



Chicken Farm



A chicken farm is located along a major tributary leading into the Chesapeake Bay. The farm has many chicken coops. The waste from these chicken coops is being washed into the nearby river. Some local residents are upset by the increased amount of algae blooms that are occurring in the Bay near the local river. They know that something has to be done to end this runoff into the local waterways. Research this problem and decide on a solution that you believe will help clean up the Bay.

A few websites to get you started:

http://www.nytimes.com/2008/11/29/us/29poultry.html?_r=1&pagewanted=2

<http://www.bayjournal.com/article.cfm?article=1805&print=yes>

http://www.chesapeakebay.net/content/publications/cbp_17018.pdf

<http://www.bayjournal.com/article.cfm?article=856>

<http://www.bayjournal.com/article.cfm?article=2547>

<http://chesapeake.news21.com/blog/index.php/2010/02/15/chicken-litter-debate-rages-on-eastern-shore/>

<http://www.npr.org/templates/story/story.php?storyId=121565792>

<http://www.environmentmaryland.org/reports/mde/unsustainable-path-why-marylands-manure-pollution-rules-are-failing-protect-chesapeake>



Farm In the Watershed



A large farm located in the Chesapeake Bay watershed area uses a huge amount of fertilizer to help stimulate the growth of its crops. The farmer understands that the fertilizer is being washed into nearby rivers and is eventually working its way into the Chesapeake Bay. He is concerned about the Bay but fears that using less fertilizer will cause him to produce fewer crops, which would cause him to make less money. Can you help find a sensible solution? Keep in mind that it is difficult to find a solution that will please all people. Decide on a solution that you think works best to help improve the health of the Bay as well as help the farmer continue to make a good living from the sale of his crops.

A few websites to get you started:

http://www.chesapeakebay.net/blog/post/maryland_farmers_to_plant_record_cover_crop_acreage_in_2011

<http://nutrients.umd.edu/water.htm>

<http://www.fws.gov/chesapeakebay/nutrient.html>

<http://www.caf.wvu.edu/~forage/nitratepollution/nitrate.htm>

<http://www.dailypress.com/features/family/home-garden/outdoors/diggin-in-blog/dp-chesapeake-bay-farmers-learn-about-tools-that-help-reduce-nitrogen-pollution-20110914,0,7621710.story>

<http://www.bayjournal.com/article.cfm?article=3902>



Development of Waterfront Resort Community



A developer has just purchased a large parcel of land and plans to have it made into a beautiful waterfront resort community. Much of the land is located along the Chesapeake Bay and includes many acres of wetlands. The resort would include waterfront condominiums, a boat marina, golf course, swimming pools, tennis courts, and restaurants. The resort will provide year-round recreation for people. Research the possible concerns this resort could create for the environmental health of the Bay. Without completely abandoning all of the developers plans, can you decide upon some sensible solutions that will help protect the Bay?

A few websites to get you started:

<http://www.ahla.com/green.aspx?id=3616>

<http://www.terracurve.com/2010/04/21/truly-sustainable-how-resorts-can-go-beyond-green/>

<http://www.cbf.org/Page.aspx?pid=389>

<http://www.friendsofblackwater.org/resortcomm.html>

http://www.washingtonpost.com/wp-dyn/content/article/2006/02/18/AR2006021801484_pf.html

<http://www.istaygreen.org/hotel.cfm/hid/11298755>

<http://www.post-gazette.com/pg/06239/716100-37.stm>



Waterman



For generations, a waterman's family has earned a living by catching fish, crabs, and harvesting oysters on the Chesapeake Bay. His family understands that the population of blue crabs, oysters, and some species of fish are declining in the Bay. The waterman is concerned about the environmental impact on the Bay, but he is also interested in supporting his family with the money that he makes when he sells the fish, crabs, and the oysters that he catches. Research this issue and decide on a sensible solution that will help the environment and still provide a living for the waterman.

A few resources to get you started:

Who are the watermen?

<http://www.marinersmuseum.org/sites/micro/cbhf/waterman/wat000.html>

A book to read:

Waterman's Child by Barbara Mitchell

Websites to investigate:

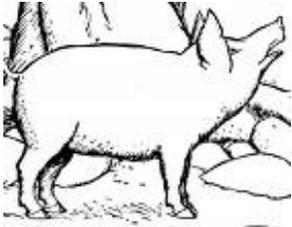
<http://www.environmentmaryland.org/reports/clean-water/clean-water-program-reports/watermen-blues-economic-cultural-and-community-impacts-of-poor-water-quality-in-the-chesapeake-bay>

http://news.nationalgeographic.com/news/2001/05/0510_crabbing.html

<http://www.baygateways.net/watermen.cfm>

<http://www.bayjournal.com/article.cfm?article=2727>

<http://www.bayjournal.com/article.cfm?article=4118>



Pennsylvania Farmer



A large dairy and pig (swine) farm is located in Pennsylvania. The farm is situated along a stream that feeds into the Susquehanna River. The farm animals like to stand in the river on hot sunny days and drink from the river when they are thirsty. A large amount of animal waste is ending up in the river. The farmer has been reading about the excess nutrient problem that is occurring in the Chesapeake Bay. He never realized that his farm might be part of the problem. Can you decide on a sensible solution for the farmer that will help keep the Bay from receiving these excess nutrients?

A few websites to get you started:

<http://www.greenworks.tv/farmers/toward.htm>

<http://live.psu.edu/story/50747>

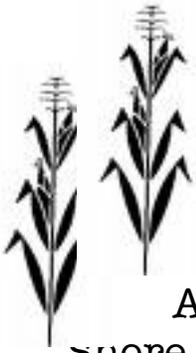
<http://www.nytimes.com/2007/04/13/us/13bay.html>

[http://www.nfwf.org/AM/Template.cfm?Section=Precision Agriculture](http://www.nfwf.org/AM/Template.cfm?Section=Precision_Agriculture)

<http://www.baltimoresun.com/news/opinion/oped/bs-ed-manure-20120220,0,3440083.story>

<http://www.bayjournal.com/article.cfm?article=3600>

<http://www.bayjournal.com/article.cfm?article=3925>



Agricultural Farm on Eastern Shore

A large agricultural farm is located on the Eastern Shore of Maryland. The farm grows corn, soybeans, and tomatoes. The farmer has been experiencing a problem with insects destroying his crops. Last year he sprayed his crops with heavy doses of pesticides. In addition, he has noticed that after he tills his fields, large amounts of soil from his field wash into the local stream. His daughter has been learning all about the Chesapeake Bay's declining health in her fourth grade classroom. She has asked her dad to avoid using these same pesticides on his crops the following year. She also wants him to control the amount of soil that is being washed into the stream. Decide on a sensible solution that will help the Bay and the farmer?

A few websites to get you started:

www.mdpestnet.org/publications/MPN-Farmers-Kit.pdf

http://www.kunafin.com/Crop_and_Orchard.php

<http://www.bayjournal.com/article.cfm?article=1805&print=yes>

http://eap.mcgill.ca/MagRack/JPR/JPR_13.htm

<http://www.motherearthnews.com/organic-gardening/why-natural-insect-control-works-better.aspx>

<http://extension.umd.edu/environment/waterqualityprojects/project44.cfm>

<http://www.bayjournal.com/article.cfm?article=1569>