ALLOWABLE MODIFICATIONS

(Single Grid Hard TEDS)

ACCELERATOR FUNNELS

NMFS SCUBA divers, using water flow meters and dye injection techniques, have measured the water flow characteristics of an operating shrimp trawl. As the trawl is pulled through the water, an area of low water pressure develops under and behind it. This low pressure area produces a vacuum under the trawl that can actually draw shrimp out of a bottom opening TED which has an improperly fitted exit hole cover or flap.

One method of keeping shrimp away from the TED exit hole is to install an accelerator funnel. The function of the accelerator funnel is to direct shrimp away from the exit hole, and through the bars of the TED. Water and shrimp are accelerated through the funnel and past the deflector bars into the tailbag (Figure 12). Comparative trawling studies have shown that an accelerator funnel can significantly reduce shrimp loss through the TED.

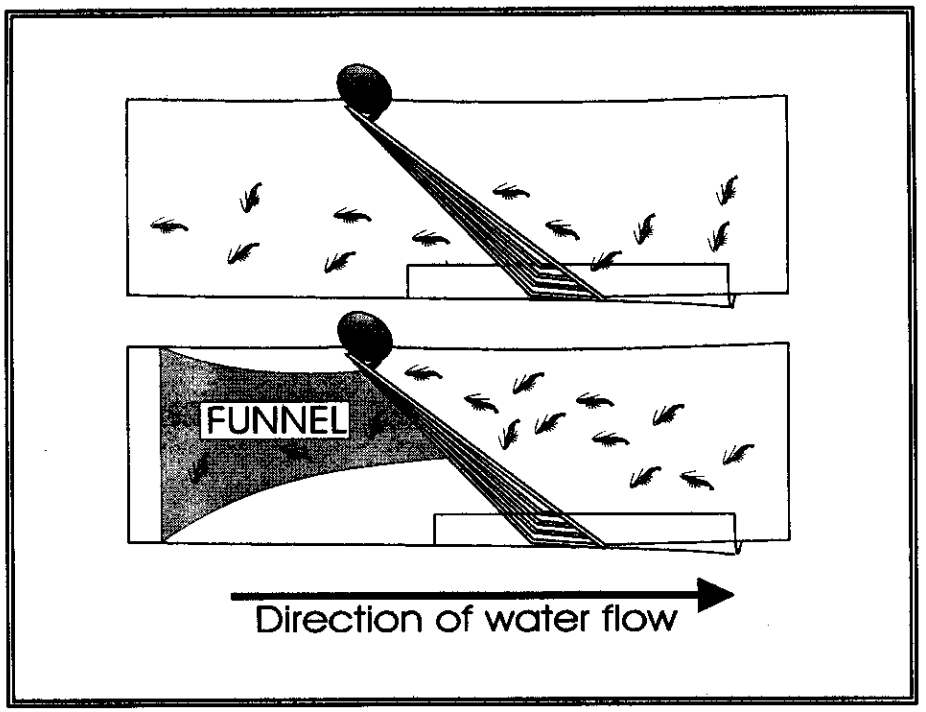

Figure 12 FUNCTION OF ACCELERATOR FUNNEL

To insure that large sea turtles will be able to pass through an accelerator funnel, federal regulations provide specifications on construction and installation.

In order to maintain an efficient funnel shape, and still yield the required opening, accelerator funnels should be constructed from depth-stretched and heat-set polyethylene webbing. This type of webbing has elastic properties, allowing the funnel to stretch in order to pass large objects, then returning to a closed mesh configuration. If heat-set poly webbing is not available an alternative funnel material is "used" bag webbing (nylon or poly) that has already been stretched. Dimension and requirements for accelerator funnels are described in Figures 13 and 14.

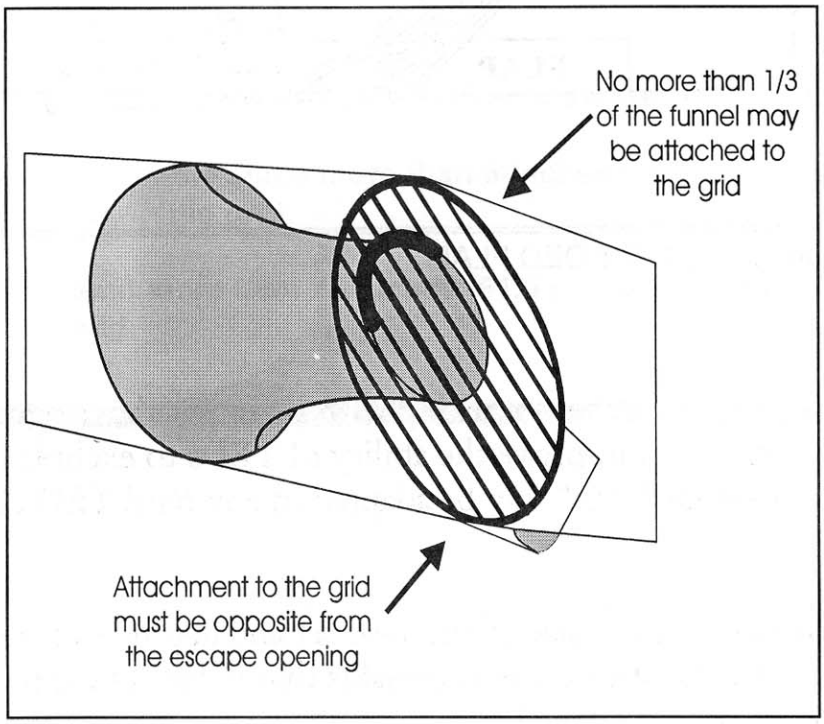

Figure 14 ACCELERATOR FUNNEL: GRID ATTACHMENT