

# STOP BALLAST WATER INVASIONS



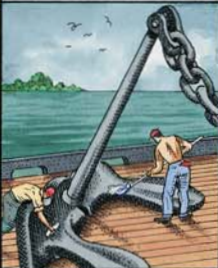
**PERFORM OPEN OCEAN BALLAST EXCHANGE IF SAFETY PERMITS**



**KEEP RECORDS OF BALLASTING OPERATIONS**



**REDUCE INVASIONS VIA HULL AND ANCHOR FOULING**



**MINIMIZE BALLASTING IN PORTS AND COASTAL AREAS**



**AVOID BALLAST UPTAKE AT NIGHT**



**AVOID BALLAST UPTAKE IN "HOT SPOTS"**



## I N V A S I V E S P E C I E S

### ASIAN CLAM

Asian clams now dominate San Francisco Bay, having replaced other bivalves and altered the estuary's delicate food web.



### NORTHERN PACIFIC SEASTAR

This rapacious predator from Japan threatens Tasmania's shellfish industry.



### CHOLERA BACTERIA

Ballast water brought this deadly waterborne disease to the Gulf of Mexico from South America in the early 1990s.



### TOXIC DINOFLAGELLATES

Japanese dinoflagellates, microscopic organisms, invaded Australian waters causing paralytic shellfish poisoning and closure of shellfish beds in 1995.



### CHINESE MITTEN CRAB

Migrating Chinese mitten crabs, introduced to SF Bay in the early 1990s, have clogged California's water delivery facilities and fish salvage operations.



### NORTH AMERICAN COMB JELLY

The voracious, Atlantic jellyfish introduced to the Black Sea and Sea of Azov in the late 1980s has decimated anchovy fisheries.

