14.3.4. Presenting Freshwater Biodiversity Evidence to Local Legislators

Introduction

Conservation policy gains strength when local legislators can draw on site-specific biodiversity evidence. On official invitation from the Sangguniang Bayan of Maco, Davao de Oro, Ms. Amy G. Ponce, project leader of the Eastern Mindanao Biodiversity Corridor (EMBC) Project, together with faculty and researchers from Davao Oriental State University (DOrSU), presented the summarized results of a biodiversity assessment during a committee hearing on the proposed ordinance declaring the Bilawa Mainit Hot Waterfalls and Lake Leonard as local government unit (LGU)-managed conservation areas in Barangays Mainit and New Leyte. The invitation itself acknowledged the essential role of science-based data in crafting effective and inclusive environmental legislation, making the presentation a documented instance of university research entering the local policy process.

The account below documents the outreach engagement, the assessment behind it, and the policy questions the hearing surfaced. It describes the contribution as evidence-sharing that informs a proposed ordinance; it does not claim that the ordinance was enacted during the reporting period or that protection measures have already taken effect.

The Assessment Behind the Presentation

The biodiversity assessment was conducted from October 28 to November 1, 2024, led by Ms. Ponce as Project Leader for the Biodiversity Component of the BD Corridor Project, Eastern Mindanao Biodiversity Corridor Cluster 5, under the overall leadership of Dr. Misael B. Clapano. The research team comprised faculty and researchers from the BS Biology and BS Environmental Science programs of DOrSU, working with personnel from the Municipal Environment and Natural Resources Office (MENRO) of Maco, CENRO Maco, the Davao de Oro Tourism Office, the Indigenous Peoples community, and the barangay local government units of New Leyte and Mainit.

The assessment documented a range of important species groups, including bats, birds, herpetofauna, coleoptera, trees, and shrubs. Many of the recorded species are endemic and keystone species with high conservation values, providing strong ecological evidence in support of formal conservation efforts for the two proposed sites. Because both the Bilawa Mainit Hot Waterfalls and Lake Leonard are freshwater ecosystems, the findings speak directly to the protection and sustainable management of inland aquatic habitats and the species that depend on them.



Figure 1. Ms. Amy G. Ponce, EMBC project leader, presents the summarized biodiversity assessment results during the Sangguniang Bayan committee hearing in Maco, Davao de Oro, with the assessment report and session attendees shown alongside. Photo: DOrSU BS Biology (@bsesgreenpulse).

Dialogue That Shaped the Ordinance

The committee hearing served as a platform for dialogue between the researchers and local legislators, clarifying how the proposed ordinance could be strengthened to better align with the interests and capacities of key stakeholders. The hearing also emphasized the importance of recognizing Indigenous Peoples' rights, as the area falls within a recognized Certificate of Ancestral Domain Title (CADT). By opening space for additional perspectives and enhancements, the session worked toward an ordinance intended to be both environmentally sound and socially equitable, supporting the coexistence of nature and the communities that depend on it.

For DOrSU, the engagement demonstrates its commitment to science-based, data-driven research as a cornerstone for policy development and informed decision-making, particularly in advancing regenerative conservation. It shows research moving beyond academic spaces into active policy processes: informing legislation, empowering communities, and supporting the protection of freshwater biodiversity in Maco.

References

Davao Oriental State University. (2024). Maco, Davao de Oro biodiversity assessment report, October 28 to November 1, 2024 [Assessment report]. Eastern Mindanao Biodiversity Corridor, Cluster 5.

Conclusion

DOrSU's presentation of the Maco biodiversity assessment before the Sangguniang Bayan documents a clear pathway from university research to local policy: an official invitation, a science-based presentation,

and a deliberation that surfaced the social and governance dimensions of conservation, including Indigenous Peoples' rights within a recognized ancestral domain. The engagement strengthened the scientific case for declaring the Bilawa Mainit Hot Waterfalls and Lake Leonard as LGU-managed conservation areas while ensuring the ordinance process remains inclusive of the communities that depend on these ecosystems. The documented contribution is evidence-sharing and dialogue; enactment of the ordinance and on-the-ground protection of the two sites remain the follow-on outcomes to be reported when they occur.