

Speech honoring Dr. JoAnn Burkholder for receiving The River Network Jim Compton Life Time Achievement Award in Cleveland Ohio on May 4th 2008.¹

As I sat in the audience last year watching all the wonderful River Hero candidates receiving their awards, I realized Dr. JoAnn Burkholder simply had to be on stage with the 2008 River Hero's. We had recently found out that scientist from NOAA in Charleston S.C published a paper on Pfiesteria Toxins, which unequivocally validated Dr. Burkholder and her colleagues' research on Pfiesteria. For ten years, she endured personal attacks and multiple attempts to discredit her research, but last year Dr. Burkholder was finally vindicated.

Her research linking Pfiesteria toxins to massive fish kills, nutrient pollution and human illness led to hundreds of millions of dollars in water quality improvements and additional scientific research for the Neuse River and other coastal estuaries. Her amazing discovery was the topic of a New York Times best selling novel "*And the Waters Turned to Blood*" by Rodney Barker. It highlighted a culture of corruption between the swine industry, NC state law makers and NC environmental regulatory agencies who attempted to down play pollution problems in eastern NC rivers and coastal estuaries for special interests who profit from polluting public waters.

More importantly, her research alerted the public about serious human health risks Pfiesteria posed (such as respiratory problems and damage to the central nervous system). The numerous beach closings, bans on fishing, and the thousands of children at summer camps kept from recreating in the Neuse River in the mid 1990's likely prevented mass illness and unnecessary public exposure to Pfiesterias' dangerous neurotoxins.

At the time, this was an extremely unpopular position with the tourism industry, commercial fisherman and NC public health officials, but she never wavered in her position that pollution from agriculture runoff and waste water treatment plants was causing massive fish kills and making people on the water sick.

But rather than being hailed as a hero, her research was strongly criticized. US Congress directed more than \$80 million for Pfiesteria research, much of which went to scientists who had never studied Pfiesteria (or dinoflagellates) and who questioned its ability to produce toxins and cause fish kills or human illness.

From 2002-2006, detractor scientists published three separate papers and press releases announcing that toxic Pfiesteria doesn't exist. The media seized on these new discoveries. Some scientists accused her of fraud. Their attacks were covered in the New York Times, Science and other media outlets. They squandered millions of dollars of taxpayer money and research, damaging the laboratory and reputation of a great scientist and an important ally to river protection.

¹ Written and presented by Upper Neuse Riverkeeper Dean Naujoks. Supporting information provided by Rick Dove and Eddie Scher of Waterkeeper Alliance.

In many ways, Dr. Burkholder is the Rachel Carson of our time. They both shed important light on man made induced pollution that was impacting human health and causing major ecological damage. Their scientific research was discredited and their character attacked. Dr. Burkholder, like Rachel Carson was labeled as a hysterical, irrational woman who was making uninformed observations based on emotion rather than sound science. Millions of dollars were spent trying to debunk their research. But in the end, their research was proven to be valid. Good science eventually prevailed, leading to important scientific discoveries and improvements in environmental protection.

Dr. Burkholder's recent validation has led to public apologies from reporters and scientist who now recognize the importance of her research and heroism in standing up for good science, but in our opinion these recent apologies are not good enough. It is not enough to justify the loss of important scientific research and causing years of delay in progress to better understand how this toxin causes fish death and human illness. Quite frankly, it is shameful to me that good scientists like JoAnn could be treated so poorly for simply speaking the truth when the general public relies on science to understand the truth.

JoAnn I just want you to know I believe in you and there are a lot of people in this room tonight who believe in you as well. I also want you to know I am sorry. I am so sorry we could not do more to help you the way you have helped my organization and so many others, but I have always believed your contribution to science, to our environment and to all of humanity would one day be recognized. My hope is the award you are receiving tonight will be the first of many awards, grants and research funding that you rightfully deserve so that you can continue your great work.

Ladies and gentlemen, please stand with me for my friend, my River Hero for tonight's Jim Compton life time achievement award, Dr. JoAnn Burkholder.