Large Aquatic Ecosystems: Introduction

A watershed is the land area that drains to a common waterway. Rivers, lakes, estuaries, wetlands, streams, and even the oceans are catch basins for the land adjacent to them. Ground water aquifers are replenished based on water flowing down through the land area above them. These important water resources are sensitive to chemicals and other pollutants released within or transferred across their boundaries.

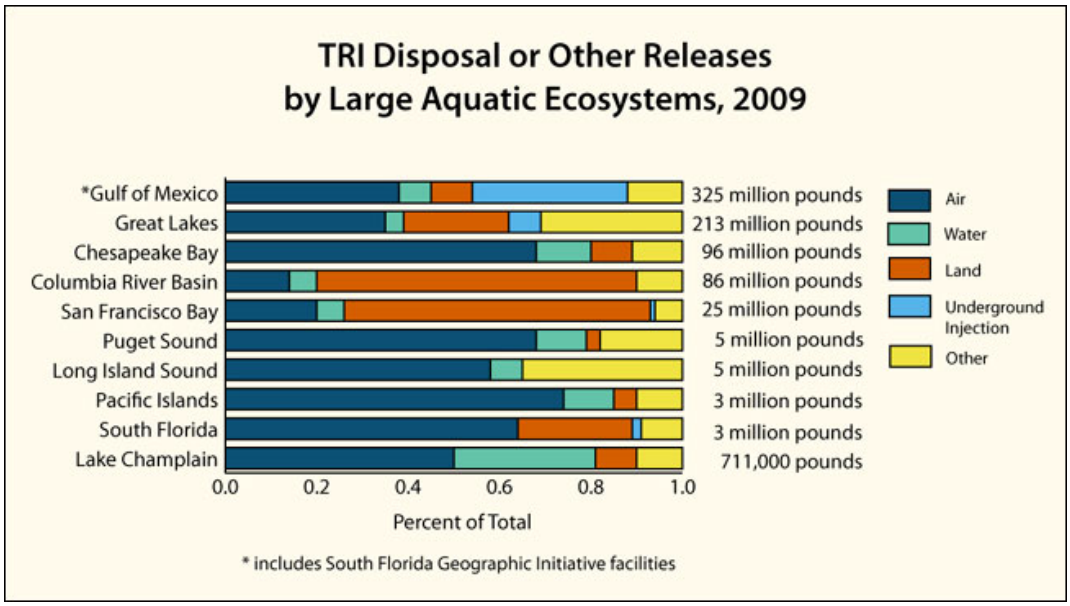
A large aquatic ecosystem (LAE) is comprised of multiple small watersheds and water resources within a large geographic area. The Large Aquatic Ecosystems Council was created by the U.S. Environmental Protection Agency in 2008 to focus on protecting and restoring the health of critical aquatic ecosystems. Currently there are ten program LAEs in this program, which are listed below and shown in the following map:

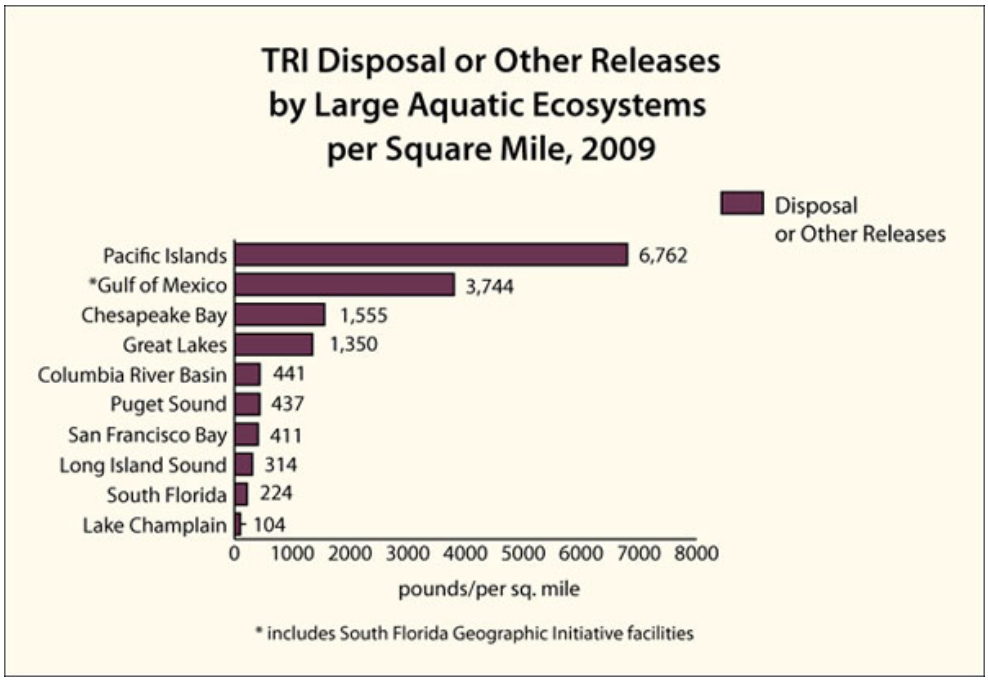
- Chesapeake Bay [Español]
- Columbia River Basin
- Great Lakes Basin
- Gulf of Mexico [Español]
- Lake Champlain Basin
- Long Island Sound [Español]
- Pacific Islands
- Puget Sound–Georgia Basin
- San Francisco Bay Delta [Español]
- South Florida [Español]

Large Aquatic Ecosystems Map

Water pollution, surface runoff, contaminated sediment, toxic discharges, and air emissions can impact the environmental quality of the land, water, and living resources within an aquatic ecosystem. Persistent toxic pollutants can be especially problematic in aquatic ecosystems because pollutants accumulate in sediments and may bioaccumulate in the tissues of fish and other wildlife at the top of the food chain to concentrations many times higher than in the water or air, causing environmental health problems for both humans and wildlife.

The TRI program has profiled each of these ten LAEs. Each profile includes information on the toxic chemicals released or otherwise managed as wastes, the sources of the toxics chemicals, and the potential impacts of these chemicals on the ecosystem and human health. The total quantity of toxic chemicals managed as wastes varies greatly among the LAEs along with the types and sizes of industrial facilities. How facilities dispose of or release toxic chemicals within the LAEs–whether to the land, air, or water–also varies greatly among the LAEs, as shown below.





Large Aquatic Ecosystems: Chesapeake Bay

TRI facilities in Chesapeake Bay Watershed

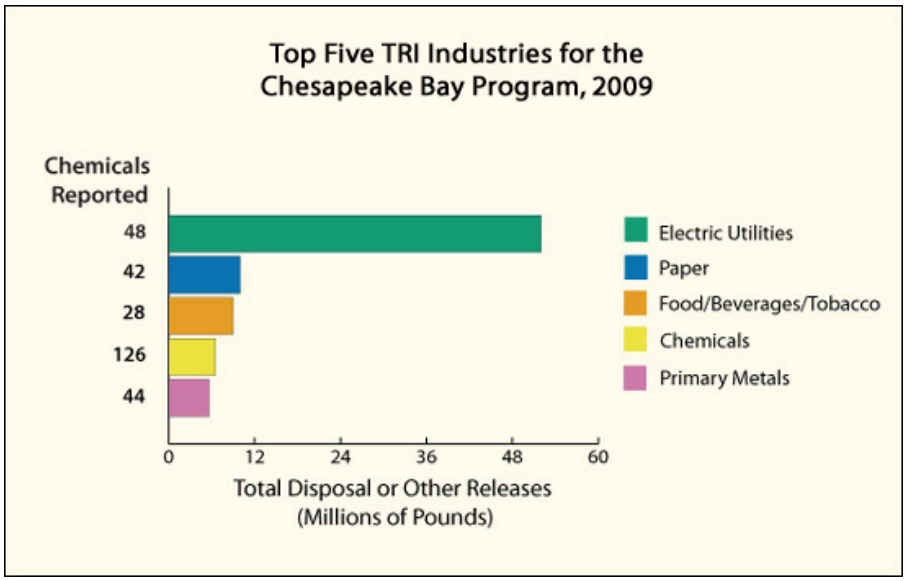
Quick Facts for 2009:

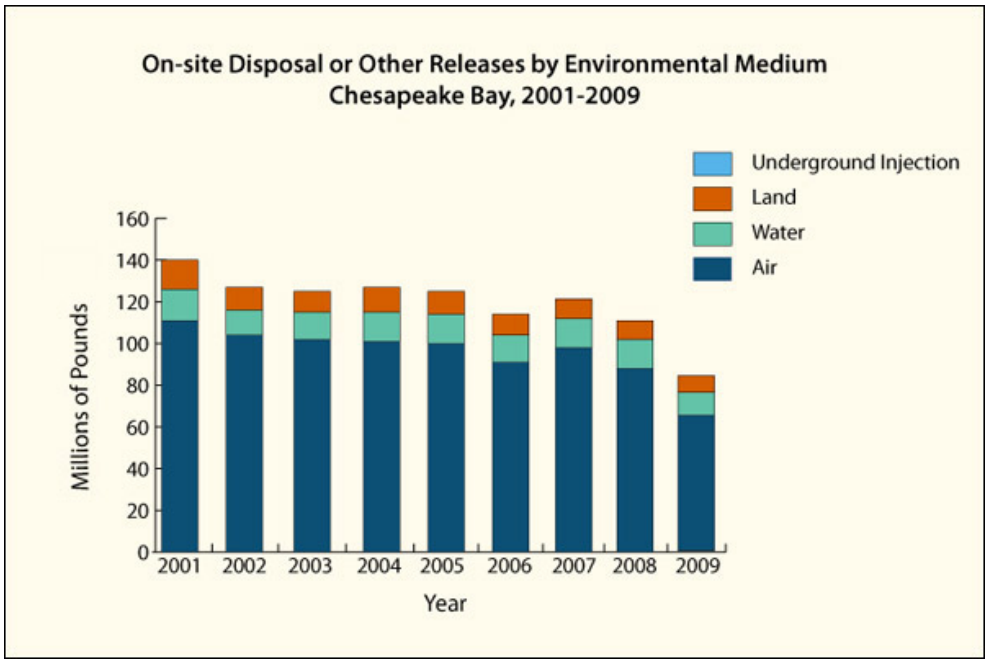
Watershed Size:	64,000 sq. miles
Population:	16.6 million
Number of TRI Facilities:	913
Total On-site and Off-site Disposal or Other Releases:	95.6 million lbs
Total On-site:	84.5 million lbs
• Air:	65.0 million lbs
• Water:	11.4 million lbs
• Land:	8.1 million lbs
• Underground Injection:	30 thousand lbs
Total Off-site:	11.1 million lbs

The Chesapeake Bay is the largest estuary in the United States and is home to more than 3,600 species of plants, fish, and animals. More than 350 species of fish are known to live, feed and spawn in the Bay and about 500 million pounds of seafood are harvested each year.

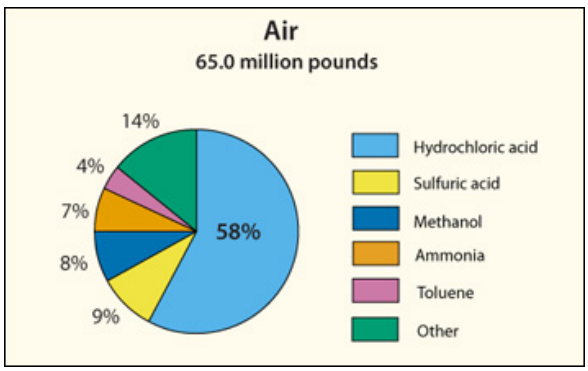
Some of the largest sources of TRI chemicals in the Chesapeake Bay watershed are air releases from electric power generating facilities. Sulfuric and hydrochloric acids released by power generating facilities and other industrial sources fall as acid rain onto the Bay and its watershed contributing to the acidification of surface waters. This source of acidification has been documented as an important factor in the ongoing decline in the populations of fish species that spawn in the Bay's streams and estuaries, including striped bass, American shad, alewife, menhaden, and herring. The TRI chemical disposed of or otherwise released in the second largest amount is nitrate compounds, which is due to releases from several large federal facilities and numerous poultry and food processing facilities. Excess nitrogen stimulates aquatic plant growth, particularly in nitrogen-limited waters, such as the Chesapeake Bay. Such intense plant growth, or eutrophication, can result in low oxygen levels and "dead zones" in summer months.

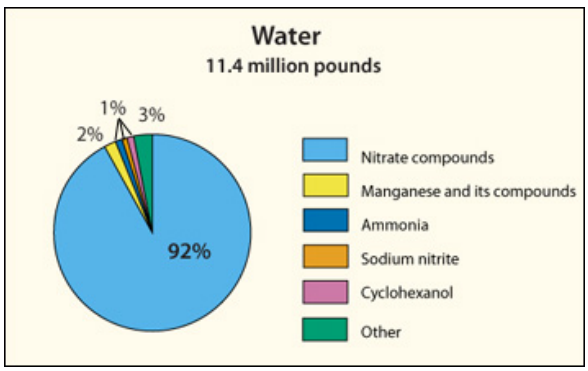
To learn more about ongoing efforts to protect the Chesapeake Bay Watershed, visit: www.chesapeakebay.net.

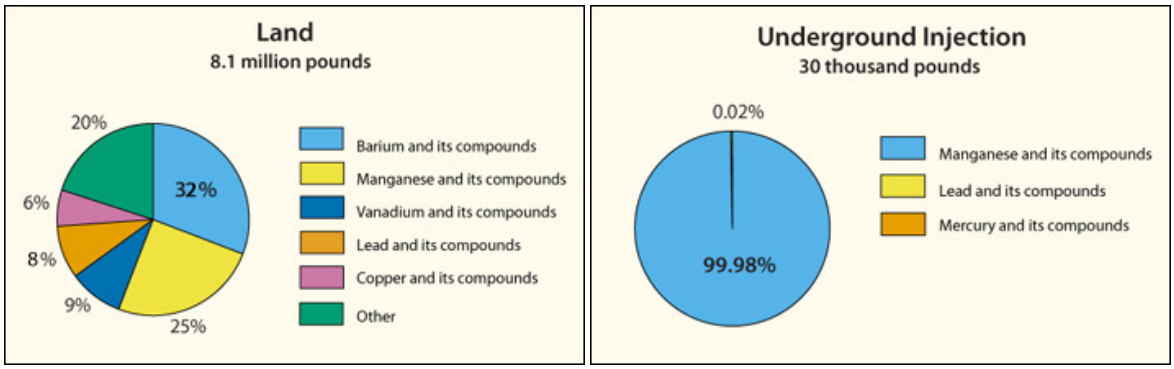




Top Five Chemicals by Environmental Medium, 2009







These charts represent the top five TRI chemicals in pounds released for this LAE, and do not include all chemicals of concern nor the priority or importance of those chemicals within the LAE. For more specific information, please visit the LAE Website at http://water.epa.gov/aboutow/owow/programs/large_aquatic.cfm.

Large Aquatic Ecosystems: Columbia River Basin

TRI facilities in Columbia River Basin

Quick Facts for 2009:

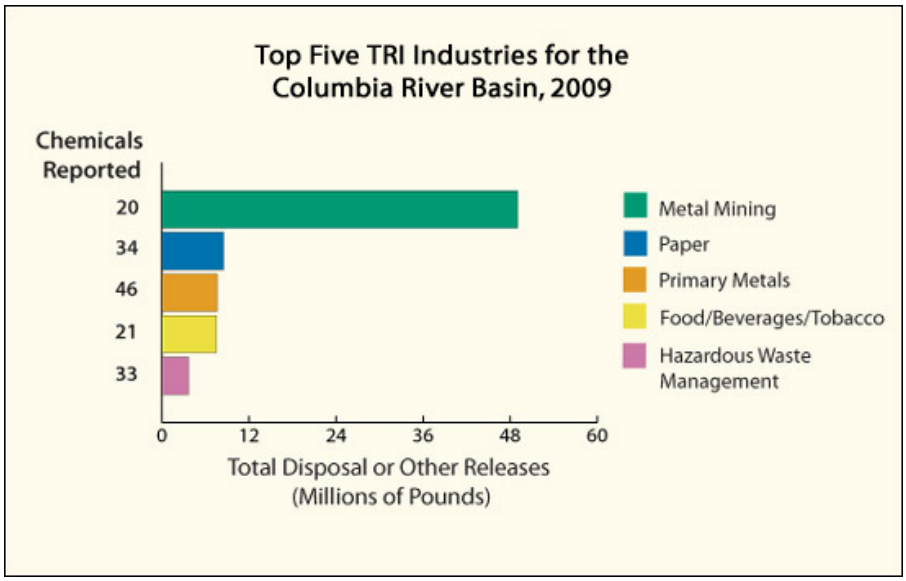
U.S. Watershed Size:	194,700 sq. miles
U.S. Population:	6 million
Number of TRI Facilities:	455
Total On-site and Off-site Disposal or Other Releases:	85.9 million lbs
Total On-site:	77.2 million lbs
• Air:	11.8 million lbs
• Water:	5.2 million lbs
• Land:	60.2 million lbs
• Underground Injection:	none
Total Off-site:	8.7 million lbs

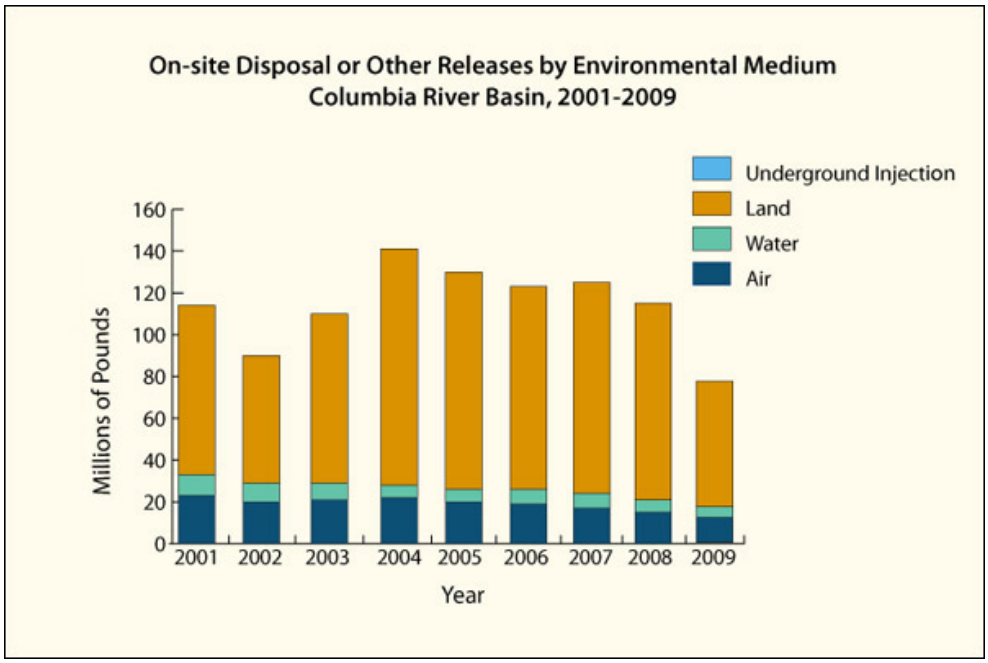
The Columbia River Basin covers an area of more than 260,000 square miles (194,700 square miles in the United States) in parts of seven U.S. states and British Columbia, Canada. The Columbia River begins in the Rocky Mountains of British Columbia, and flows for 1,200 miles through the states of Washington and Oregon before emptying into the Pacific Ocean. The Basin is home to many industries vital to the Pacific Northwest, including sport and commercial fisheries, agriculture, transportation, recreation, mining, paper mills, and hydro-electric power generation.

The Columbia River Basin ecosystem is home to many important plant and animal species. The Columbia River salmon and steelhead runs, for example, were once the largest fish runs in the world. Recent studies and monitoring programs have found significant levels of toxic chemicals in fish and the waters they inhabit, including DDT, PCBs, mercury, dioxins, and other anthropogenic toxic chemicals. According to EPA Region 10's "Columbia River Basin Toxics Reduction Action Plan," such accumulation of toxics in fish threatens the species, and human consumption of fish with significant body burdens of toxics can lead to health problems.

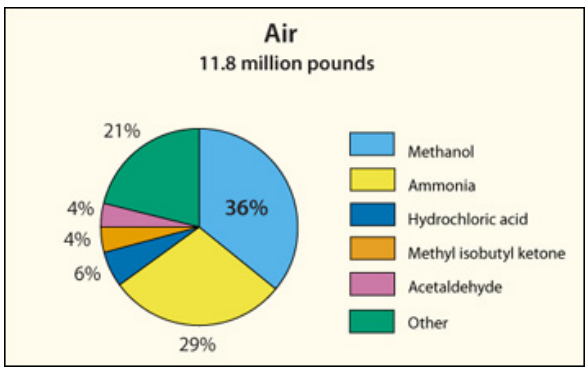
Some of the largest sources of TRI chemicals in the Columbia River Basin include the land disposal of manganese, lead, copper and zinc and other metals from metal mines. Runoff from these areas, as well as wastewater effluent from numerous pulp and paper mills, is associated with degraded water quality. Indian Tribes and state and federal governments are all engaged in efforts to restore and improve the water, land, and air quality of the Columbia River drainage basin and have committed to work together on a range of ecosystem restoration efforts.

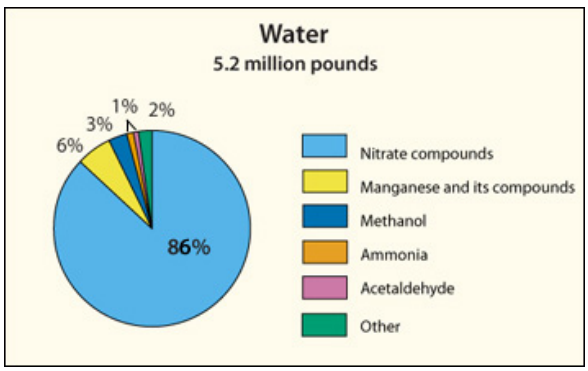
To learn more about ongoing efforts to protect the Columbia River Basin, visit: http://yosemite.epa.gov/r10/ecocomm.nsf/Columbia/Columbia.

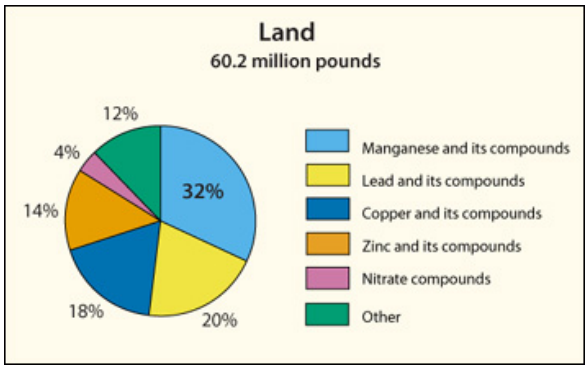




Top Five Chemicals by Environmental Medium, 2009







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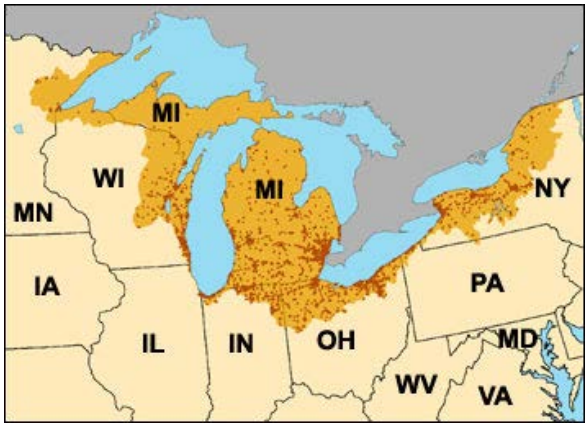
Large Aquatic Ecosystems: Great Lakes Basin



TRI facilities in the Great Lakes

Quick Facts for 2009:

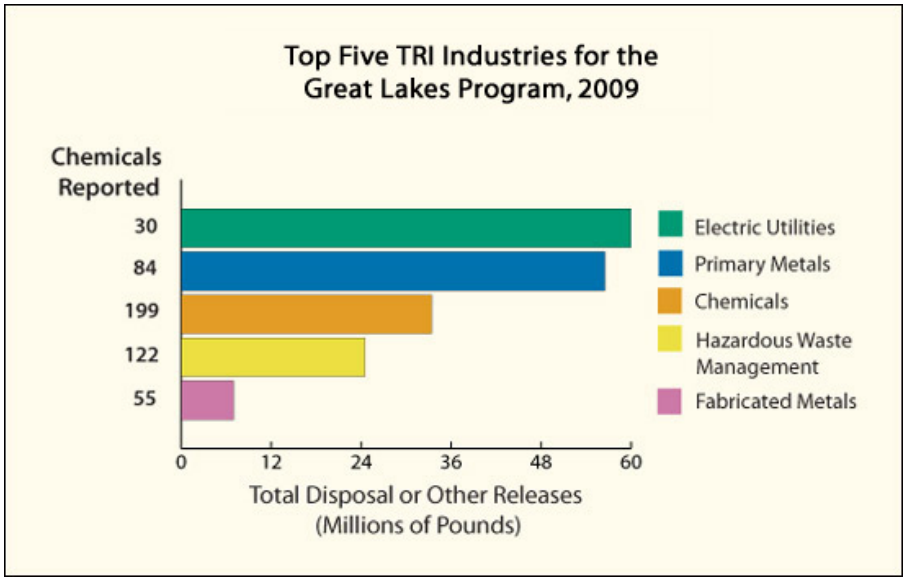
U.S. Watershed Size:	157,900 sq. miles
U.S. Population:	30 million
Number of TRI Facilities:	2,391
Total On-site and Off-site Disposal or Other Releases:	213.0 million lbs
Total On-site:	148.3 million lbs
• Air:	74.6 million lbs
• Water:	8.8 million lbs
• Land:	49.8 million lbs
• Underground Injection:	15.1 million lbs
Total Off-site:	64.8 million lbs

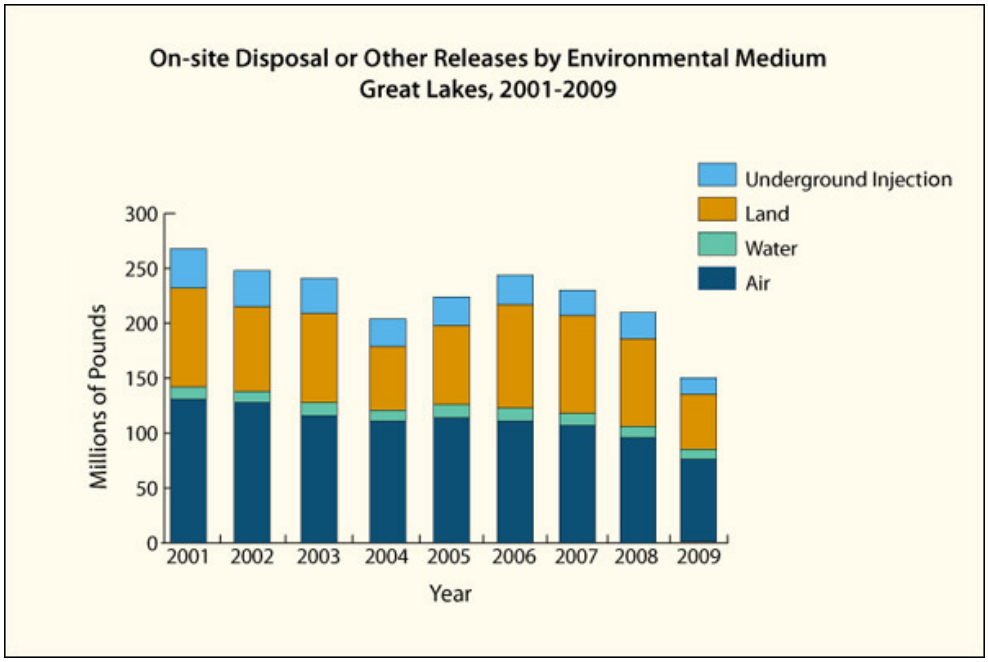
The Great Lakes Basin consists of the Superior, Michigan, Huron, Erie and Ontario Lakes, a number of other lesser lakes and waterways, and the surrounding watershed. The watershed covers parts of the U.S. states of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin, as well as parts of the province of Ontario in Canada. The Great Lakes are the largest freshwater bodies in the world, with a surface area of more than 94,000 square miles. The Great Lakes system drains less than one percent of its total water volume each year to the Saint Lawrence River, resulting in high residence time for water and toxics entering the basin.

Major contributors to the ecological problems in the Great Lakes Basin include urban runoff, hazardous waste management, sewage disposal, and discharges of industrial wastewaters containing toxic chemicals. These environmental releases affect not only water quality but also aquatic food chains, fish populations, and human health. The largest air releases of toxics in the Great Lakes Basin are hydrochloric and sulfuric acid generated by electric utilities. The Great Lakes are very susceptible to resulting acid rain pollution due to the large surface areas in the water and watershed. Nitrates and pesticides are common surface water pollutants from agricultural land and municipal wastewater treatment plants. Nitrates are also discharged in significant quantities by food and beverage manufacturers and metal processing industries. The metal processing and electric utilities industries are the primary sources of land disposal of barium, manganese, zinc, lead and mercury metals in the basin.

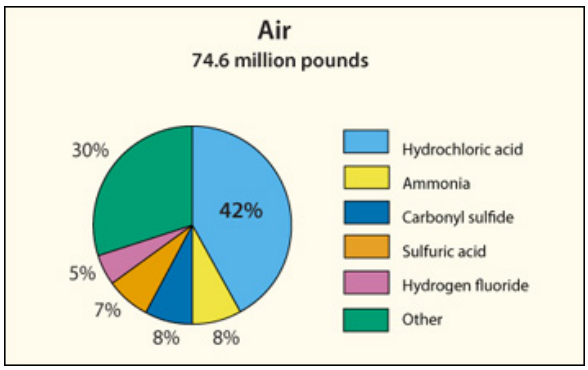
The health of the Great Lakes is much improved from previous decades due to voluntary and regulatory efforts at the local and international level, beginning with the first wide scale effort in 1972, the Great Lakes Water Quality Agreement, which coordinated water quality management efforts of the United States and Canada. Since that time, many toxic chemical disposals or other releases have been reduced or eliminated through regulatory and voluntary actions on both sides of the border; however, pollutants still enter the basin and the effects of many of the previously released toxic chemicals are not yet attenuated.

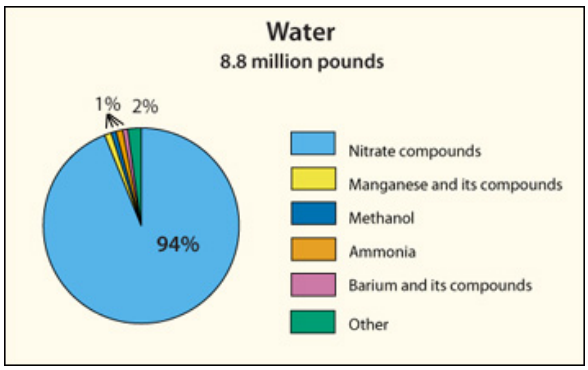
To learn more about ongoing efforts to protect the Great Lakes, visit: www.epa.gov/glnpo.

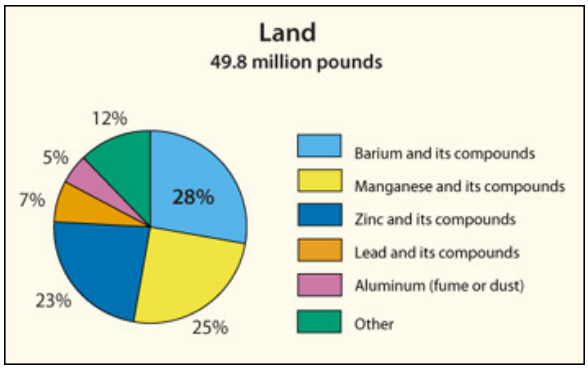


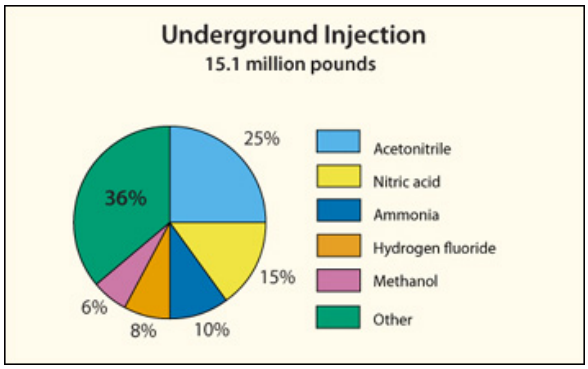


Top Five Chemicals by Environmental Medium, 2009









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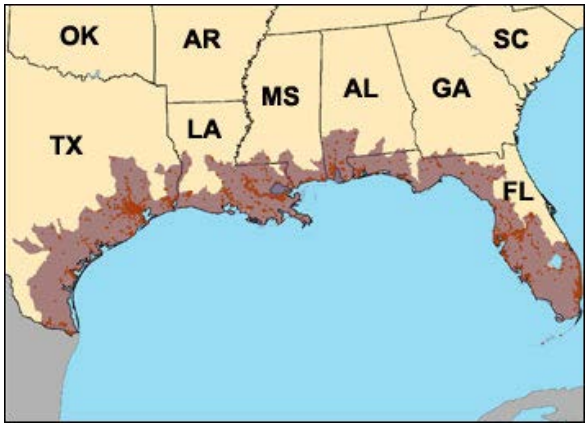
Large Aquatic Ecosystems: Gulf of Mexico



TRI facilities in the Gulf of Mexico

Quick Facts for 2009:

Watershed Size:	86,800 sq. miles
Population:	44.2 million
Number of TRI Facilities:	1,192
Total On-site and Off-site Disposal or Other Releases:	325.0 million lbs
Total On-site:	288.4 million lbs
• Air:	123.8 million lbs
• Water:	23.4 million lbs
• Land:	30.0 million lbs
• Underground Injection:	111.2 million lbs
Total Off-site:	36.6 million lbs

The Gulf of Mexico is a vast, highly productive body of water in ecological, economic, and social terms. This large aquatic ecosystem (LAE) includes major portions the U.S. states of Texas, Louisiana, Mississippi, Alabama, and Florida. The Gulf of Mexico ecosystem supports a wide array of natural resource dependent industries, including oil and gas production, marine shipping, agriculture, and tourism. The Gulf of Mexico is also one of the largest commercial fishing regions in the United States. The coastal areas are also home to many large petroleum refining and chemical production facilities. The ecosystem of the Gulf and surrounding land is complex and delicate, shared and used by many people, wildlife and plant life.

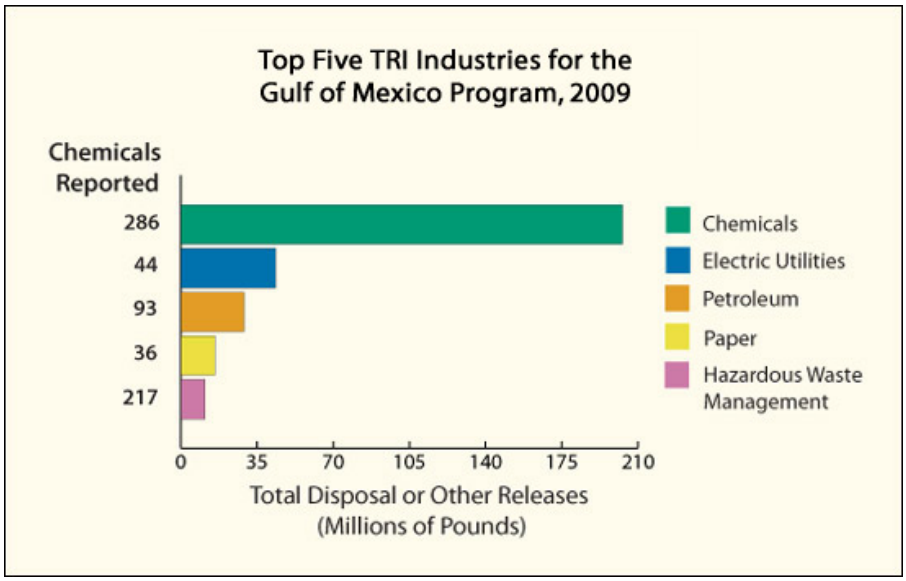
Runoff and discharges from agricultural, industrial, and municipal sources into surface waters bring excessive nutrients and toxic pollutants into the Gulf. One of the world's largest hypoxic or dead zones, where oxygen is too low to support aquatic life, is along the Texas and Louisiana coast, primarily the result of pollution flowing from the Mississippi River. High levels of heavy metals, pesticides and petroleum are observed in water, sediments and in the tissues of many aquatic species.

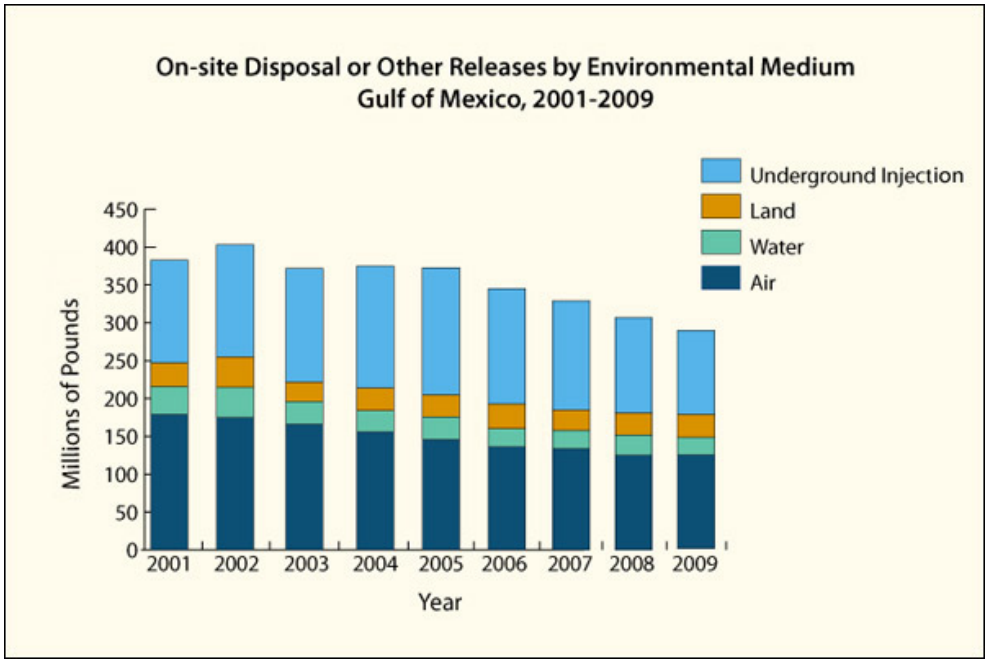
The largest amounts of TRI air emissions in the Gulf of Mexico LAE are methanol, primarily from paper mills; hydrochloric acid, primarily from electric utilities; and ammonia, primarily from chemical manufacturing facilities. Nitrates constitute the largest TRI surface water release, primarily from poultry processing, petroleum refining, and chemical manufacture. The greatest amount of TRI land disposed chemicals are barium and barium compounds from electric utilities, manganese and manganese compounds from chemical manufacturing, and lead and zinc and their compounds from primary metals production. In this region, underground injection is used for the disposal of toxic chemicals, including nitrates, acetonitrile, and ammonia, primarily from the chemical manufacturing industry.

A number of federal, state and local groups are concerned about the impact of these releases and other threats to the Gulf of Mexico ecosystem.

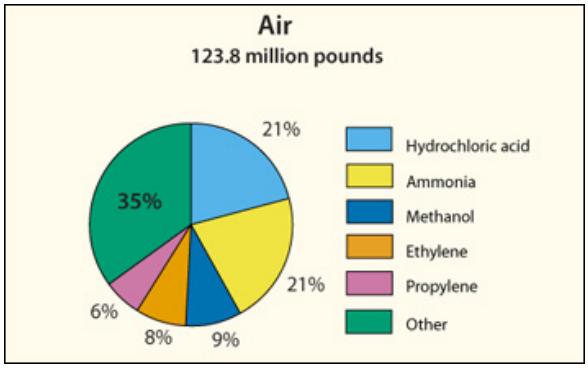
The 2004 Gulf of Mexico Alliance initiated by the five Gulf states and the 1998 U.S. EPA's Gulf of Mexico Program both monitor and protect the health of the Gulf of Mexico ecosystem.

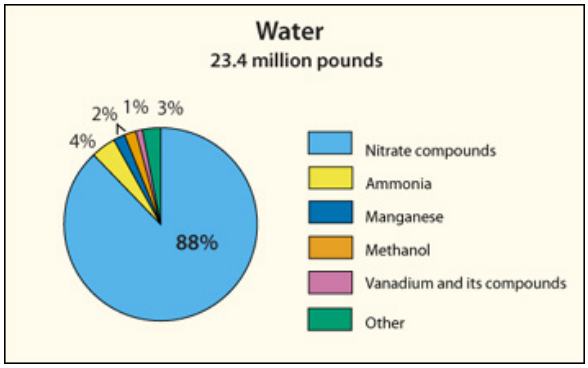
To learn more about ongoing efforts to protect the Gulf of Mexico, visit: www.epa.gov/gmpo.

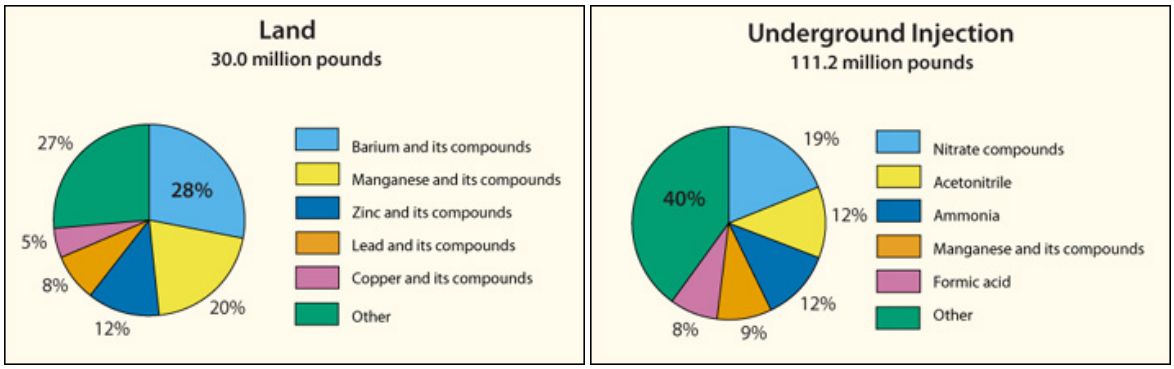




Top Five Chemicals by Environmental Medium, 2009







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Large Aquatic Ecosystems: Lake Champlain Basin

TRI facilities in the Lake Champlain Basin

Quick Facts for 2009:

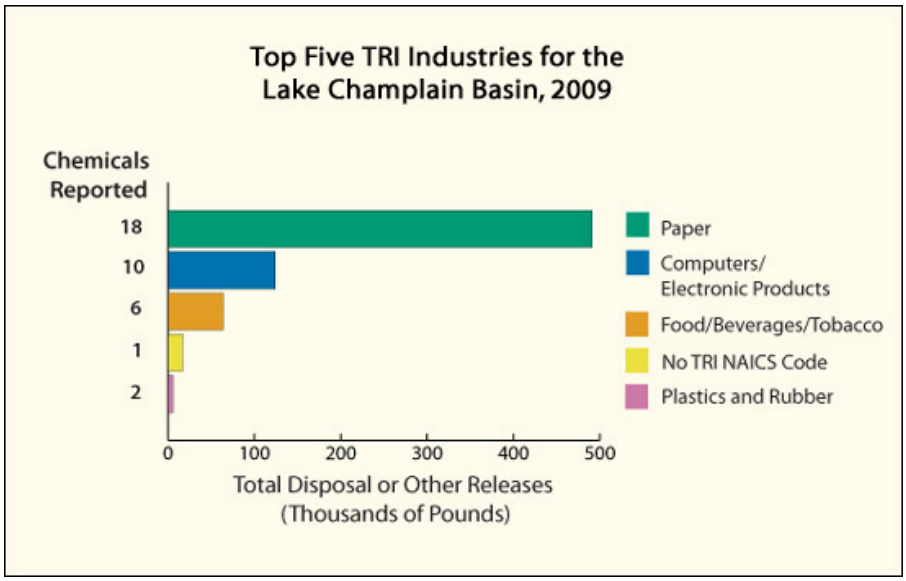
U.S. Watershed Size:	6,800 sq. miles
U.S. Population:	600 thousand
Number of TRI Facilities:	29
Total On-site and Off-site Disposal or Other Releases:	711 thousand lbs
Total On-site:	638 thousand lbs
• Air:	356 thousand lbs
• Water:	218 thousand lbs
• Land:	64 thousand lbs
• Underground Injection:	none
Total Off-site:	72 thousand lbs

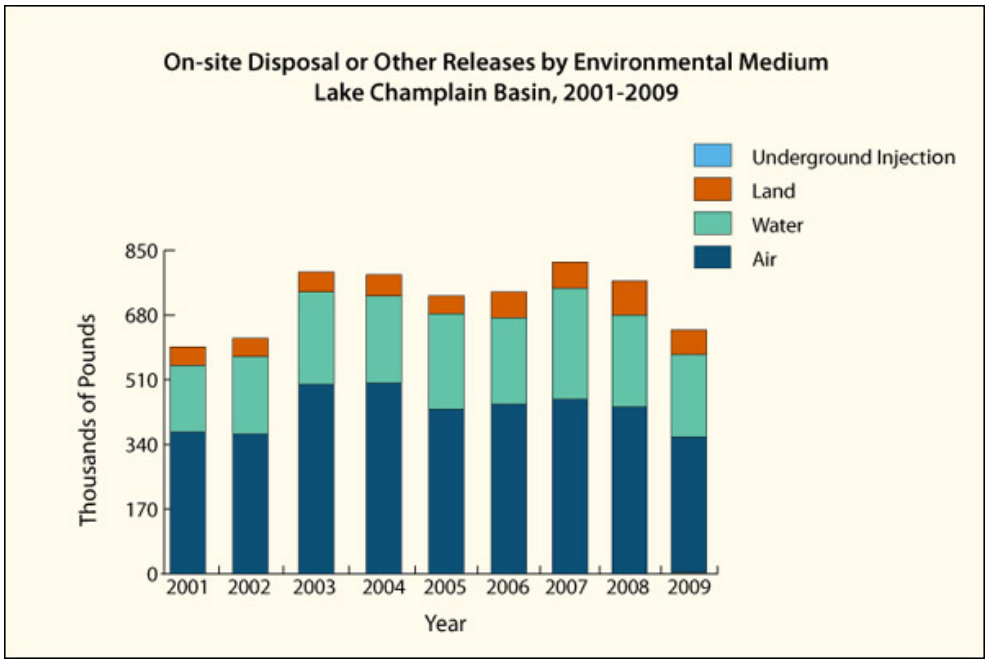
Lake Champlain is situated between the states of New York, Vermont, and the Canadian province of Quebec. The Lake's watershed is in the Champlain Valley, located between the Green Mountains of Vermont, the Adirondack Mountains of New York and includes portions of Quebec. The Lake is used for drinking water for over 200,000 people, as well as for fishing and recreation.

The largest toxic air releases in the watershed are methanol and acetaldehyde generated by paper mills. Nitrates and phosphorous are released to surface water primarily through agricultural runoff and municipal wastewater treatment plants. Nitrates are also discharged from TRI facilities producing food and beverages and electronic components. The largest amounts of disposal to land are lead, zinc, manganese and their compounds, as well as methanol, which are primarily from paper mills, federal facilities, and facilities manufacturing transportation equipment and electronic components.

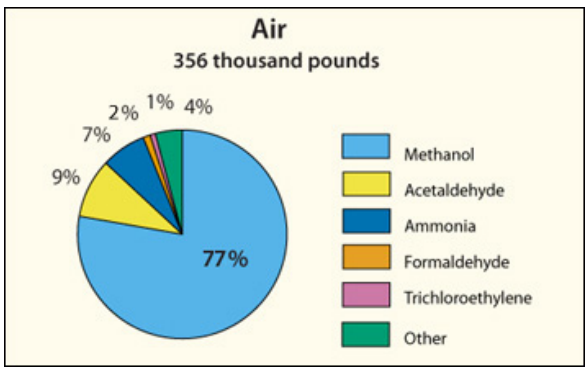
In 1996, New York, Vermont and the EPA endorsed the Lake Champlain Basin Program as a pollution prevention, control, and restoration plan for Lake Champlain. The government of Quebec joined the Program in 2003. The plan primarily aims to reduce high phosphorus levels in the Lake, which cause damaging algal blooms. Another priority of the plan is to reduce the amounts of toxic substances entering the Lake. Toxics, such as PCB's and mercury, which accumulate in the aquatic food chain, have resulted in fish consumption advisories.

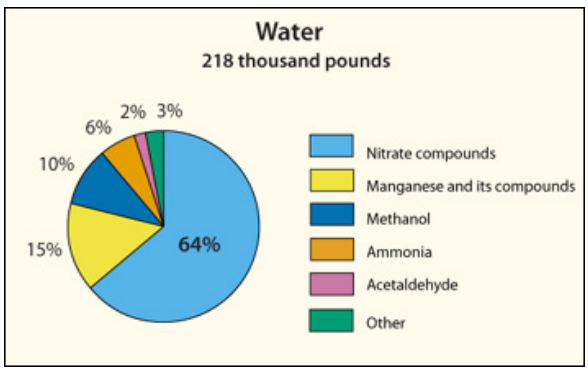
To learn more about ongoing efforts to protect Lake Champlain, visit: www.lcbp.org.

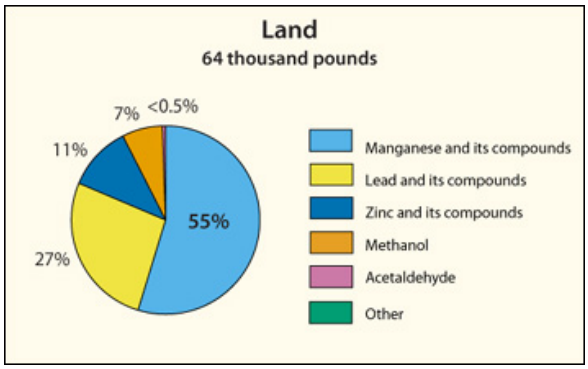




Top Five Chemicals by Environmental Medium, 2009







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Large Aquatic Ecosystems: Long Island Sound

TRI facilities in Long Island Sound

Quick Facts for 2009:

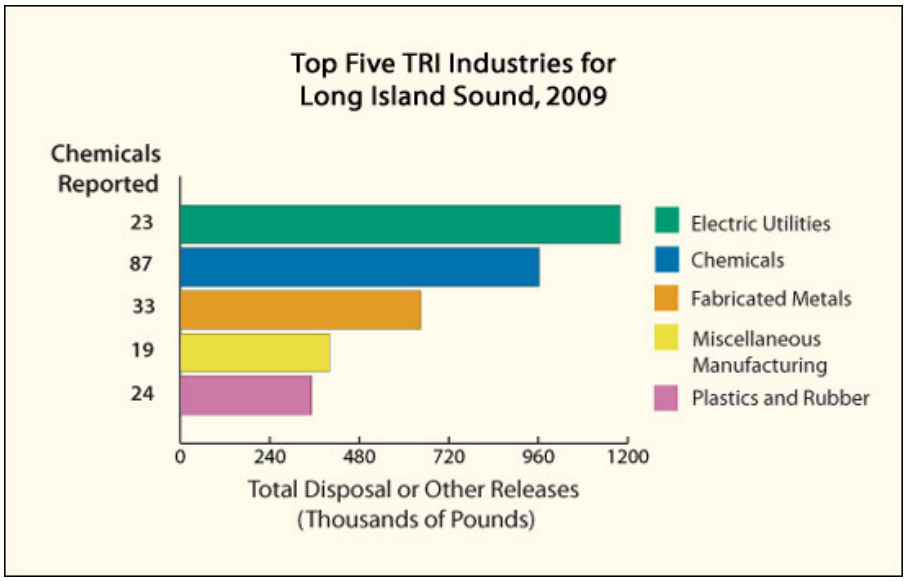
Watershed Size:	17,393 sq. miles
Population:	8 million
Number of TRI Facilities:	484
Total On-site and Off-site Disposal or Other Releases:	4.8 million lbs
Total On-site:	3.2 million lbs
• Air:	2.8 million lbs
• Water:	0.3 million lbs
• Land:	21 thousand lbs
• Underground Injection:	none
Total Off-site:	1.7 million lbs

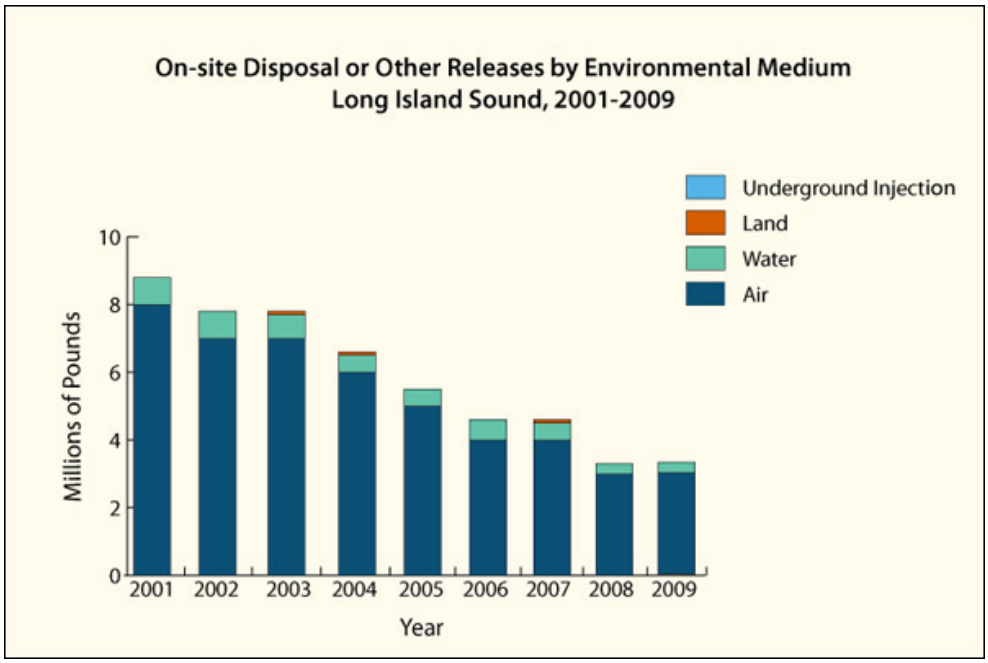
Long Island Sound is a large and productive estuary lying between Connecticut to the north and Long Island, New York to the south. It is home to more than 170 species of fish and dozens of species of migratory birds. The Sound supports a large commercial fishing and shellfishing industry and its waters and shores are an important recreational resource. The Sound's watershed, which begins at the headwaters of the Connecticut River near the Quebec border, covers more than 17,000 square miles and is home to more than 8 million people.

The largest quantities of toxic disposal or other releases in the Long Island Sound watershed are air releases of hydrochloric acid, sulfuric acid, and ammonia primarily from electric utilities. Dichloromethane is also released from primary metals and fabricated metals facilities. One electric utility was the primary source of chromium and barium disposed in the watershed.

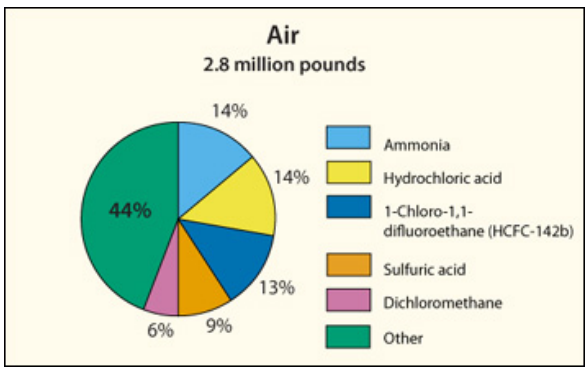
Much of the land area bordering Long Island Sound is densely populated and the health and productivity of the Sound, its wetlands, intertidal areas, and other habitats have been diminished by development and pollution. Areas of the Sound are impaired as habitat for fish and shellfish because of low dissolved oxygen levels, a condition called hypoxia. Reducing nitrogen loads, which contribute to oxygen depletion, is a top priority for the government and nongovernmental organizations working to protect the Sound. Another priority is the reduction of toxic substances entering the Sound. Discharges and atmospheric deposition into the Sound, its tributaries, and watershed from industrial activities over the years have resulted in accumulation of toxic chemicals in the water column and sediments. According to the Long Island Sound Study, mercury, copper, zinc, and PCBs are of particular concern. Health advisories in Long Island Sound warn against consumption of several fish and shellfish species due to elevated levels of toxic chemicals.

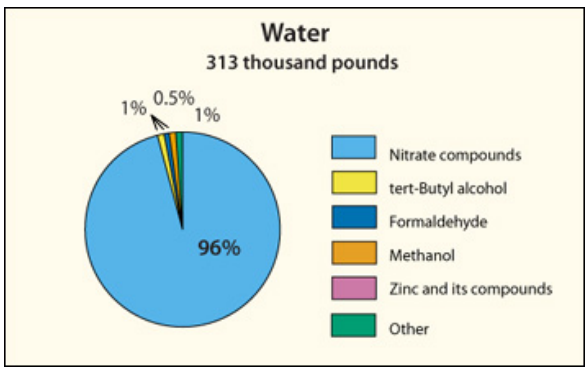
To learn more about ongoing efforts to protect Long Island Sound, visit: www.longislandsoundstudy.net.

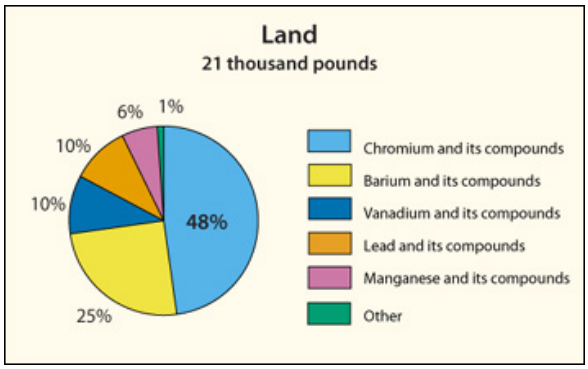




Top Five Chemicals by Environmental Medium, 2009







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Large Aquatic Ecosystems: Pacific Islands

TRI facilities in the Pacific Islands

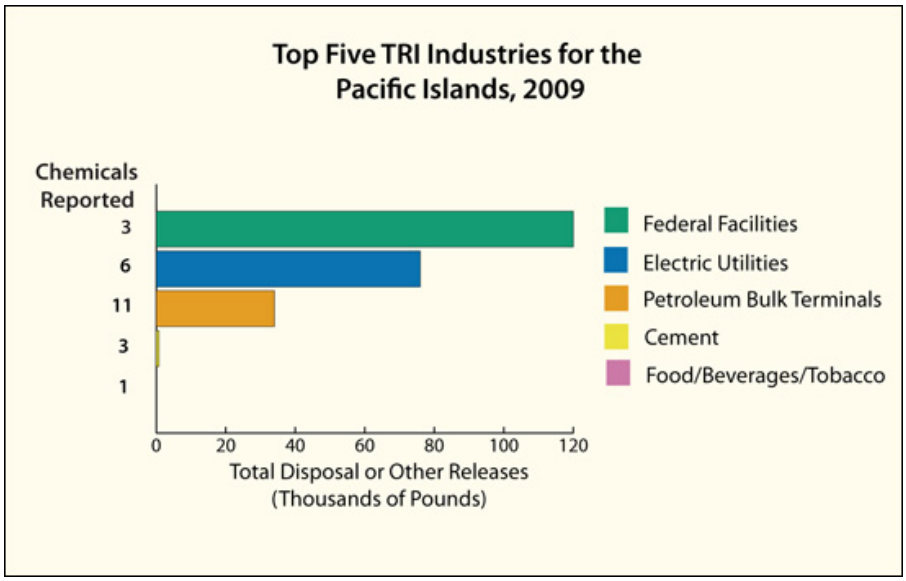
Quick Facts for 2009:

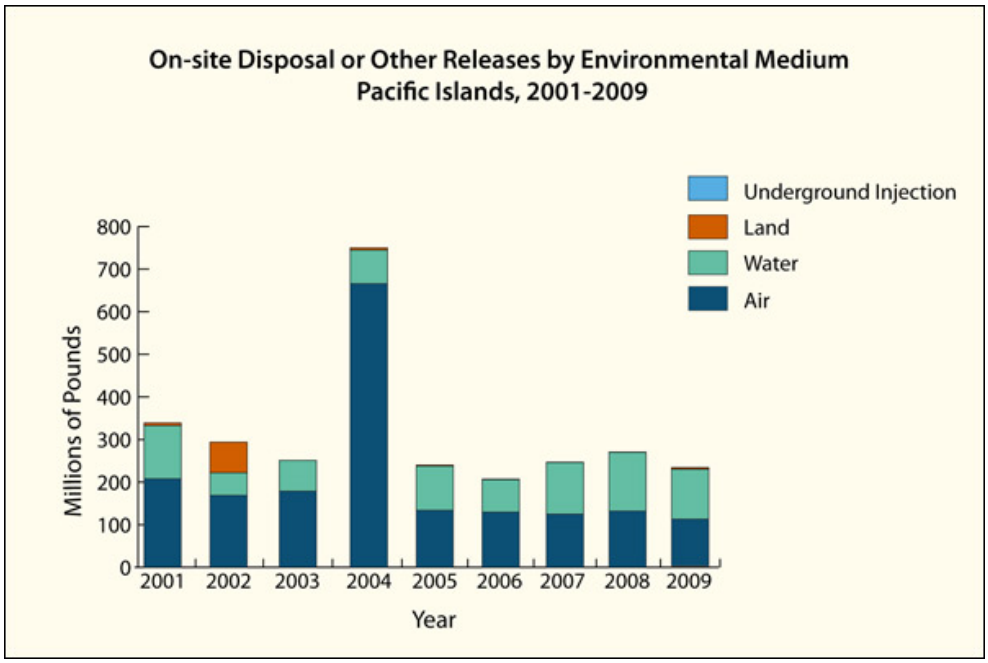
Watershed Size:	470 sq. miles
Population:	324 thousand
Number of TRI Facilities:	14
Total On-site and Off-site Disposal or Other Releases:	231 thousand lbs
Total On-site:	230 thousand lbs
• Air:	110 thousand lbs
• Water:	117 thousand lbs
• Land:	4 thousand lbs
• Underground Injection:	none
Total Off-site:	377 lbs

The Pacific Islands large aquatic ecosystem is composed of the U.S. territories of Guam, the Commonwealth of the Northern Mariana Islands (CNMI), and American Samoa. Guam and CNMI, both of the Mariana Islands, are located within Micronesia Region of the Western Pacific Ocean. American Samoa is located in the Polynesia Region of the South Pacific. The economy of the three territories is driven by tourism, the U.S. military, and fishing.

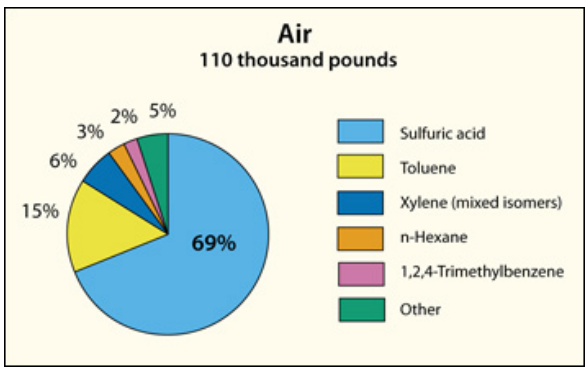
There are 14 TRI facilities in the Pacific Islands: 9 in Guam, 1 in American Samoa, and 4 in the Northern Mariana Islands on the island of Saipan. TRI air releases are primarily from electric utilities, with sulfuric and hydrochloric acid composing the greatest emissions. Federal facilities are the main source of nitrate releases to the water as well as lead and copper disposal or other releases to land. The ecology of these territories is monitored by the Region 9 EPA, as well as local EPA and DEQ offices in the territories.

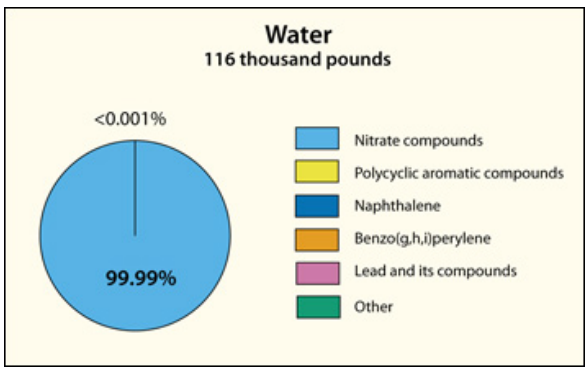
To learn more about ongoing efforts to protect the Pacific Islands, visit: www.epa.gov/region09/islands.

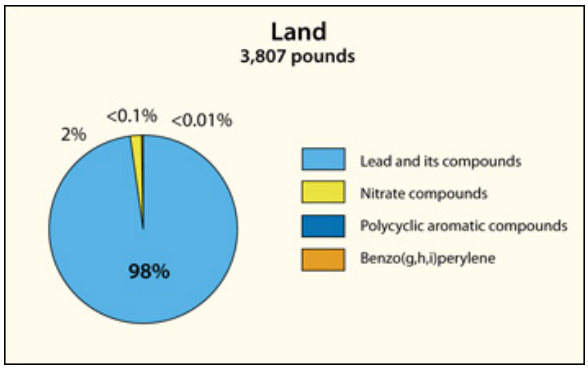




Top Five Chemicals by Environmental Medium, 2009







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Large Aquatic Ecosystems: Puget Sound - Georgia Basin

TRI facilities in Puget Sound - Georgia Basin

Quick Facts for 2009:

U.S. Watershed Size:	12,500 sq. miles
U.S. Population:	4.5 million
Number of TRI Facilities:	174
Total On-site and Off-site Disposal or Other Releases:	5.4 million lbs
Total On-site:	4.5 million lbs
• Air:	3.7 million lbs
• Water:	0.6 million lbs
• Land:	0.2 million lbs
• Underground Injection:	none
Total Off-site:	1.0 million lbs

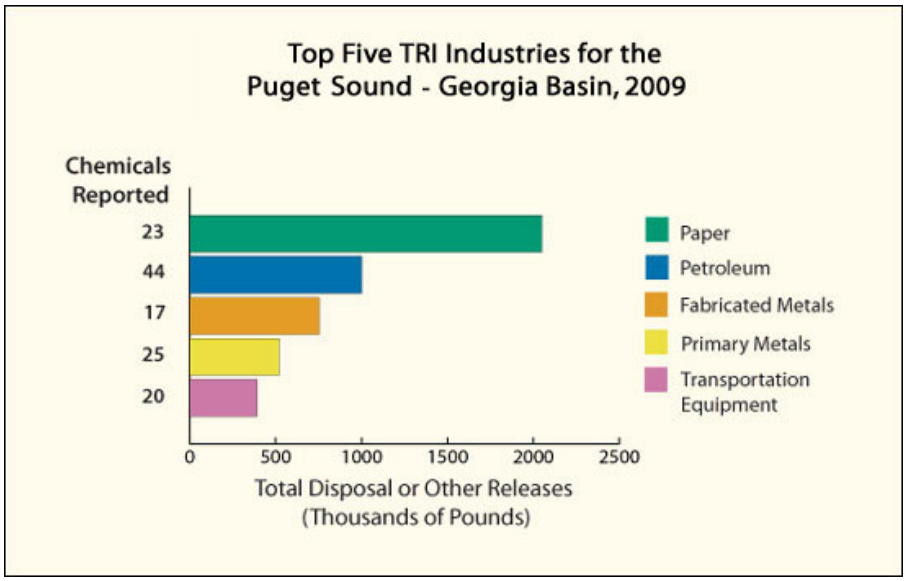
The Puget Sound - Georgia Basin ecosystem is a shared resource of both the United States and Canada. The saltwater basin contains the Puget Sound in Washington State, the Strait of Georgia in British Columbia, and the Strait of Juan de Fuca, which separates Washington's Olympic Peninsula from British Columbia's Vancouver Island. The land and numerous rivers of mainland Washington and British Columbia, Vancouver Island, and the other islands compose the watershed which drains to this common saltwater basin.

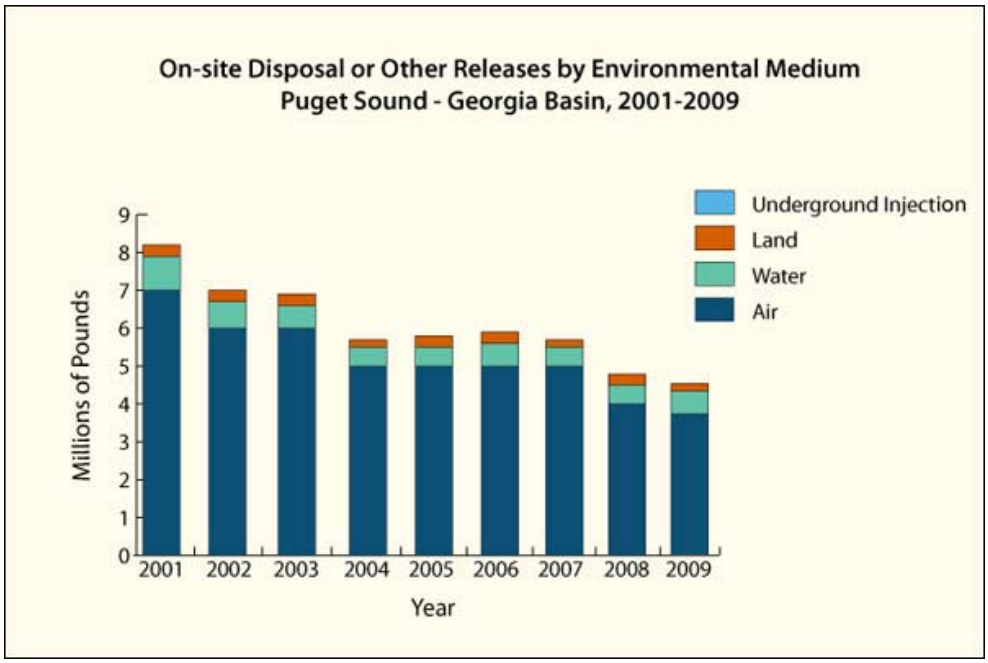
The ecosystem is one of the most ecologically diverse in North America and is also the backbone for the Region's culture and economy. The abundant coastline, waters and natural features afford a high quality of life to residents. Logging, wood products, fish and shellfish production, and tourism are major segments of the region's economy.

Pulp and paper, petroleum refining, and metals production generate the most significant toxic disposal or other releases in this ecosystem. The largest air emissions in the basin are methanol and hydrochloric acid generated primarily by the pulp and paper mills and petroleum refiners. Smelters use land disposal for significant amounts of lead and manganese. These releases may make their way to the fresh and salt waters of the ecosystem and accumulate in the food chain as evidenced by elevated levels of these toxins in the tissues of some aquatic species in the ecosystem.

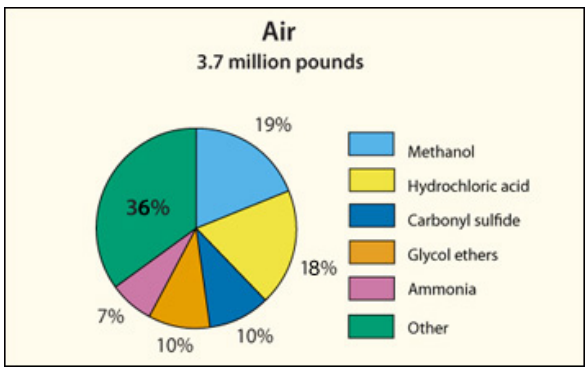
Many federal, state, and tribal government agencies as well as other local and regional groups are involved in monitoring and managing the Puget Sound-Georgia Straight. The EPA and Environment Canada have agreed to common management goals for the Region. In 2007, the Puget Sound Partnership, one of EPA's 28 National Estuary Programs, was formed by the Washington State Legislature for managing the ecological health of the Basin.

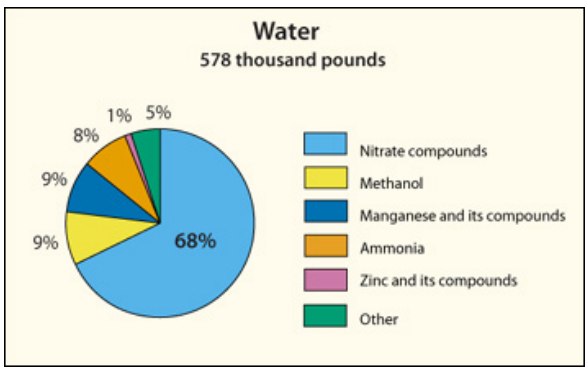
To learn more about ongoing efforts to protect Puget Sound - Georgia Basin, visit: www.epa.gov/pugetsound/.

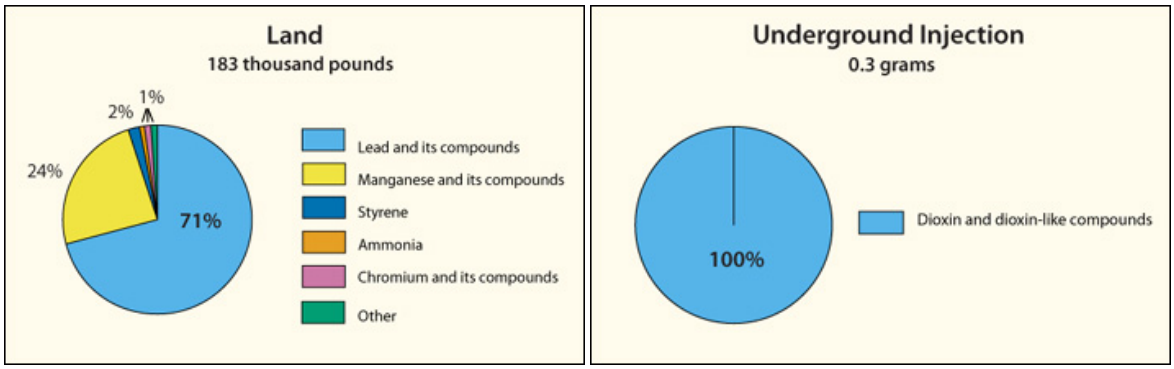




Top Five Chemicals by Environmental Medium, 2009







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Large Aquatic Ecosystems: San Francisco Bay Delta Estuary

TRI facilities in San Francisco Bay Delta

Quick Facts for 2009:

Watershed Size:	61,200 sq. miles
Population:	9 million
Number of TRI Facilities:	461
Total On-site and Off-site Disposal or Other Releases:	25.1 million lbs
Total On-site:	23.5 million lbs
• Air:	5.0 million lbs
• Water:	1.4 million lbs
• Land:	16.8 million lbs
• Underground Injection:	0.4 million lbs
Total Off-site:	1.7 million lbs

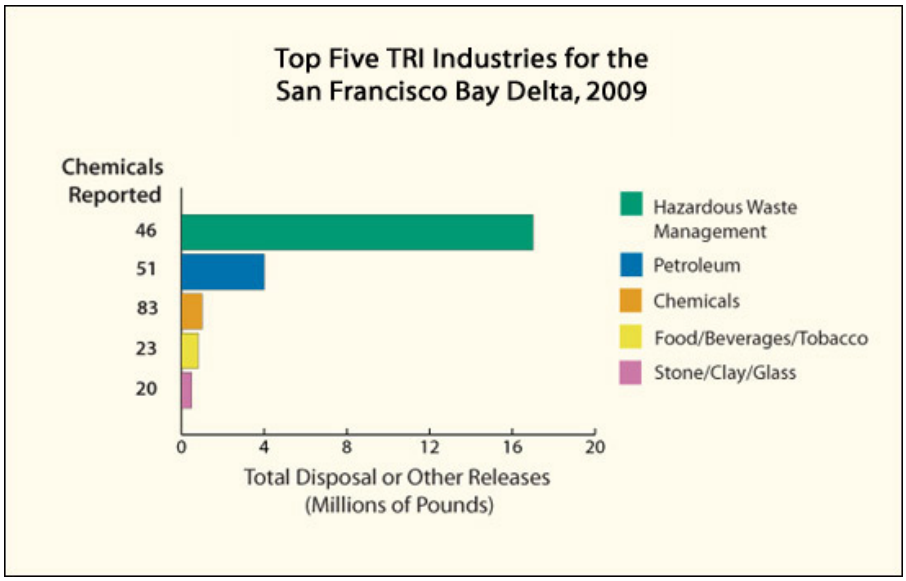
The San Francisco Bay Delta Estuary is the largest estuary on the west coast of the United States. The estuary provides critical habitat for a wide variety of birds, fish and other wildlife. The area is also home to more than 9 million people and industries vital to the region's economy, including sport and commercial fisheries, agriculture, transportation, and recreation. The large aquatic ecosystem (LAE) profiled here includes the San Francisco Bay Delta Estuary as well as the estuary's 60,000 square mile watershed, which covers about 40 percent of California.

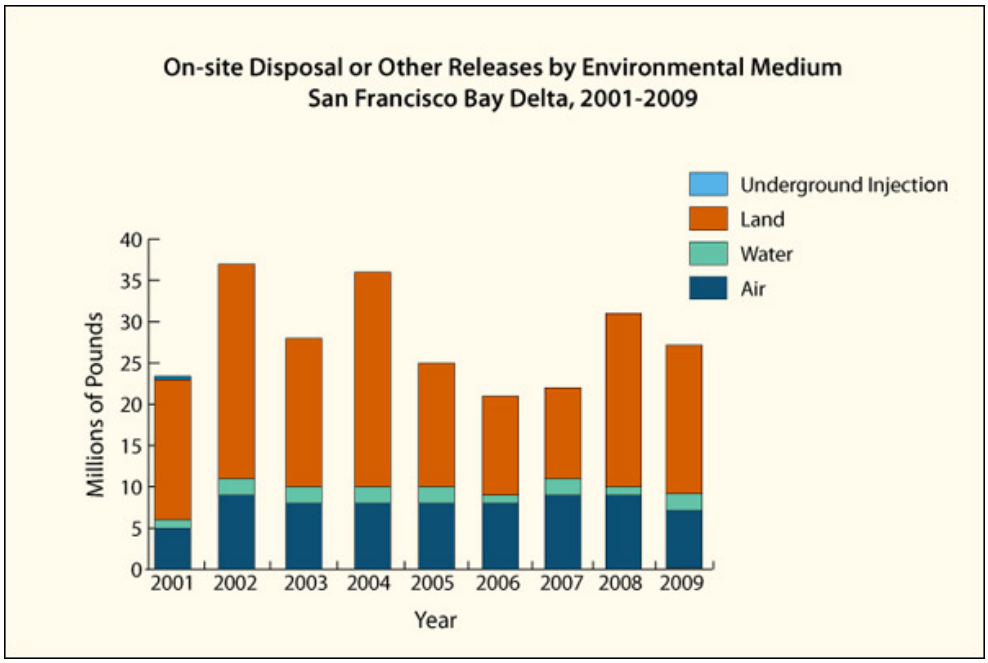
Disposal or other releases of toxic chemicals into this LAE are just one of a number of issues threatening the estuary's health. Roughly half of the water that falls as rain or snow within the watershed is diverted for use by farms, factories or households. Draining wetlands for agriculture and urban development in and around the estuary have resulted in the destruction of 80 percent of the estuary's marshes.

The toxic chemicals found in the estuarine environment come from a variety of sources, including runoff from cities, farms and historic mining areas, atmospheric deposition within the watershed, and discharges from industrial facilities and municipal wastewater treatment plants. Contaminated bottom sediments, along with wastewater discharges and other waste releases and disposal in the watershed, result in elevated contaminant levels in fish, shellfish and other organisms. Toxics of particular concern in the estuary include copper, mercury, selenium, pesticides, and PCBs.

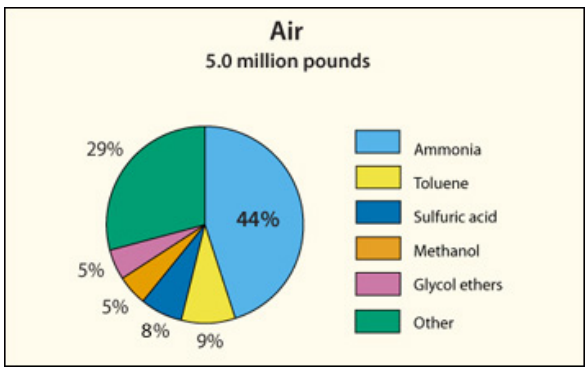
Several large hazardous waste management facilities account for the largest quantities of toxic chemicals disposed of or otherwise released to the land though these facilities are located at some distance from the estuary and do not discharge into the estuary. These facilities, however, are disposing of these wastes into RCRA Subtitle C landfills, which must follow very stringent guidelines for their design and operation to avoid and chemical releases from the landfills. The largest water discharges are nitrate compounds and the largest air releases are ammonia and toluene primarily; the sources for these are a number of large petroleum refineries and chemical plants operating within the LAE.

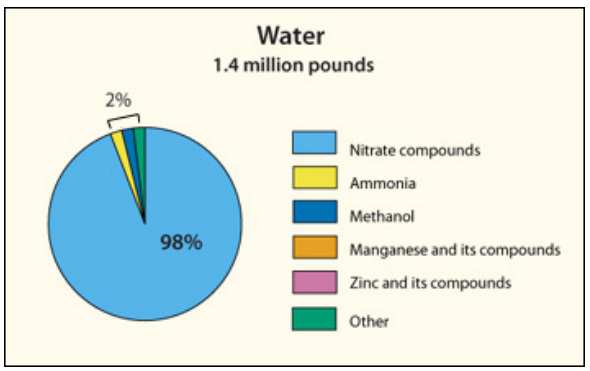
To learn more about ongoing efforts to protect the San Francisco Bay Delta Estuary, visit: http://www.epa.gov/region9/water/watershed/sfbay-delta/.

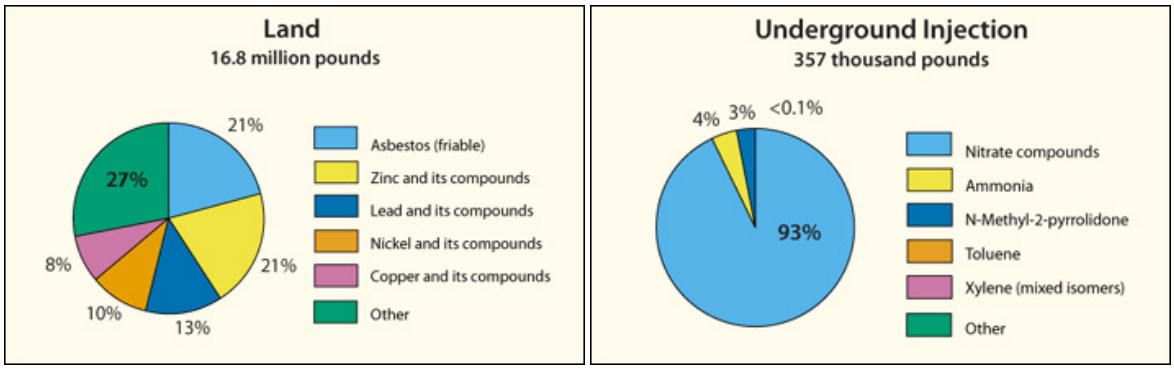




Top Five Chemicals by Environmental Medium, 2009







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Large Aquatic Ecosystems: South Florida Geographic Initiative

TRI facilities in South Florida

Quick Facts for 2009:

Watershed Size:	17,930 sq. miles
Population:	8 million
Number of TRI Facilities:	114
Total On-site and Off-site Disposal or Other Releases:	2.6 million lbs
Total On-site:	2.4 million lbs
• Air:	1.7 million lbs
• Water:	10 lbs
• Land:	0.6 million lbs
• Underground Injection:	39 thousand lbs
Total Off-site:	0.3 million lbs

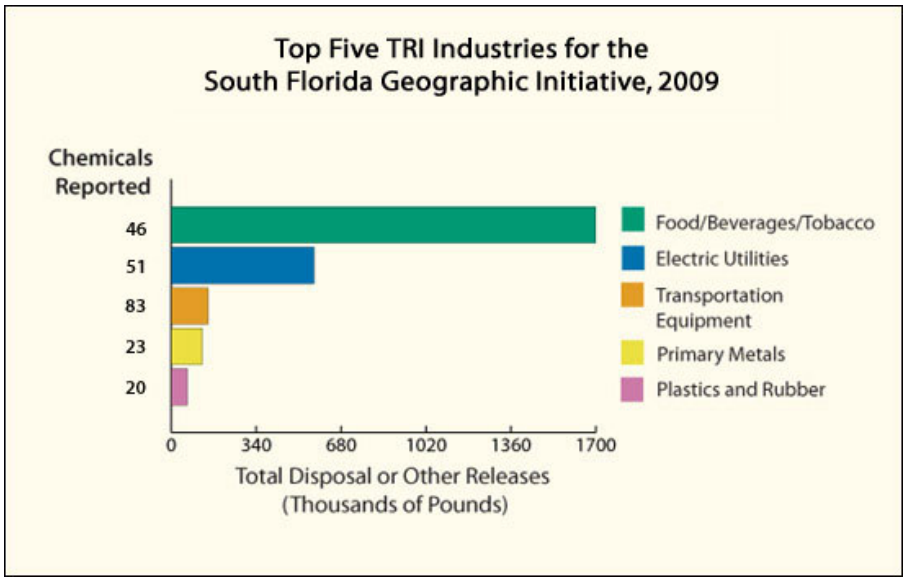
The area covered by the South Florida Geographic Initiative is home to two unique ecosystems: the Everglades and the Florida Keys coral reef ecosystem. The Everglades are the largest subtropical wilderness in the United States. It is a significant breeding ground for wading birds and is home to a number of rare and endangered species. The Florida Keys coral reef ecosystem spans more than 330 miles providing habitat for over 6,000 marine species. It protects south Florida's shorelines from tropical storms and hurricanes, and sustains the region's fisheries, beaches, tourism, and recreation. The South Florida Geographic Initiative is a partnership program aimed at protecting and restoring the aquatic ecosystems of southern Florida.

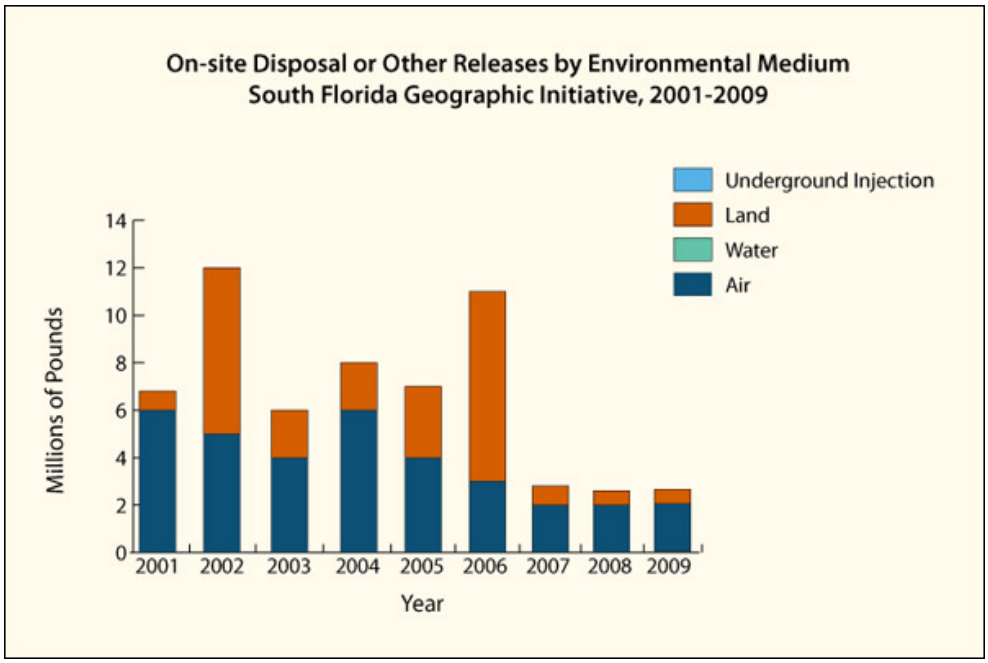
South Florida ecosystem's health is threatened in part by its expanding human population, currently about eight million people. Fifty percent of the region's wetlands have been lost to suburban and agricultural development. Altered water flows throughout the Region as well as pollutant loadings of nutrients and mercury have had significant impacts on the area's ecosystems. Fish consumption advisories or bans are in place for many species because of mercury contamination and mercury concentrations in many birds and mammals were found to be highly elevated.

Mercury emission source studies indicate that atmospheric deposition, primarily from medical and municipal incinerators, are the major mercury emission sources in South Florida. The largest TRI toxics disposal or other releases in the region are of methanol, from citrus and sugar cane processing facilities, and hydrochloric and sulfuric acids, primarily from electric power plants.

Among the efforts underway to restore the South Florida ecosystem include restoring natural water flows, controlling nutrient loading, minimizing habitat alteration, and reducing mercury contamination.

To learn more about ongoing efforts to protect South Florida, visit: www.epa.gov/region4/water/southflorida.





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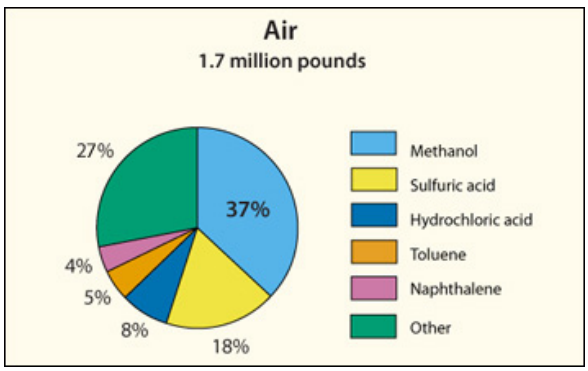

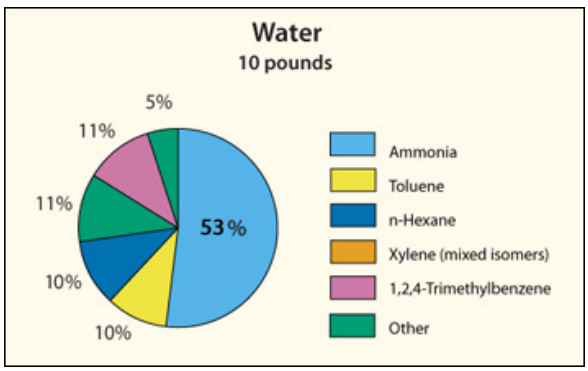

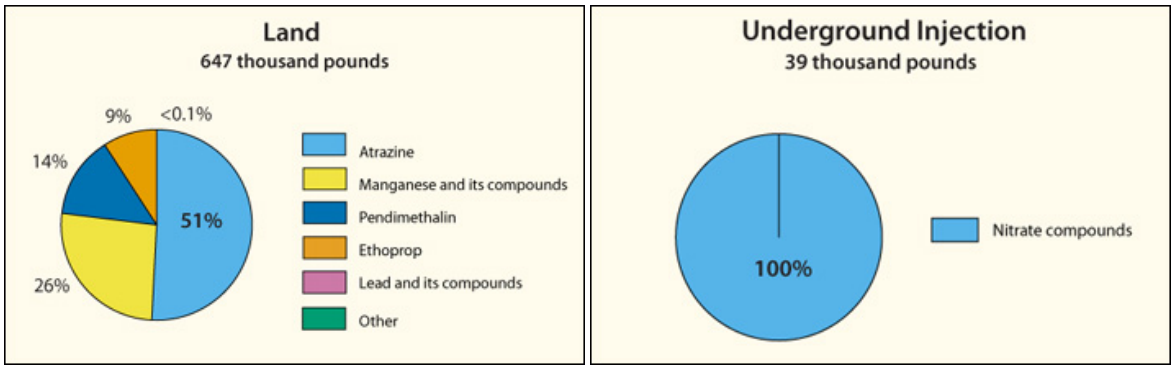

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