# How to talk science to the public (or how *hypoxia* became dinner conversation)





#### The Issue:

*Transforming science into a story that speaks to the public* 

How do you communicate about an important scientific study that shows that efforts to improve the Chesapeake Bay are starting to work?





### The starting point:

#### Scientific study:

Long-term trends in Chesapeake Bay seasonal hypoxia, stratification and nutrient loading.

#### Main finding:

By analyzing a 60-year record of hypoxia, stratification and nutrient loading in the Chesapeake Bay, the team found that the longterm trend in late July hypoxic volume has been fairly constant or decreased slightly since 1984, and this decrease correlates to a reduction in the amount of nutrients entering the bay.





#### Sometimes science is a foreign language

How do you "translate" science into a language the public will understand?

How do you figure out what is newsworthy?

Learning how to tell the story can have a big impact on public perception and government policy.

A few things to keep in mind...







#### Is this news?

Understand the science. Talk to researchers and educators.

Research the topic online/newspaper/ magazines to see what has already been reported.

What is the impact of the science?

What does this research impact people's lives?

How does this research support public policy?

What are the implications?





# 2

# Communicate it so the public can understand.

*This is a line from the study:* A previously observed shift in the relationship between Chesapeake Bay hypoxia and nitrogen loading has pressing implications on the efficacy of nutrient management.



# This is how to explain it scientifically.

A new study of long-term trends in the Chesapeake Bay suggests that nutrient reduction efforts over the past two decades appear to be making an impact on the health of the bay.

## This is how to explain it to the public.

Efforts to reduce the flow of fertilizers, animal waste and other pollutants into the Chesapeake Bay appear to be giving a boost to the bay's health, a new study that analyzed 60 years of water quality data has concluded.



# 3

# **Empower the public**

The message will stick if people have learned something they can share.

Not only communicate, but educate. Give background to help the public understand.

Explain the issue and its consequences.

Quote an expert who can put the science in context.







# Does it pass the grandmother test?

Tell the story in a way that your grandmother would understand.

Don't assume that the public has a science background.

Use simple language and explain unfamiliar terms.







# Think positive

Give too much bad news and the public will give up.

Be honest, but look for good news in the story.

Explain why this science makes a difference to the public.





#### Outcome:

#### A decline in dead zones: Study shows efforts to heal Chesapeake Bay are working

Story picked up in more than 50 news outlets, including United Press International, Associated Press, Yahoo News, Washington Post, and local TV and radio stations.

Finally, some good news: Shrinking dead zones linked to nutrient reduction

Chesapeake study offers hope for controlling nutrient pollution

Chesapeake dead zones return to life

Chesapeake Bay shows signs of recovery

Two years later, it is still being referenced in articles about the health of the Chesapeake Bay and decisions about policy



#### Science makes an impact when the story speaks to the public

Starting point: complicated scientific study dealing with models, data, and long-term trends

*Challenge:* Tell the story so a wide audience will understand its impact



Science supported efforts to clean up the Bay and proved they were working

Educated the public about Bay science and influenced public opinion

Study is still referenced in conversations about Bay clean-up



Amy Pelsinsky Director of Public Relations University of Maryland Center for Environmental Science 410-330-1389 apelsinsky@umces.edu