Marine Mammal Commission 2025 Annual Meeting Regional Updates Session Summary

The Regional Updates: Hot Topics in the California Current Ecosystem session provided updates on emerging challenges and management responses for marine mammals across the California Current ecosystem. Dr. Elliott Hazen highlighted how species distribution and management needs intersect across timescales, from immediate responses to marine heatwaves to long-term climate projections, showing how tools such as WhaleWatch, the Habitat Compression Index, and seasonal forecasts can provide managers with timely, actionable information to better respond to climate variability and change. Ryan Bartling reviewed collaborative strategies to address whale entanglement, particularly in the Dungeness crab fishery, through the Risk Assessment and Mitigation Program, adaptive management, experimental gear, and stakeholder-driven working groups. Dr. Aimée Lang reported on the status of eastern North Pacific gray whales, providing an overview of long-term abundance and calf production trends, the recent unusual mortality event, and the need for innovative approaches to understand population variability and ecological drivers behind recent population fluctuations. Dr. Clarissa Anderson described an increase in harmful algal bloom-related mortality events, with domoic acid and saxitoxin exposures causing record numbers of strandings and abnormal marine mammal behavior in Southern California, and emphasized the importance of early-warning systems and coordinated response networks to protect both human and ecosystem health. Together, the presentations highlighted the role of sustained monitoring, innovative tools, and collaboration across agencies, scientists, and stakeholders in responding to these evolving challenges.