What are Aquatic Nuisance Species?

1. Aquatic nuisance species (ANS) (sometimes called exotic, invasive, nonindigenous or non-native) are organisms that invade ecosystems beyond their natural, historic range. Their presence may harm native ecosystems or commercial, agricultural, or recreational activities dependent on these ecosystems. They may even harm our health.

People have helped spread species around the globe for centuries either intentionally or unintentionally. **Intentional introductions** involve the deliberate transfer of nuisance species into a new environment. An example of this would be someone who dumps the contents of their home aquarium into a lake. **Unintentional introductions** occur when invasives are transferred accidentally. For instance, zebra mussels can be spread when ballast water used for ship stability is exchanged.

In fact, nuisance species can be spread many ways including ships, boats, barges, aquaculture, agriculture, nurseries, or connected waterways. Through these and other means, thousands of terrestrial and aquatic invasive species have been introduced into our country, costing us billions annually.

Examples of aquatic nuisance species include:

zebra mussels,

Chinese mitten crabs,

hydrilla,

Eurasian watermilfoil,

nutria,

sea lamprey,

Asian carp, and

New Zealand mudsnail.

Some of these organisms seem to have little impact while others are devastating. Here are two examples of harmful species:

**Zebra mussels**
Brought here from Europe in ships' ballast water; zebra mussels were first discovered in the Great Lakes region in 1988. Zebra mussels have inflicted tremendous damage to native ecosystems and to facilities using water, like power plants and municipal water suppliers. Millions of dollars have been spent by water users, to control and eradicate zebra mussels. And, as zebra mussel populations in an area increase, native mussels decrease; a strong indication that zebra mussels are the cause.

**European green crab**
These crabs invaded eastern North America in the early 1800s and were discovered in California around 1990. Green crabs probably entered the east by boats and the west in packing material of bait shipments. Females can produce an impressive 200,000 eggs annually. The European green crab eats such things as mussels, clams, snails, worms, and even other crustaceans. This diet has hurt New England's soft shell clam industry. And, because they compete for the same food sources, they could damage commercially important Dungeness crab, oyster, and clam fisheries on the west coast.