Sea Turtle Friendly Lighting: Law, Science, and Policy

Artificial lighting negatively impacts sea turtle populations. It discourages females from nesting and interferes with hatchlings ocean-finding abilities. This is a particularly salient issue in Florida, which hosts 90% of the sea turtle nesting in the United States and is projected to have nearly 15 million people living in its coastal counties by 2050. To reduce the impact of artificial light on sea turtles and their nesting habitat 84 local governments in Florida have passed beach lighting ordinances, most of them based on the Department of Environmental Protection (DEP) model lighting ordinance for sea turtle protection (FL Admin Code Rule 62B-55). This study employed content analysis methodology to evaluate both biological relevance, and strength of law for the State's model lighting ordinance (62B-55), newly promulgated draft best management practices, and the local government lighting ordinances currently in place. The content analysis revealed that most ordinances do not reference the newly available commercial technology. For example, less than 10% of ordinances require lights to be long wavelength (580 nm). Future iterations of lighting ordinances should include a framework for implementing new technology. To help address this legislative gap, the project has developed turtle friendly Conditions, Covenants and Restrictions that could be added to community association bylaws to provide additional, privately enforced, safeguards.

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