# Comparing Relative Significance and Sources of Plastic Straws, Sucker-Sticks (Lollipop Sticks) and Earbud Sticks as Pollutants on Western Cape Beaches

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This project investigated the relative importance and sources of marine plastic pollutants to reduce plastic pollution. Stratified pollution surveys investigated the relative quantities and sources of plastic straws, sucker-sticks (lollipop sticks) and earbud sticks. There were more sucker-sticks than straws in all the surveys done on Western Cape beaches during this study period. On Strand Beach the river section was most polluted, followed by the relatively isolated marine protected area. Despite having the most visitors, the populated area was least polluted. Sucker-sticks dominated in all sections. The least straws were found in the river area, indicating that the river is not their most significant source. Almost 50% of sucker-sticks found were in the river area, indicating river transport of storm water and riparian pollution is the most significant source for sucker-sticks. This is supported by upstream surveys of the Lourens river and storm-water drains. Surveys at Gordons Bay were also divided into populated, river and remote sections and supported these trends. Surveys at remote beaches without rivers (Kogel Bay and Pearly Bay) strongly supported the hypothesis that the ocean is a significant source of sucker-sticks as on these beaches as they made up over 85% of the pollutants surveyed. Earbuds were most prevalent in the river and buffer transect areas. There were more earbuds than straws in 30% of the transect surveys and in the remote surveys. This project concludes that river transported sucker-sticks are a significant and relatively unrecognized pollutant.

**Awards Won:**