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Rewilding the River: Assessing the Environmental Effects and Regulatory Influences of the Condit Dam Removal Process

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Abstract : There are more than two million dams in the United States, and a considerable portion of them are either non-operational or approaching the end of their designed lifespan. However, this emerging trend is new, and the majority of dam sites have not undergone thorough research and assessments after their removal to determine the overall effectiveness of restoration initiatives, particularly in the case of large-scale dams that may significantly impact their surrounding areas. A crucial factor to consider is the lack of specific regulations pertaining to dam removal at the federal level. Consequently, other environmental regulations that were not originally designed with dam removal considerations are used to execute these projects. This can result in delays or challenges for dam removal initiatives. The process of removing dams is usually the most important first step to restore the ecological and biological health of the river, but often there is a lack of measurable indicators to assess if it has achieved its intended objectives. In addition, the majority of studies on dam removal are only short-term and focus on a particular measure of response. Therefore, it is essential to conduct extensive and continuous monitoring to analyze the river's response throughout every aspect. Our study is divided into two sections. The first section of my research will analyze the establishment and utilization of dam removal laws and regulations in the Condit Dam removal process. We will highlight the areas where the frameworks for policy and dam removal projects remain in need of improvement in order to facilitate successful dam removals in the future. In this part, We will review the policies and plans that affected the decision-making process to remove the Condit dam while also looking at how they impacted the physical changes to the river after the dam was removed. In the second section, we will look at the effects of the dam removal over a decade later and attempt to determine how the river's physical response has been impacted by this modification. Our study aims to investigate the Condit dam removal process and its impact on the ecological response of the river. We anticipate identifying areas for improvement in policies pertaining to dam removal projects and exploring ways to enhance them to ensure improved project outcomes in the future.

Keywords : dam removal, ecolocgical change, water related regulation, water resources
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