

## Challenges within the industry of environmental conservation

How much do you care about the future health of the planet and the human population that lives on it? With the changing climate and the current issues we face environmentally as a society, it is becoming more and more crucial to shift our focus and address these problems. My mentor Brennan Blue understands the severity of this issue and is combating it by working for a non profit organization called Great River Greening that focuses on the conservation of the environment throughout Minnesota. He has worked in this field for 15 years and has run into three major challenges, a changing climate, a loss of urban tree canopy and maintaining conservation efforts.

In the environmental conservation industry, one of the foremost challenges revolves around habitat restoration efforts, particularly in navigating the increasingly unpredictable impacts of climate change. With severe droughts becoming more frequent and intense, planting and habitat restoration initiatives face significant hurdles. Many conservation organizations don't own the land they work on, relying instead on partnerships and assistance, which limits their control over crucial resources like water. In regions where rainfall was once predictable, the absence of rain, coupled with record-breaking heat poses unprecedented challenges. Without reliable access to water, conservation projects risk faltering, leading to wasted resources and lost investments. The dilemma of whether to scale back operations or persist in the face of uncertainty becomes a pressing question, highlighting the profound difficulties in planning and executing conservation efforts amidst a changing climate.

The next challenge the industry faces is tree loss, particularly in Minnesota concerning the loss of ash trees due to threats such as the emerald ash borer infestation. In the early 2010s

St. Paul thought they had found the new tree that could do it all, the ash. Despite efforts to replant ash trees, the lack of diversity in tree species worsens the issue, leading to a rapid depletion of tree canopy faster than they can be replaced. Drought conditions further enhance the problem, making it difficult to establish and maintain new trees. “The capacity of cities, counties, and municipalities to replace lost trees is stretched thin” says my mentor Brennan Blue, with limited resources available for watering and maintenance. Moreover, selecting tree species poses a significant dilemma, as climate change alters traditional habitat conditions. Brennan also says “Balancing the need for species that can survive in the future climate while also addressing immediate concerns complicates decision-making”. With unpredictable year-to-year variations and the risk of losing a substantial portion of tree canopy at once, the challenge of tree loss looms largely, highlighting the urgent need for adaptive strategies and long-term investment in resilient urban forests.

The final challenge lies in the fact that many organizations don't own the land they work on. Instead, they rely on partnerships with local stakeholders, which introduces complexities when it comes to long-term upkeep and relations. People may leave after completing their part, handing over responsibility to others, but without consistent follow-up, the progress achieved can easily be lost. Brennan gave the example of if a teacher and student at a school were very passionate about conservation efforts on their campus they could partner with an organization like Great River Greening to move forward with their goals. However once that student graduates and that teacher moves on or retires that conservation effort could be lost if not taken over. Situations like these are where it really comes to education because the conservation non-profits like Brennans have already done their part and if not properly educated further, their efforts could be wasted. Breaking through to the public and fostering a genuine connection and commitment to environmental stewardship is essential for overcoming these obstacles and achieving lasting conservation outcomes.

In conclusion, these issues pose a growing concern in the environmental conservation industry. Individuals like my mentor, Brennan Blue, who have dedicated themselves to environmental conservation through organizations like Great River Greening, exemplify the urgent need for action. Brennan's experience highlights the profound challenges facing the conservation industry, from navigating the impacts of a changing climate to addressing tree loss and maintaining long-term conservation efforts. As we confront these challenges, it is crucial to prioritize resilience, adaptability, and collaboration to ensure our planet's future for generations to come.