



# 40<sup>th</sup> International Sea Turtle Symposium

## Workshop Proposal for ISTS40

**Title of Proposed Workshop:**

Light Pollution Solutions for Sea Turtles

**Name of Main Organiser:** Karen Arthur, Caesar San Miguel, and Rachel Tighe

**Email Address:** Karen.Arthur@awe.gov.au

**Suggested Duration of Workshop:** Half Day (4 hours)

**Description and Justification of the Workshop:**

Light pollution is increasing globally by ~2% per year and is a common problem near turtle nesting beaches. Artificial light can disrupt critical behaviours in sea turtles. Nesting female turtles may avoid artificially lit beaches and hatchling turtles may not be able to find the ocean when coastal areas are artificially lit at night, making them more vulnerable to predation. Recent studies have demonstrated that hatchlings in the water are attracted to light, which may delay their dispersal to the open ocean or trap them in light pools increasing their risk of predation at sea.

In 2020, Australia released the National Light Pollution Guidelines for Wildlife including Marine Turtles, Seabirds and Migratory Shorebirds. These Guidelines were endorsed by the 132 member states of the Convention on the Conservation of Migratory Species of Wild Animals. The guidelines provide a framework for managing and assessing the impacts of light pollution for wildlife with specific advice for management for marine turtles. At the local level the Queensland Government has introduced Sea Turtle Sensitive Areas into local planning schemes and the new Model Lighting Ordinance provides protection for turtles nesting in Florida.

The virtual Light Pollution Solutions for Sea Turtles workshop will explore practical on ground solutions to managing the impacts of artificial light for sea turtle. It will include presentations from researchers, engineers, lighting designers, managers, and policy makers to explore the latest research and technology to address these challenges. The workshop will also examine appropriate methods for measuring light, human

behaviour change, regulation and education and outreach. Presentations will be followed by question and answer opportunities, and attendees will be able to share lessons learned from their experience of light management through breakout sessions.

**Expected Outcomes of the Workshop:**

The Light Pollution Solutions for Sea Turtles workshop will be an opportunity for information sharing, virtual “hands on” learning, and break out group discussions will work through common challenges faced on our nesting beaches and in adjacent waters. It will provide an opportunity to share recent learnings about the impact and management of artificial light for sea turtles. It will discuss the latest technology and mitigation techniques and identify current knowledge gaps. Most importantly, the workshop will build networks across the world of individuals with experience and expertise relevant to the multidisciplinary challenges associated with managing artificial light for the benefit of sea turtles.