**Discussion Questions on *Downriver: Into the Future of Water in the West***

* What are the key takeaways from Hansman's journey down the Green River regarding the current state of water management in the West?
* How does Major John Wesley Powell figure into this story?
* What are the major factors driving water scarcity in the West, and how is climate change exacerbating these issues?

Water Allocation and Rights

* Where does most of the water from the Green River go? To what users? What are your thoughts on this?

Agriculture and ranching use 90% of the water in Wyoming, and around 80% elsewhere. It doesn’t add much value to each state’s bottom line, but farmers and ranchers have the oldest and most senior water rights.

* What are the different types of water rights, and how do they create conflicts between different water users?

Doctrine of Prior Appropriations states that whoever was first able to put the water to beneficial use is entitled to primary rights. “If you don’t use it, you lose it.”

Colorado River Compact of 1922 (the Law of the River). Upper Colorado River Basin Compact which mandates how much water must end up downstream. Colorado gets 51.75 percent of the water; Utah gets 23 percent; New Mexico gets 11.25 percent; and Wyoming gets 14 percent. Colorado Basin Roundtable was formed to bring the region’s perspective to the table.

The state or the federal government can control water rights. Rights are considered private property in Colorado, and public property that users are entitled to lease in Wyoming. In Utah they are administered by the state, and they are tied to the land and to beneficial use.

* How does the "senior water rights" system function, and what are its implications for water distribution during drought periods?

Tribal water rights have seniority in the Colorado Basin and could be put into use at any point. Junior rights holders who depend on the river live in fear of senior right holders cutting off their supply if there’s not enough to go around. The current infrastructure and legal and social structures for water management are based on hard numbers and a range of relatively consistent flows, even though that’s not how the river runs. Global warming is already changing those flows.

Impacts on Communities and Ecosystems

* Discuss the potential social and economic consequences of dwindling water supplies for communities in the West.
* How does reduced river flow affect the ecosystems along the Colorado River, including native fish species and riparian habitats?

Potential Solutions and Policy Considerations

* What are some proposed strategies to address water scarcity in the West?

 Water conservation measures, improved irrigation practices, and water pricing mechanisms.

* What was John Wesley Powell’s idea?

Self-government by hydrographic basins.

* How can policies be adapted to account for the growing impacts of climate change on water availability?

Personal Reflection

* What did you learn that you didn’t know before?
* Who was your favorite character that Heather met during her journey down the river?
* What are your thoughts on the balance between individual water usage and broader policy changes in addressing water scarcity?
* How can individuals make informed choices to conserve water in their daily lives?
* What are the ethical considerations surrounding water management, especially concerning the needs of vulnerable communities?