts” program received a grant to expand nationwide.

Nutrient Reduction

- “No Wetland, No Seafood” Sea Grant beverage holders.

Community Resiliency

- Pilot tests on the Resiliency Index may be an opportunity for press coverage.
- Create a blog or chat room with the Coastal Resource Center.

Appendix B: Sample Resources for Journalists

The following list is a sample of schools, scholarships, conferences, websites, journals, and others related to science and the media. A full list of professional resources will be available on Florida's Gulf Alliance website (www.supportthegulf.org).

Environmental Journalism Schools

University of Colorado Center for Environmental Journalism
www.colorado.edu/journalism/cej/

The Knight Center for Environmental Journalism

<http://ej.msu.edu/about.php>

- Toolbox at <http://ej.msu.edu/resources.php>
- The Knight Center offers national and international training workshops to professional journalists interested in environmental reporting.

Scholarships and Fellowships

University of Colorado Center for Environmental Journalism: Ted Scripps Fellowships
www.colorado.edu/journalism/cej/

National Conferences

Society for Environmental Journalism Annual Conference

<http://www.sej.org>

2nd US and European Environmental Journalists Summit: May, 2009

http://www.csis.org/component/option,com_csis_events/task,view/id,1659/

[Planeta](http://www.planeta.com)'s Media, Environment and Tourism Conference (November 2001)

<http://www.planeta.com/ecotravel/period/metevent.html>

Media and the Environment Conference: (April, 2007), UC Santa Barbara Campus

Regional Conferences

Society for Environmental Journalism (SEJ) Regional Conferences

<http://www.sej.org>

- "SEJ's regional conferences sprout up wherever enthusiastic and energetic SEJ members join together to organize an event. These events range from three-day sessions including panels and keynoters to simple beer-and-pizza meetings with local experts or policy makers willing to spend a few hours with a handful of journalists."

Environmental Journalism Mini-Conference (March, 2009)

<http://etspj.org/environmental-conference/>

Websites

Real Climate

<http://www.realclimate.org/>

- A commentary site on climate science by working climate scientists for the interested public and journalists. We aim to provide a quick response to developing stories and provide the context sometimes missing in mainstream commentary.
- Invite others to link to their RSS
- Great idea to provide basic information and increase complexity as a teaching tool

UNEP Climate Change Media website

<http://www.ipcc.ch/press/index.htm>

- Press Releases
- Media Advisories
- Reports and webcasts for download

The Environment News Service

<http://www.ens-newswire.com/about.asp>

Not-for-Profit Organizations

The Yale Forum on Climate Change and the Media

<http://www.yaleclimatemediaforum.org>

Environmental Communication Network

<http://www.esf.edu/ecn/>

- The Environmental Communication Network (ECN) is an independent, non-profit, non-commercial educational service. It is housed on the web servers of the [State University of New York College of Environmental Science and Forestry](http://www.esf.edu/), but is independent of the college. The ECN is not a network for simply talking about environmental issues. Rather, it is a network for talking about how communication issues interact with environmental affairs.

Coalition on the Public Understanding of Science (COPUS)

<http://www.copusproject.org/index.php>

- A grassroots effort whose goal is to engage sectors of the public in science to increase their understanding of the nature of science and its value to society. A key objective of COPUS is to create new forums for communication and to develop new opportunities for engaging the public with science.

The International Institute for Environmental Communication

<http://www.envcomm.org/aboutIIEC.htm>

- A non-profit (501c3) organization formed to teach the tools of environmental education and communication. This organization will serve the multi-disciplinary field with information, training, and applications of the strategies, methods and tools of environmental communication.

Journals

University of Colorado: Center for Environmental Journalism Online Journal

<http://www.cejournal.net/>

[Applied Environmental Education and Communication](#)

- Presents the latest environmental developments in the fields of education, communication, social marketing, and journalism

[Public Understanding of Science](#)

Tip Sheets

Society for Environmental Journalism Tip Sheets

<http://www.sej.org>



Appendix C: Tips for Writing for Radio

Compiled by the Florida Gulf Alliance Educators, 2008
Gulf of Mexico Alliance

➤ Use Simple Sentences

- Stick to one subject and one verb
- Be sure the *first* sentence is simple
- (Subject) + (verb) + (object) + ...
 - Example: “(The White House) (denies) (the charge).”

➤ Answer Important Questions

- Who, what, when, where, how, why
- Answer the most important for radio: why and how
- Identify all pronouns
 - Who is “he?”, “they?”

➤ Use Active Language

- Avoid passive voice
- Include subjects doing things
- Do not waste time stating object’s existence
- Avoid: “There is, there are”
- Never use past tense
- Rewrite story for current situations

➤ Write a Great Lead

- Start with simple sentence
- Focus on future event
- Start with a person, personal story, or illustrative account
- Include something listener can relate to and understand

➤ Beware of any Bias in Original Material

- Stick to the significance of the story
- “Play it straight”

➤ Do Not Repeat Words or Phrases

➤ Use Vivid, Descriptive Language

- Use active adjectives
- Avoid words that are too flowery

➤ Write in the Positive

➤ Avoid These Words:

- Furthermore, however, there is, there are
- Negative words: no, not, don’t, doesn’t, won’t
- Any form of “be”: is, am, are, were, will be, have been, being
- “Get”, Adverbs (ending in -ly), that, which, common clichés or overused phrases



Six Steps to Effective Public Service Announcements (PSAs):

Adapted from “Six Steps to Effective PSAs”, by Craig Miyamoto, APR
Compiled by the Florida Gulf Alliance Educators, 2008
Gulf of Mexico Alliance

1. Compel Audience to Listen

- Relate to their lives
- Show them why they need your organization

2. Empower Listener to Take Responsibility

- Provide facts
- Educate for a general public audience

3. Make Every Word Count

- Focus every word on selling your idea or suggestion
- Talk to your audience, not at them
- Stick to one idea / have a single core message

4. Play with Listener’s Emotions

- Use humor sparingly
- Use 11 psychological appeals:
 - Sensory, appetite, security, acquisition, well-being, attractiveness, threat, humor, convenience, curiosity, ego
- Appeal to basic needs (shelter, food, clothing, love)
- Use appeals to psychological needs, basic needs *honestly*

5. Register Name of Organization

- Establish name of organization, repeat 3 times for 60-second PSA

6. Call for Action

- Motivate listeners to change behavior

References:

1. “Understand Media:” www.understandmedia.com/art028.htm
2. “Six Steps To Effective PSAs,” By [Craig Miyamoto](http://www.geocities.com/WallStreet/8925/writepsa.htm), APR, Fellow PRSA:
www.geocities.com/WallStreet/8925/writepsa.htm
3. KDRT.org, “Media Literacy”: <http://www.kdrt.org/node/223>