**Environment and Cultures: Take-Home Midterm**

Tejas Kamtam, 305749402, Section 1D

1. **What is the difference between the Holocene and the Anthropocene?**  
   Crutzen describes the Holocene using Lyell’s definition from 1833 as the past ~11,000 years of the “post-glacial geological epoch” of the little ice age in which humanity has developed technology to alter the Earth geologically. On the other hand, the Anthropocene (the age of humanity) is a widely debated term designed to signify the period of geological history in which humanity has had a significant impact on the environment around the world. There are many viewpoints for the turning point from as far back as 8,000 years ago with the innovation of agriculture and as close as the 18th century with industrialization (Prof. Heise has stated she prefers to use the term to refer to the boom of the 1950s following World War 2). The difference ultimately comes down to the magnitude of geological change as the Holocene points to the post-little ice age, while the Anthropocene points to the effects of significant human industrialization and innovation (farming, manufacturing, globalization, etc.).
2. **Please describe one aspect in which John Muir’s view of nature and that of the Native Americans interviewed in *Tending the Wild* differ from each other.**The significant difference in Muir’s perspective of nature and Native Americans (as told by the *Tending the Wild* broadcast) is humanity’s relationship with nature. Muir viewed the natural, sublime landscapes of the Sierra, and more general nature, as God’s creations separate from civilization and meant to be observed as an escape from society and industrialism, while Native Americans view nature as an integrated part of humanity that requires cooperation to maintain. The mainstream ideology is that Native Americans view nature as a garden in which we live and requires actions to prevent ecological destruction with methods such as “cultural burning” to release nutrients back into the soil and water back into the rivers and forests. Muir, on the other hand, describes the Sierra in *My First Summer in the Sierra* as an escape from society, and his efforts in conservationism reflect this view of nature as some exhibit to be observed, experienced, and then left alone.
3. **Briefly explain why Rachel Carson, in her book Silent Spring, compares environmental toxins to radioactive fallout.**Carson makes the similarity to emphasize the inescapable and indiscriminate nature of chemical pesticides and DDT – as pesticides seep into the soil and waterways just as radioactive fallout does – in a manner and significance that her post-WW2 readers can better understand. Particularly, Carson uses the analogy to point out how chemical pesticides imitate radioactive fallout by the symptoms they induce in the environment, organisms, and human beings, including “nausea, vomiting, chills, fever, extreme fatigue, and coughing” (Carson, 157) – which we have now come to learn to be symptoms due to carcinogens.
4. **Why does Jennifer Price include sections entitled "River Interlude" in her essay "Thirteen Ways of Looking at Nature in L.A."?**  
   These interludes help to facilitate an understanding of how important the claims made in previous sections really are. For example, the “First River Trip” interlude helps to emphasize how greatly LA residents disassociate with nature as a part of their lives through the “removal” of the LA River by the Army Corps engineers and its transformation into “LA’s grand sewer” (Price, 229) from a once magnificently large river enough to create a “megalopolis” of an ecosystem in its basin. Similarly, the “Second River Trip” interlude expands on the idea of LA as a fairly dirty place by considering the LA River and its filth once again. Price, in this interlude, describes the extensive process of cleaning the river, including greening the riverbanks, removing the concrete, and limiting the pesticide dumping – all in order to emphasize the transformation of LA into a dirtier and dirtier place over time.
5. **How is environmental racism related to environmental justice?**  
   Environmental racism is a core aspect of the environmental justice movement as it pertains to environmental policy and lawmaking “that differentially affects or disadvantages individuals, groups, or communities based on race or color” (Bullard, 98). Bullard’s *Dumping in Dixie* describes an excellent example of how the environments around mostly black neighborhoods are much worse off in pollution, habitats, and well-being due to the disproportionate construction of city sewage treatment plants and near black neighborhoods compared to their white counterparts of similar socioeconomic standing. Issues of environmental racism like these inhibit activists of the environmental justice movement to achieve true distributive, participatory, and procedural justice due to unfair lawmaking and unacceptable enforcement practices which encourage the creation of environmental distinctions due to certain human perspectives of race, ethnicity, gender, and socioeconomic status. Ultimately, environmental racism leads to the lack of equal access and, consequently, availability and appreciation of nature that the environmental justice movement strives for.
6. **Briefly compare the way in which Kyle Powys Whyte envisions the relationship between science and Indigenous knowledge to how Robin Wall Kimmerer sees it. Name at least two aspects in which the writers converge or conflict.**Both Whyte and Kimmerer agree on the value of indigenous knowledge and its accuracy to be representative of what we scientifically derive to be the truth. For instance, Whyte states that the scientific practices to increase the lake sturgeon population were shared by the ideas prompted by the assembled cultural context group, just as Kimmerer’s note of his ancestors knowing that the plants talked to each other was verified by the discovery of plant pheromones transmitted by winds. However, from a literary standpoint, Whyte and Kimmerer diverge on the idea of settler science and indigenous knowledge cooperating to advance each other. Whyte explicitly states that settler societies’ science and indigenous knowledge can work together to “reconcile… and hold each other accountable” (Whyte, 209), whereas Kimmerer, for nearly every section, follows a pattern that describes a “settler science” quelling indigenous knowledge (e.g., Asters and Goldenrod) only for later science to agree with the ancestral knowledge suggesting that indigenous knowledge is almost always a certainty that modern science only discovers until later (a one-sided advancement rather than cooperation as suggested by Whyte).