

Water Quality and Indigenous Knowledge

Essay Assignment

Utilizing the outcomes of the above group discussions, work with your group to come up with a short (~300 words) statement answering the following questions:

- What role could Indigenous Knowledge play in the management decisions relevant to the above community?
- How might scientists better benefit the communities they work with given the reading (David-Chavez and Gavin 2018) and case study?
- Why is direct collaboration with communities important for ecology, monitoring, and forecasting?
- Finally, think about the environmental issues facing your community. How could increased community input surrounding ecological decision-making benefit your community?

Rubric for evaluation of writing assignment

	0: No evidence	1: Below proficient	2: Emerging proficient	3: Proficient	4: Advanced
The impact of Indigenous Knowledge	No mention of Indigenous Knowledge or its relationship to management	Understanding of Indigenous Knowledge has substantial errors or does not describe its effect on management	Discusses the role of Indigenous Knowledge with some grasp but misses details or lacks specificity	Discusses the role of Indigenous Knowledge with a thorough grasp and minimal error	Discusses the role of Indigenous Knowledge thoroughly and with a strong understanding of its impact
Scientist community engagement	Does not discuss how scientists can better engage with communities	Does not understand the potential problems with lack of community participation	Demonstrates a vague understanding of community participation, does not reference specific qualities	Discusses multiple levels or qualities of community participation, but may lack detail or contain some error	Shows a thorough understanding of the reading and case study, referencing specific parts of both and drawing new connections
Community participation and forecasting	No mention of community participation or forecasting	Only discusses one component of participation and forecasting, or contains significant misunderstandings	Relates community participation to forecasting and discusses either the scientific impacts or ethical impacts but contains error	Relates participation and forecasting both in terms of scientific and ethical impacts but lacks detail	Thoroughly relates participation and forecasting ethically and scientifically with reference to the reading and case study
Community response	Does not talk about their community or its environment	Makes little effort to discuss potential environmental issues and solutions	Mentions an environmental problem and a brief solution with no depth or relation to the reading or case study	Clearly explains an issue in their community and how increased participation could be beneficial	Fully explains an issue and its link to participation, with specific positive impacts identified for the community