

Evaluating GRP Strategies

The Use of Boom*

Key Criteria

- 1) Identify reason(s) for strategy development (cultural resource, natural resource or likely oil collection area).
- 2) Determine whether booming would be the most effective strategy for reducing oil spill impacts. (That is, would other alternatives—such as a phone call to an operator, shutting off a water intake, or closing a tidal gate—be as effective?)
- 3) Find out whether safety of human responders will be put at risk for limited likelihood of strategy success.
- 4) Determine what type of booming strategy would be the most effective at reducing oil impacts to the resource under prevailing conditions—collection, deflection, or exclusion.
- 5) Evaluate the site for advantageous characteristics based on:
 - a) **Anchoring substrate.**
 - b) **Accessibility.** Private vs. public lands. Marine GRPs generally require boat access. Inland GRPs are trickier. Access points along rivers are usually the only sites where effective strategies can be mounted.
 - c) **Time to arrive on scene.**
 - d) **Potential for oiling** (for example, proximity to shipping activity, fueling operations, pipeline crossing).
 - e) **Beach substrate.** Use Environmental Sensitivity Index (ESI) or ShoreZone classification to determine vulnerability to oiling and likely oil longevity.
 - f) **Type and quantity of boom.** How many sections and what size anchors? Anchoring depth? What type of tending will be needed (timing, access, etc.)?
 - g) **Prevailing weather—especially wind and waves.** Is a booming strategy realistic for prevailing conditions?
 - h) **Tidal influence.** At extreme lows will there be nothing but mud flats (very difficult to tend boom when it is stuck in the mud)—or—at extreme highs will the entire face of a coastal marsh be underwater (thus exposing the entire perimeter to oil)?
 - i) **Influence of currents.** What velocities can be expected?
 - j) **Whether strategy uses reasonable lengths of boom** (<1000 foot sections).
 - k) **Reasonableness.** Depends on: boom size, boom length, the number and size of anchors, the capability of the recruited workboats (to tow boom, set and recover anchors, shelter boat crews, carry boom and associated equipment), the experience of the boat crew, and the effectiveness of the anchoring system (both on shore and in water).

***Note**

These criteria are not intended to be exhaustive or ranked in order of priority—rather, they are meant to help frame the evaluation of GRP booming strategies.