### **Research Questions:**

How does pollution affect crabs?

What are the affects trash has on shore crabs?

#### Quote:

"Sadly,80 percent of all the marine debris found in our oceans come from inland sources."-

## Source

# **Secondary Source:**

http://www.sdcoastkeeper.org/learn/swimmable/san-diego-water-pollution/types-runoff-pollution.html

# What I Have Discovered:

What I learned from the article was:

- Copper is in antifouling paint which is used on boats, that leak into the water and poison certain organisms in the water
- Copper turns out to affect the mating behavior in male shore crabs
- An experiment in a laboratory showed the crabs that were infected with copper took twice as long to search for a female to mate with and were less direct in actually searching for a mate
- Trash is seen a lot on beaches and bays.
- Especially fast food wrappers, which is around 49% of marine trash and over 1 million plastic bags end up on bays in a year
- Trash affects crabs in a most predicted way. The crabs with more pollution in their environments tend to be less active than crabs with a clean environment
- While mercury is found more in larger animals like sharks and king mackerel, crabs tend to have less levels of mercury compared to lobsters and trout
- Mercury builds up in fish tissue

## **Questions:**

How does mercury build up in fish tissue?

When were the first signs of mercury detected in a fish?

How long has plastic been piling up in the ocean?

How does copper affect the male crabs to find a mate?

Why is copper used in antifouling paint?

Will the plastic in bodies of water decrease or increase with future decisions?

Will there ever be a way to vaporize trash so we could stop having trash pollute the water?