



**Prize Winner**

# Science Writing

## Year 7-8

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**St John's Grammar School -  
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# COVER PAGE

## Scientific Writing – Environmental Justice

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### Glossary:

**Pulitzer Prize:** An award for an achievement in American journalism, literature, or music.

**PCB:** Poly-Chlorinated Biphenyls, are industrial products or chemicals. The most commonly observed health effects in people exposed to large amounts of PCBs are skin conditions such as acne and rashes. Studies in exposed workers have shown changes in blood and urine that may indicate liver damage. PCBs have a range of toxicity and vary in consistency from thin, light-colored liquids to yellow or black waxy solids.

**Sociologist:** An expert in or student of the development, structure, and functioning of human society.

**Precept:** A general rule intended to regulate behaviour or thought.

### References:

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# Environmental Justice (Information Report)

My name is Jesse Obst, I am a year 8 student at St John's Grammar School, and the topic I have chosen to write about is 'Environmental Justice'. I must admit that when I chose this topic I did so because of my passion for the outdoors and wildlife generally. I really enjoy wild camping, cross-country running with my dog, and a variety of water sports, so I am concerned about the environment that we live in. I first thought that 'Environmental Justice' was all about protecting the environment from damage caused by humans whether by littering, deforestation, or pollution. But the more I researched the topic, the more I realised how far-reaching and how extremely important 'Environmental Justice' truly is...

During my research, I came across a webinar<sup>1</sup> discussion hosted by 'National Geographic' entitled 'Environmental Justice: Running Dry' that was held on the 27<sup>th</sup> of September 2022, moderated by Naveena Sadasivan, a Pulitzer Prize recognised Environmental Journalist. This panel discussion opened my eyes to the true meaning behind 'Environmental Justice', which was far more enlightening than I anticipated.

In this webinar, the speakers spoke of many concerns. The key points that arose which emphasize the importance of the topic are: "we have waited long enough; we are approaching the tipping point; extinction is just around the corner; this should be a wake-up call; humans need food, water and air to survive; communities are being poisoned; people are drinking bottled water, because of health concerns; we can't wait for the government; we need to initiate, mobilise and come together; key issues need to be addressed, not ignored; people think that the environment is not an everyday issue and just something 'over there'". All the points made were reasonably justified and should be more widely recognised by the global population, as they are increasingly widespread concerns that are increasing in frequency and becoming worse as the years advance.

Perhaps the most controversial of concerns relates to inequality. In many locations across the globe, minority groups have far too often been ignored or suppressed when it comes to exploiting natural resources that favour governments, multinational corporations and wealthy individuals. It is evident in America and Australia that historical neglect of first nations people has disadvantaged society and the environment in which they live. I quote the following statement from the *US Environmental Protection Agency (EPA) website*<sup>2</sup>: "*Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, colour, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.*"

In other words, Environmental Justice ensures that "all" people have a right to be protected from environmental pollution, and to live in and enjoy a clean, safe and healthy environment. I additionally quote from the *Environmental Justice Australia website*<sup>3</sup>: "*We use the law to protect nature and safeguard our climate. We support First Nations people fighting for Country and Culture. We empower communities to put justice at the heart of action. We run landmark court cases and legal interventions to hold power to account.*"

In summary, Environmental Justice is the regulation of laws to protect both nature and people's well-being and also to regenerate nature in the case of adverse human intervention. This process helps promote sustainability, which can only help in humanity's struggle against climate change, because climate change results from non-sustainable actions that threaten the environment and human livelihoods. It is evident that Environmental Justice is extremely important because it preserves a healthy environment to ensure that societies maintain what they need to survive – clean water, an abundance of food, and fresh air. Because without these things, life on Earth cannot continue to exist.

I have therefore learned that Environmental Justice not only involves preventing pollution or littering and mitigating humanity's damage to natural ecosystems but is implemented through laws and policies that everyone should follow if we wish to achieve a clean and sustainable environment for generations to come. My next task was to understand how such a global movement first came about, and why it's so important.

The concept of Environmental Justice originated<sup>4</sup> in Warren County, North Carolina in 1984 because an African American group was chosen to host a hazardous waste landfill. This landfill contained PCB-contaminated soil that came from the illegal dumping of toxic waste along roadways. Robert Bullard (Sociologist) spent four decades since making the case that these environmental harms have disproportionately affected Black communities across the US.

Robert Bullard found out that 14 of the 17 industrial waste sites in Houston, Texas are responsible for more than 80 per cent of the city's waste tonnage which were placed in black neighbourhoods, even though only a quarter of

Houston's population is Black. Robert Bullard's findings were the first to systematically show that environmentally harmful infrastructure was more likely to end up in places where minority populations lived.

A group of residents and activists living in Warren County, North Carolina, gained national attention when they resisted a proposed waste facility that planned to store 60 thousand tonnes of PCB-contaminated soil. At the time, Warren County had the highest percentage of Black residents in the state, and when the contaminated soil began to arrive at the site, more than 500 protesters emerged to resist it, lying on the road to stop the dump trucks. Even though they failed to stop the dump trucks from burying the contaminated soil into the site, the news of their efforts to stop the trucks shocked Black leaders, community members, and researchers across the country. This prompted them to ask if there was evidence that toxic waste disposal sites were more often placed in minority communities.

The following year, a federal report confirmed what Bullard had shown in Houston: Black communities in the south were home to a high percentage of waste sites. In 1990, researchers and activists gathered in Detroit to discuss the recent studies and the enraging implications. Then the next year over a thousand people attended a conference in Washington, DC, and at that meeting, they drafted out their 'Principles of Environmental Justice' which were 17 precepts that could be used to guide the growing research, activists and policy movements. In 1992, the EPA officially defined "Environmental Justice" and established an office dedicated to it, and in 1994, President Bill Clinton issued an executive order for all government agencies to consider Environmental Justice in their decisions.

*Ironically, the need for Environmental Justice especially in consideration of social minorities appears to be widespread. A not-too-dissimilar situation is apparent here in South Australia<sup>5</sup>. After 40 years of different governments talking about a national nuclear waste facility, the Morrison government chose a site near the town of Kimba in South Australia. But the local Barngarla people are united against the plan, and have vowed to keep fighting to stop it happening. The federal resources minister, Madeleine King, said the waste "cannot continue to build up" and she would continue to work with the Barngarla people to protect the cultural heritage of the site and deliver economic benefit to the traditional custodians. The Kimba site was announced after an Australian Electoral Commission ballot found the majority of the people in the council area were in favour. However, that ballot did not include Aboriginal people who count the area as part of their traditional lands.*

It seems that the push for Environmental Justice has really only just begun. President Joe Biden<sup>6</sup> recently signed an executive order to advance Environmental Justice efforts. The executive order, "*Revitalising our Nation's Commitment to Environmental Justice for All*", will affect multiple federal agencies. Importantly orders are to be granted to prevent disproportionate environmental and health harms for underserved communities, including pollution and climate change.

This was promptly followed by the U.S. EPA<sup>7</sup> announcement of proposed federal baseline water quality standards for water bodies on Indian reservations that do not have Clean Water Act standards, ensuring protections for over half a million people living on Indian reservations as well as critical aquatic ecosystems. "*President Biden has made it clear; all people deserve access to clean, safe water. Today's proposal is a monumental step forward in our work with Tribal governments to ensure precious water resources are protected,*" said EPA Administrator Michael S. Regan. "*Establishing federal baseline water quality standards, and implementing them in consultation with Tribal governments, will help support Tribes' interests in protecting and improving waters that are essential to thriving communities, vibrant ecosystems, and sustainable economic growth.*"

When I first heard and understood the potential effects of climate change I was just seven years of age, and I do remember being quite disturbed by the consequences of rising sea levels and flooding of homes. But what I have since found is even more disturbing. It is evident from scientific studies<sup>8</sup> from around the world that human activity has been responsible for widespread damage to the natural world. Since the dawn of civilisation, humanity has caused the loss of 83% of all wild mammals and half of plants, even though human beings represent just 0.01% of all life on Earth.

In conclusion, my research into Environmental Justice has led me to understand the importance of using the law to protect and defend nature as well as affected minority groups. Environmental Justice is essential if we are to protect and regenerate vital ecosystems from destruction. Environmental Justice needs to be at the heart of everything we do. Regardless of where you live or who you are, all people should be granted fair treatment when it comes to environmental considerations. Environmental Justice means that everyone should have clean air and water, and be able to live in a healthy, natural Environment.

**Word Count: 1610**