## What Happens When We Try to Bridge the Science-Practice Gap? An Example from the Brazilian Native Vegetation Protection Law

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Abstract : The segregation between science and policy in decision making process hinders nature conservation efforts worldwide. Scientists have been criticized for not producing information that leads to effective solutions for environmental problems. In an attempt to bridge this gap between science and practice, we conducted a project aimed at supporting the implementation of the Brazilian Native Vegetation Protection Law (NVPL) implementation in São Paulo State (SP), Brazil. To do so, we conducted multiple open meetings with the stakeholders involved in this discussion. Throughout this process, we raised stakeholders' demands for scientific information and brought feedbacks about our findings. However, our main scientific advice was not taken into account during the NVPL implementation in SP. The NVPL has a mechanism that exempts landholders who converted native vegetation without offending the legislation in place at the time of the conversion from restoration requirements. We found out that there were no accurate spatialized data for native vegetation cover before the 1960s. Thus, the initial benchmark for the mechanism application should be the 1965 Brazilian Forest Act. Even so, SP kept the 1934 Brazilian Forest Act as the initial legal benchmark for the law application. This decision implies the use of a probabilistic native vegetation map that has uncertainty and subjectivity as its intrinsic characteristics, thus its use can lead to legal queries, corruption, and an unfair benefit application. But why this decision was made even after the scientific advice was vastly divulgated? We raised some possible reasons to explain it. First, the decision was made during a government transition, showing that circumstantial political events can overshadow scientific arguments. Second, the debate about the NVPL in SP was not pacified and powerful stakeholders could benefit from the confusion created by this decision. Finally, the native vegetation protection mechanism is a complex issue, with many technical aspects that can be hard to understand for a nonspecialized courtroom, such as the one that made the final decision at SP. This example shows that science and decisionmakers still have a long way ahead to improve their way to interact and that science needs to find its way to be heard above the political buzz.

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