

## Buoyed and On-Demand Systems

What a Surface Buoy Does	What an On-Demand System Should Do	What an On-Demand System Could Do (Extras)
Physical presence: Allows detection of subsurface gear by ALL ocean users from about ½ mile away in good conditions.	Alert all ocean users at least ½ mile away from gear, on chartplotter or to vessel.	Alert ocean users or enforcement at any distances - could be based on user type.
Provides accurate information (fluctuations depending on tides/conditions) about subsurface gear location.	Inform ocean users of on-demand gear location via chartplotter or through other existing platform.	Alert gear owners of lost or moved gear and display/share associated information about the gear with other vessels on chartplotters.
In Federal waters, systems have high flyers/radar reflectors and markings for increased visibility and to indicate set direction, visible on radar screen about 4-6 miles away.	In Federal waters, alert ocean users 4-6 miles away from gear in real time, and indicate set direction if provided by buoy.	Alert ocean users at different distances depending on need for access.
Acts as a standardized non-proprietary identification device that allows everyone equal access to information that gear is below.	Equal access on the water to “see” the buoy within a limited radius and display subsurface gear on chartplotter or other existing platforms.	Provide detailed information regarding the gear, vessel, and permit information.
Requirements vary, but buoys often include fishery and ownership information such as state/federal permit/license number, owner identity, gear type. Requires buoy retrieval or being very close to read it.	Display required ownership/permit information on chartplotter or other similar device within a comparable distance of information provided by buoy.	Allow the sharing of additional info, <b>if requested by user groups and legally permissible</b> , such as time of deployment, fishery type, and environmental data from additional devices on the gear including depth, temperature, salinity, ambient noise, whale calls, etc. Could be accessed from the cloud.
Provides surface connection for hauling gear on the bottom for the fisherman whose gear it is, and for enforcement to inspect gear. Gear can be hauled from either end (except in Maine state waters).	Provide a way to communicate with submerged gear and enable hauling for both the fisherman whose gear it is and enforcement.	Automatically mark gear deployments and recoveries via RFID or other technologies.