

G. PASSIVE RECOVERY AND DEBRIS REMOVAL

Objective & Strategy

The objective of the passive recovery and debris removal unit is to minimize the impact to designated shoreline by reducing the potential oil volume through passive recovery as well as by removing driftwood and other debris that spilled oil may contaminate.

Passive recovery is performed by placing sorbent materials at or near sensitive areas to collect oil and thus minimize impacts. This is usually accomplished by anchoring rows of sorbent boom or snare line¹ (oleophilic pom poms attached to a rope) between the high and low tide zones on the shoreline. Passive recovery for marine mammal haul-outs is accomplished by broadcasting natural sorbent material, such as peat moss or sphagnum moss, on the haulout.

Passive recovery can be deployed along selected shorelines prior to impact to reduce the quantity of oil that might otherwise adhere to the beach. This technique can also be applied to shoreline that has already been oiled to help keep the mobile oil from refloating and migrating to other non-impacted shorelines. In either case, the recovery must be monitored after each tide and recovery materials must be replaced as necessary.

The debris removal component of this tactic is to remove or re-locate excessive concentrations of driftwood and other debris from areas of the shoreline likely to be oiled. The impact area is typically defined as the low to mean high tide zone of the shoreline. The debris removal tactic is normally considered to be an independent unit but, in this case, has been combined with the passive recovery unit to optimize resource utilization.

Although this tactic can produce a significant solid waste stream requiring logistical support, it can be very effective due to the ability to rapidly deploy. Once deployed, the snare line needs to be monitored and periodically replaced to avoid diminished effectiveness due to saturation.

Access to selected shoreline may be accomplished from the water using shallow water platforms such as landing craft, or from on-land, using ATV's or other four-wheel drive vehicles.

The general strategy is to:

- Identify the trajectory of the spilled oil and select shoreline to be protected, as well as identify natural recovery sites where debris may concentrate.
- Evaluate access restrictions and select appropriate marine deployment platforms or on-land vehicles.
- Mobilize and deploy personnel with tools and materials to selected shorelines.

Resources for this module have been defined as personnel with tools and sorbent materials. Quantity of units required will be determined by site and resource sets may need to be refined as site-specific requirements dictate.

Passive Recovery Unit General Configuration

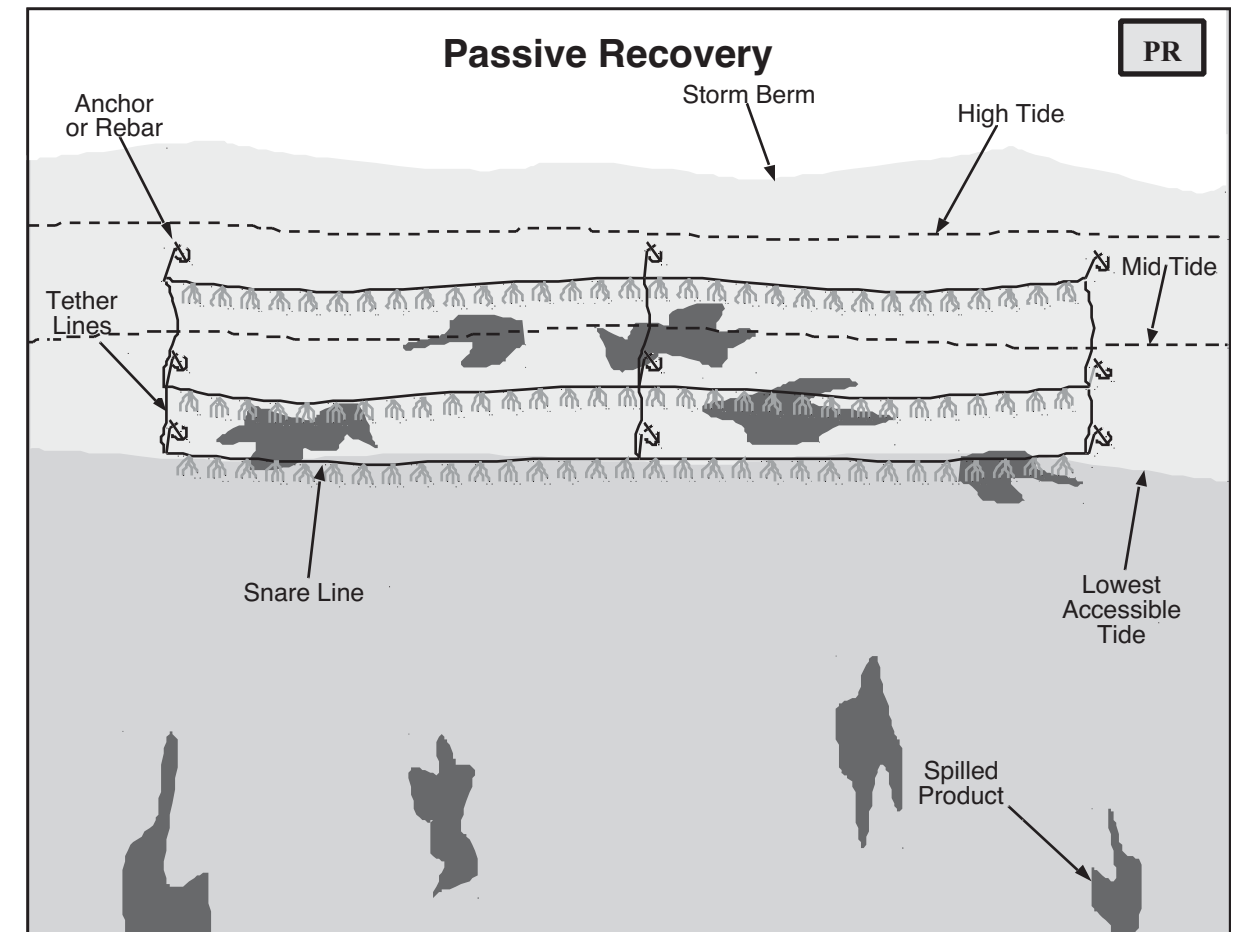


Figure G-2-28. Aerial view of a passive recovery configuration.

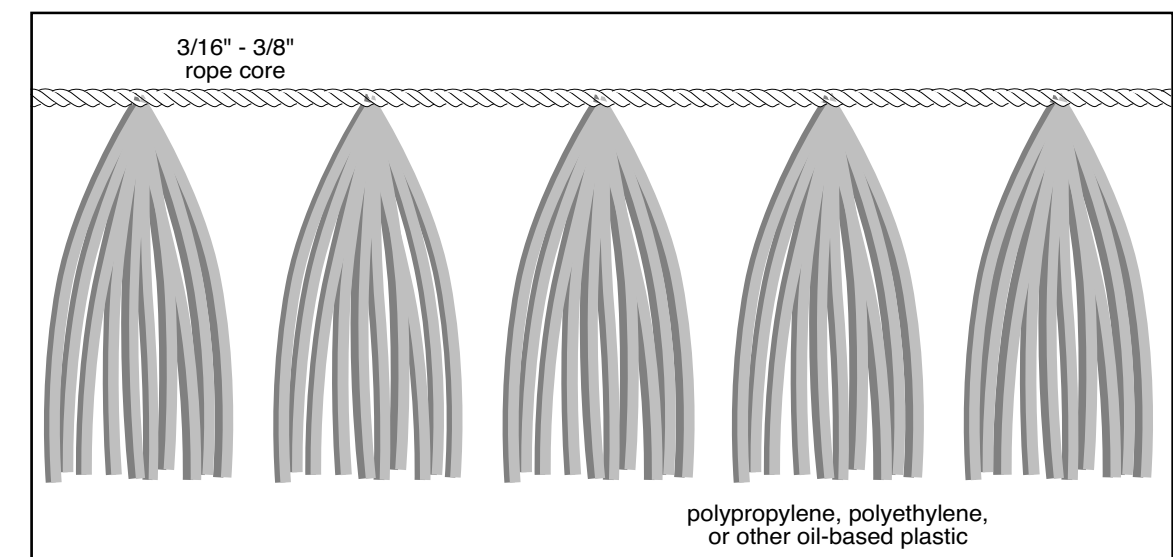


Figure G-2-29. Snare line.

¹ Snare line is also sold as Viscous Sweep and Snare-On-A-Rope. The primary difference is the distance between the pom-poms.

Resources

Passive Recovery and Debris Removal, Marine Access PR

Direct Resources

Description	Type	Function	Quantity
Snare Boom	Optional	Oil recovery	3,600'
Rebar Stakes/Small Anchor Materials	Optional	Snare Boom Placement	
Hand Tools and Line	Misc.	System support	
Chainsaw	Optional	Debris Removal	2
Bags/Super Sacks	Optional	Solid Waste Collection	

Support Resources*

Description	Type	Function	Quantity
Personnel**	Crew & Tech./Shift		8
ATV's		Material Transport	2
Landing Craft	Shallow Draft	Access/Deployment	1

Passive Recovery and Debris Removal, Shoreside Access PR-S

Direct Resources

Description	Type	Function	Quantity
Snare Boom	Optional	Oil recovery	3,600'
Rebar Stakes/Small Anchor Materials	Optional	Snare Boom Placement	
Hand Tools and Line	Misc.	System support	
Chainsaw	Optional	Debris Removal	2
Bags/Super Sacks	Optional	Solid Waste Collection	

Support Resources*

Description	Type	Function	Quantity
Personnel	Crew & Tech./Shift		6
ATV's		Material Transport	2
Trucks with ATV Trailers	Shallow Draft	Mobilization Support	2

Passive Recovery – Marine Mammal Haulout*** PR-MM

Direct Resources

Description	Type	Function	Quantity
Natural Sorbent	Peat Moss Sphagnum Moss	Oil recovery	1/2 #/sq. ft.
Broadcast System	Blower Hydro-seeder	Deploy Sorbent	1

Support Resources*

Description	Type	Function	Quantity
Personnel	Crew & Tech./Shift	Vessel Crew	4 to 6
Vessel	Class 2/3/4	Transport & Broadcast	1
Vessel	Class 5	Hand Broadcast	1

* Support resources may need to be re-evaluated, and in most cases decreased, when deploying multiple units or tending systems after deployment.

** Personnel does not include Landing Craft crew.

*** Passive recovery for marine mammal haulouts should only be attempted after consultation with the National Marine Fisheries Service.

Deployment Considerations and Limitations

- Shoreline access may influence deployment platform options.
- Passive recovery materials need tending and periodic replacement.
- Logistics for solid waste transport and disposal need to be considered.
- Contact NMFS before disturbance of marine mammals.