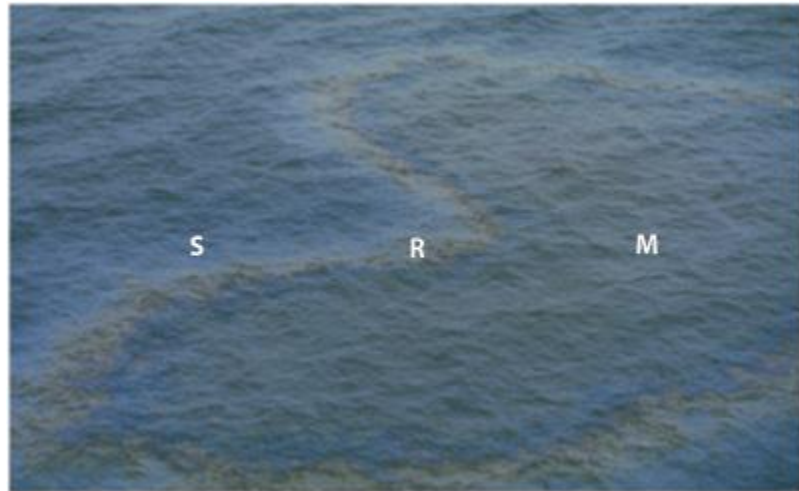


Oil Sheens

Sheens are very thin layers of floating oil that may appear silver/grey (S; 0.00007 mm), rainbow (R; 0.00015 mm), or metallic (M; 0.001 mm) colored, depending on their thickness. Sheens are formed by oil spreading and thinning after it is released at the water's surface. They are virtually impossible to collect, but are also more readily degraded than heavier oil by natural processes, including sunlight, dissolution, and evaporation. Compositionally, sheens are similar to the original oil, with the exception that due to their thinness, the more toxic compounds in the oil are more easily removed from sheens by weathering. Unlike heavier oil that cover shorelines and coat plants and animals, once ashore, thin sheens weather quickly.

Fishing in sheen-covered waters will result in the catch (e.g., fish, shrimp, shellfish, etc.) becoming coated with a thin layer of oil as it is brought on board. Removal of this oil from the catch will be almost impossible leading to tainting of the catch, and a marked decrease in marketability of the catch. From the perspective of ecological injury to birds and wildlife, contact with sheen either at the surface of the sea or once the sheen has come on-



shore is unlikely to lead to death in adult populations. Long-term impacts to health or growth may occur, depending on the level and duration of exposure to the sheens. For fish, adult populations are not expected to come into direct contact with surface sheens. However, exposure of juveniles, eggs, and or larvae that reside at the sea surface to sheens may have a significant detrimental effect on their survival and /or growth.

From the perspective of human health, impacts due to direct contact with sheens should be minimal, but will depend on the amount of the sheen, the degree to which the sheen has been weathered, and the duration of the exposure; with a greater possibility of impact being associated with greater exposure to less weathered sheen.