

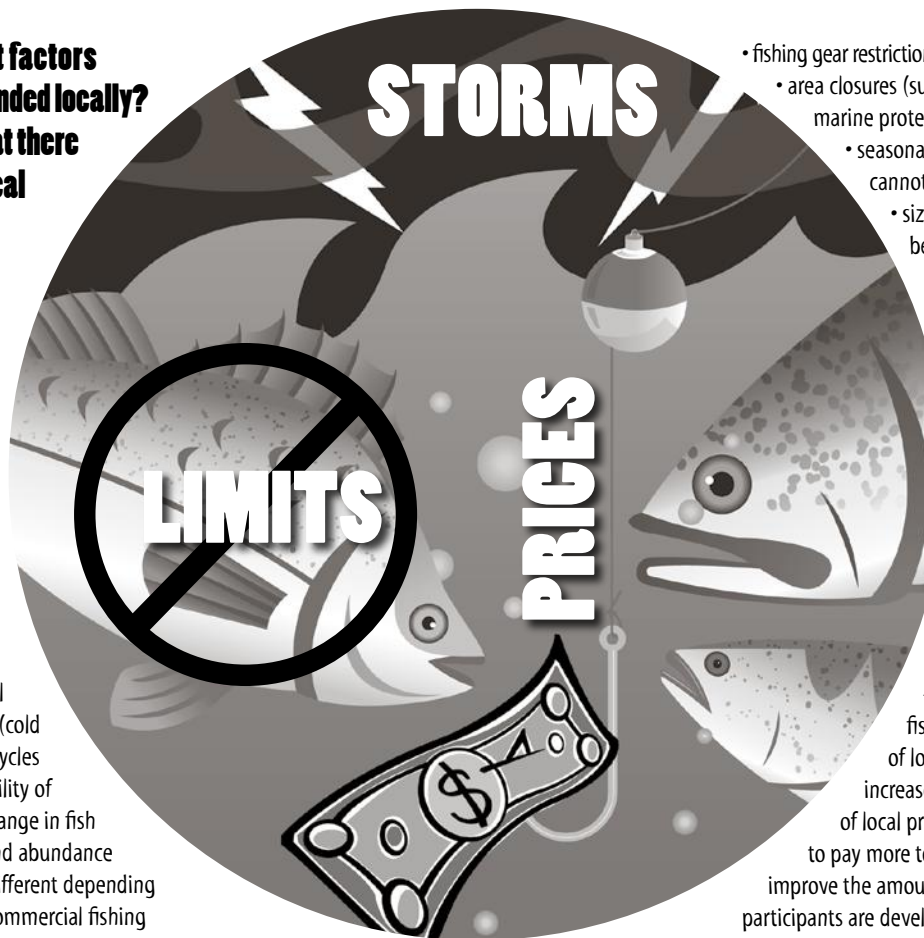
FACTORS AFFECTING FISHERIES

Have you ever wondered what factors influence what is fished and landed locally? You may be surprised to find that there are many factors that affect local fishing operations.

Environmental Factors

Commercial fisheries are impacted by many environmental factors. Ocean currents are often changing, impacting where fish are found. Weather conditions often change as well. Storms, rough seas and high winds may prevent fishery participants from leaving the harbor, or can cut their trip short if they are already out to sea.

A bigger environmental impact occurs with dramatic climatic changes, such as El Niños (warm water events) and La Niñas (cold water events). Both El Niño and La Niña cycles affect water temperature and the availability of nutrients for fish. As a result, there is a change in fish distribution (where the fish are found) and abundance (the number of fish), and the change is different depending on the fish. These changes impact local commercial fishing operations when the events occur, and often for several years after the events. The distribution of fish often changes right away. For example, during an El Niño some fish can no longer be found here in commercial quantities (such as squid), while others not usually found here thrive (like yellowtail). However, for fish that stay in the SBC throughout these events, changes in their abundance may not happen for a few years. Lobsters often increase in number many years after an El Niño, while sea urchins may decrease in number following this same event.



- fishing gear restrictions (only certain gear types can be used)
- area closures (such as refuges, marine reserves and marine protected areas)
- seasonal closures (specific times when fish cannot be caught)
- size limits (only certain sizes of fish can be taken)
- sex limits (only a certain gender of fish can be taken)
- fleet-wide quotas on total fish taken per season (a set amount of fish that can be taken each year for a particular fishery)
- trip limits (a limit on the amount of fish that can be taken with each fishing trip)

Economic Factors

Fisheries are also impacted by one more very important factor - economics. Competition with other fishery products can impact the sales of local seafood. Have you noticed the increased gas prices? This too affects the price of local products as fishery participants have to pay more to get to and from where they fish. To improve the amount paid for local products, local fishery participants are developing new markets that recognize and promote high - quality seafood. For example, there is more local product being sold directly from the fishing boat to the consumer. This is similar to what local farmers have done by selling directly from the farm. Also, new domestic markets have been developed -- sea urchins used to be primarily shipped overseas, but not anymore. More products, like halibut and shrimps/prawns, are also being kept alive to serve up-scale markets that pay more for the freshest high quality products.

Regulatory Factors

Other factors influencing fishing activity of the SBC include the federal and state regulations regarding commercial fishing. These regulations limit the ability of fishery participants to provide seafood to the consumer, but they are intended to sustain fishery resources. Local fishery participants have to follow many rules and regulations, including:

- limits on the number of participants in a fishery (called limited-entry or restricted access)

DID YOU KNOW?

The average age of a SBC commercial fishery participant is fifty-two. Few young people are entering commercial fishing. As a result, the future survival of the local fishing community could be at risk and the consumer may have trouble buying locally caught seafood.

ACTIVITY:

What limits the amount of fish that our local commercial fishery participants can provide to consumers?

A

Fish population size (the number of fish available)

B

Consumer demand

C

Limits on the size of fish that can be taken

D

Bad weather

E

A and D

F

A, C, and D

G

All of the above