

US EPA ARCHIVE DOCUMENT

Fast Water Response

Abstract

Fast Water Booming is always a challenge. Normal containment theories will not work and a swift moving river often seems to have its own ideas about where it will go and how it will behave. Oil spills only complicate matters.

Achieving an effective containment system in fast moving rivers can be done, but there are considerations that must be taken into account to be successful. These include water speed, shoreline configuration, water depth, natural collection points, amount of oil, weather, available equipment and available manpower. Based on this information, a good location for booming can be found.

In booming fast waters, angling the boom correctly becomes very important. The faster the river is flowing, the smaller the angle between the boom and the shoreline. Cascade systems prove more effective since a single diversionary will often become swamped in fast currents. Also, smaller boom is more effective in diverting oil to shoreline and is easier to work with.

Applying the right booming technique for fast water applications is the next challenge. For fast rivers, good “anchors” are the key. In narrow rivers, shoreline rocks and trees may be utilized. But in wider rivers, this is not practical. Therefore, bridges and permanent buoys can provide solid anchors for boom deployment.

By reading the river and surrounding shoreline well, having the correct equipment, and deploying boom utilizing small angles and good anchors, fast water booming can be done successfully.

Fast Water Response - Outline

1. Purpose of Containment Booming
2. Considerations in Fast Water Booming Applications
3. Booming Techniques Selection Factors
4. Effective Containment System Attributes
5. Fast River booming Techniques
 - a. Rope Bank to Bank System
 - b. Bridge Anchor System
 - c. Buoy Anchor System