



2006 Customer Services

Customer Services Introduction



DEQ's Customer Services Division (CSD) is a place where all agency programs meet. Air, water and land programs are supported by CSD activities that involve working with customers, both inside and outside the agency.

The State Environmental Laboratory (SEL), an integral part of CSD, provides analytical support for the public water, wastewater, stream water, storm water, solid waste, hazardous waste, Superfund and complaints programs. SEL provides quality, defensible data for regulatory and oversight decision-making.

CSD handles media responses and publication production for all of DEQ. In addition, the division provides multimedia support for

activities such as facilitating public meetings, targeted outreach on myriad topics, and support for business recruitment to the state. Pollution prevention information and education, community right-to-know,

and environmental and public health data-tracking projects also call upon CSD's multimedia expertise. The role of CSD is to assist DEQ with quality services that facilitate the media-specific activities of the agency.



CSD staff Denise Harkins and Erin Hatfield present DEQ information during Community Development Day at the State Capitol.

Fulfilling Public Right-to-Know, CSD Publishes Annual TRI Report



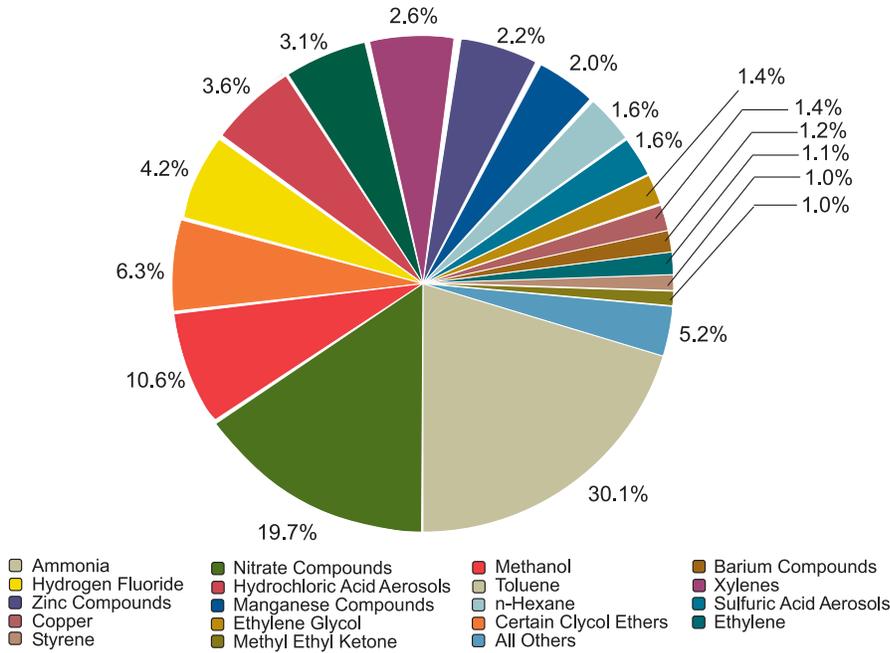
In October 1986, the U.S. Congress passed Title III of the Superfund Amendments and Reauthorization Act (SARA), also known as the Emergency Planning and Community Right-to-Know Act (EPCRA). Their intention was to ensure that the public was informed about toxic chemicals used and stored within

their communities, raise public awareness of potential chemical hazards and encourage local planning for chemical emergencies.

The Toxics Release Inventory (TRI) section of EPCRA requires covered industries using any of the more than 600 toxic chemicals to report releases and waste

management of these chemicals annually to EPA and DEQ. Another part of the Act requires that sites storing hazardous chemicals report to DEQ, local fire departments and Local Emergency Planning Committees (LEPCs) once a year, using a Hazardous Chemical Inventory (Tier II) form.

TRI Chemicals Released in Greatest Quantities

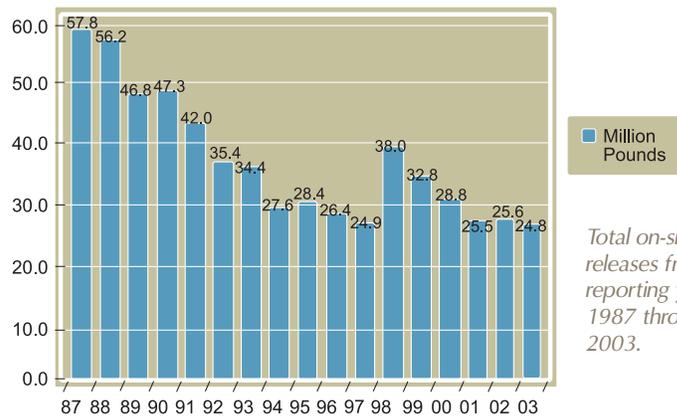


TRI chemicals released in greatest quantities for reporting year 2003.

TRI and Tier II information is available to the public. For the past six years, DEQ has published an annual TRI Summary Report that analyzes the data and tracks trends in releases, disposal, treatment and reuse of chemicals in Oklahoma. Since 2000, Tier II data has been included, as well. The accompanying graphs are examples of the information that can be found in the Annual TRI Report.

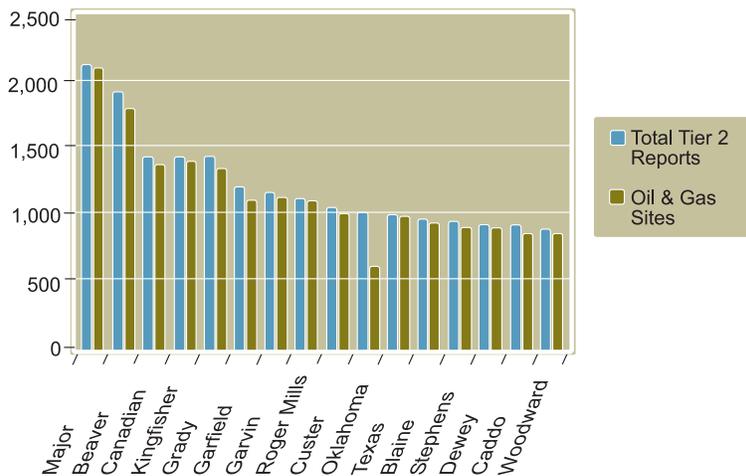
Management and analyses of reported data and public awareness are some ways that the Risk Communication Section of CSD provides support. In addition, the section assists regulated industries with training and telephone support for required reporting and by accompanying federal personnel statewide on inspections.

Total On-Site Releases



Total on-site TRI releases from reporting years 1987 through 2003.

Impact of Oil & Gas Sites on Tier II Reporting



Impact of Oil and Gas Sites on Tier 2 Reporting for 2003.

OKPHETS: Continued Collaboration with OSDH to Map Heart Defects



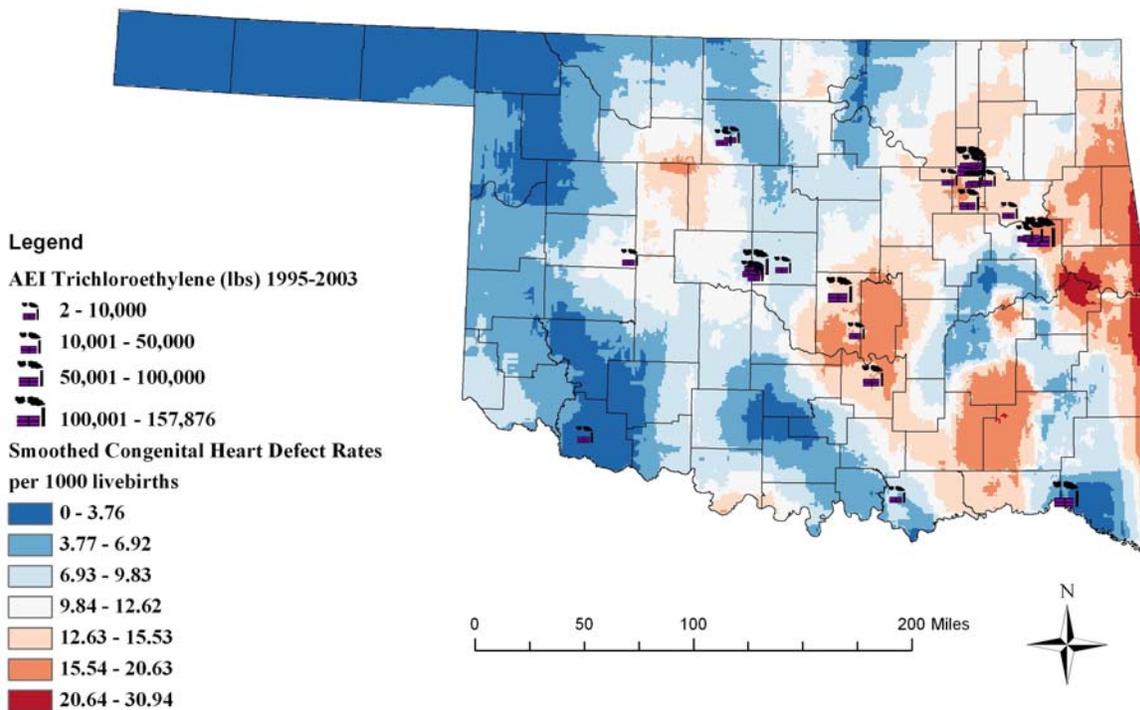
In its second year, the Oklahoma Public Health Environmental Tracking System (OK-PHETS), a collaboration between DEQ and the Oklahoma Department of Health, undertook a project to determine whether relationships existed between congenital heart defects (CHD) and environmental hazards. Congenital heart defects are the most common

birth defect in the U.S. They are believed to be caused by genetic factors as well as by environmental factors that affect genes. CHD has been related to maternal illnesses such as Rubella, diabetes, phenylketonuria (PKU) and lupus during pregnancy. It has also been associated with using alcohol, cocaine, anticonvulsants, retinoic acid, thalidomide and lithium during

pregnancy. Environmental hazard exposures associated with congenital heart defects include trichloroethylene, tetrachloroethylene, benzene, heavy metals, dioxins and pesticides.

A total of 5,388 congenital heart defect cases occurred in Oklahoma from 1994 through 2003. The annual rate of CHD cases remained steady during the time period studied. Some

**Smoothed Congenital Heart Defect Rates, Oklahoma, 1994-2003;
Trichloroethylene from Air Emission Inventory (AEI), 1995-2003**



Smoothed congenital heart defect rates (1994-2003) and trichloroethylene air emission inventory sites (1995-2003).

significant differences in CHD rates appeared for different races:

American/Alaskan Indians had a much higher rate than Whites or Blacks. CHD rates were also significantly higher for those with maternal alcohol or tobacco use during pregnancy; in fact, the CHD rate increased as the number of cigarettes smoked per day increased.

CHD cases were mapped by individual location, zip code rate and

county rate. In addition, a smoothed congenital heart defect rate by zip code was created. Cluster analysis revealed that a cluster of high CHD rates exists in the eastern area of Oklahoma. Superfund, Voluntary Cleanup/Brownfield, Toxic Release Inventory (TRI) and Air Emission Inventory (AEI) sites were also mapped. It was noted that higher trichloroethylene, tetrachloroethylene, arsenic,

cadmium, mercury and dioxins releases occurred in the eastern area of Oklahoma during the study period. This showed some interesting spatial associations, but the hazard sites are not clearly centered in areas of high CHD rates. There is still no quantifiable link between these sites and congenital heart defects, but this information should prompt future studies to explore possible relationships.

One-Stop Filing of Tier II Forms Offers Utility and Convenience

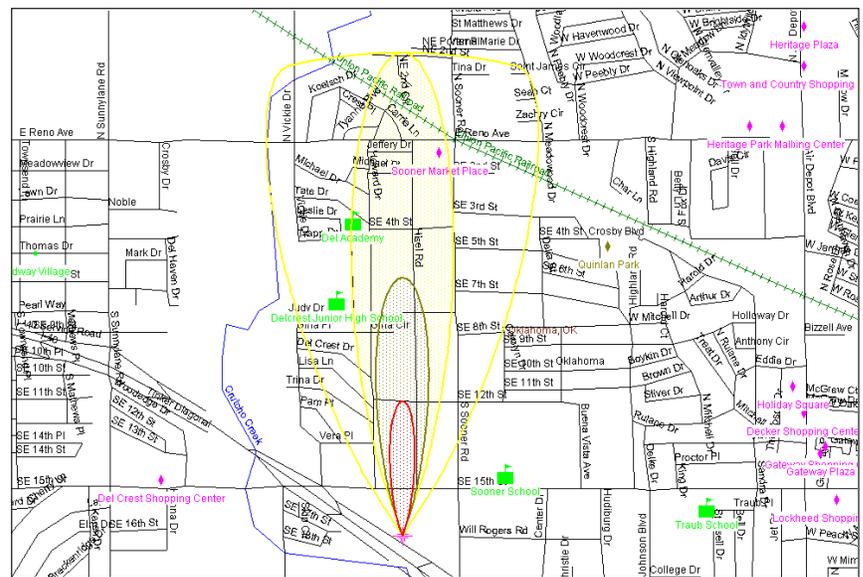
To ease the process of filing Hazardous Chemical Inventory forms (Tier II) for the regulated community and increase utility of the reports for emergency responders in Oklahoma, DEQ will initiate mandatory online filing in 2007. Federal law requires that information on hazardous chemicals stored at facilities be delivered to the state, to Local Emergency Planning Committees (LEPC) and to local fire departments. In the past, companies mailed the required forms separately to each entity. Companies located in more than one county had to generate and mail identical paperwork to several agencies. With the online system, a single Internet filing will fulfill the entire reporting obligation for these facilities.

Receiving data electronically will also help state and local emergency planners prepare for chemical emergencies. Information about

facility locations and chemicals present can be added to their planning software, ALOHA, along with other community information such as population and the locations of schools, hospitals and nursing homes. The software predicts who and what would be affected by a

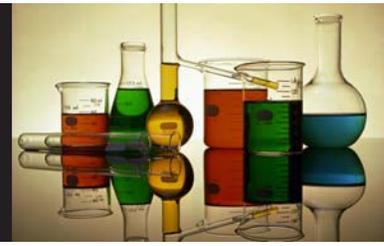
chemical spill. That information can then be incorporated into disaster-response planning elements such as evacuation routes.

DEQ will work with LEPCs and fire departments to implement one-stop, online filing by the March 2007 reporting deadline.



Example of spill prediction using TierII data and ALOHA software.

SEL Fees Receive Legislative Funding



The State Environmental Laboratory (SEL) has been challenged for the past five years to maintain quality service in spite of rapidly increasing expenses for equipment, supplies, maintenance and personnel. Some expense increases are attributable to unfunded federal mandates. Others are related to the demand for lower analytical detection limits, greater quality control and

expanded documentation. SEL has been unable to replace instruments as needed, prepare for new analytical requirements and develop needed technologies.

This year, SEL reviewed all analytical fees and, based on the results, amended the Laboratory Services Rules. Overall, fees were increased 33 percent to meet budgetary obligations. Public Water Supply (PWS) analytical fees

increased by 45 percent and contractual fees increased by approximately 30 percent. Public Water Supplies received the largest percentage increase due to unfunded federal mandates requiring new and expanded analytical services. DEQ is sensitive to PWS needs and budgetary constraints, especially those of small community systems. To support these, DEQ requested and received funding from the Oklahoma Legislature.

DEQ Laboratory Accreditation Works Toward Incorporating National Standards



Laboratory analysis is extensively used in environmental decision-making. Laboratory analysis of drinking water, for example, determines whether it is safe to consume – or not. Analysis of wastewater discharges determines whether or not they may harm receiving streams, potentially killing fish or damaging the habitat too much for a healthy diversity of species to survive and thrive. Analysis of hazardous and solid waste is the primary way to determine proper methods of disposal. Analysis of industrial-site soils and ground water reveals whether a site needs cleanup and, afterward, whether or not cleanup actions have succeeded.

With all of these critical decisions depending upon laboratory analysis, it seems odd that no standardized method of assuring accuracy and reliability has

been in place. To remedy this, the National Environmental Laboratory Accreditation Conference (NELAC), a group of state and federal regulators, has been working with industry representatives to develop and implement consensus standards for laboratory accreditation. DEQ's Laboratory Accreditation Program supports the NELAC philosophy and standards. Oklahoma has memberships in both NELAC and the Institute for the National Environmental Laboratory Accreditation (INELA). The state is represented on the NELAC Board of Directors by Judy Duncan, Chair-elect. Ms. Duncan and other DEQ participants in NELAC and its committees are helping to develop the national database and outreach programs.

Although Oklahoma is not yet a NELAC accrediting state, the Laboratory Accreditation program is making progress toward NELAC recognition by adopting sections of the NELAC standards. These have included the proficiency testing requirements, quality manual and quality control procedures for monitoring the validity of environmental data, and most recently, the standard operating procedures and methods requirements to reflect all elements of the laboratory activities. The changes were made with the support of the Laboratory Services Advisory Council and laboratories that participate in the accreditation program. Two commercial laboratories hold NELAC accreditation and several other commercial laboratories are working toward their applications to NELAC.

Making Pollution Prevention Personal

More in Your Wallet; Less from the Environment



Susan Roothaan.

Since its inception in 1990 and a legislative directive in 1994, the Pollution Prevention Program (P2P) has provided education, assistance, support and incentives to business and industry, supporting waste reduction and regulatory compliance. In 2005, acknowledging the role of individuals in reducing waste, P2P partnered with the Oklahoma Sustainability Network

and the First Unitarian Church of Oklahoma City to host two workshops. Approximately 100 participants enjoyed a presentation by Susan Roothaan, founder and Executive Director of *A Nurtured World*.

Roothaan takes the mystery out of personally acting to improve the environment while saving money. Participants explored the interdependency of spending habits and environmental impact and discovered where to leverage daily actions for the most results. Among the points discussed:

- Transportation accounts for 30 to 50 percent of air pollution. *The average person spends more than 20 percent of her budget for transportation.*
- Water to grow food accounts for nearly half of all water usage.

Agricultural activity also impacts wildlife areas, and may involve pesticides and fertilizers that damage the environment. *An average consumer spends 14 percent of his budget on food.*

- Energy consumed in the average home contributes more to air pollution and climate change than the energy used to fuel the average car. *The average impact to the wallet for home energy use is \$1,400 annually.*

Previous participants of Roothaan's seminars have reported an average cost-savings of \$1,500 per person per year. This year's workshop attendees developed individual behavior-change action plans for the coming year, anticipating similar savings while having a positive environmental impact.

DEQ Assists with Reopening Thomas Refinery



A key objective of DEQ's Customer Assistance Program (CAP) is to help new and expanding industry in Oklahoma understand and comply with environmental regulations. Recently, CAP members were able to aid Ventura Refining and Transmission, LLC, to achieve its goal: to restart an oil refinery in Thomas, Oklahoma. The Thomas refinery had been dormant since 1996, as most oil production and refining was moving to foreign countries. Recently, however, prices for gasoline skyrocketed, recreating a demand for domestically produced and refined oil. Anticipating this need, Ventura Refining had purchased the Thomas refinery with the intent of operating it once again.

At the top of Ventura's "to-do" list was contacting CAP and DEQ's Air Quality Division (AQD) and Land Protection Division (LPD) in order to learn about the intricacies of the permit application process. Staff identified the needed permits, explained how to complete permit applications and expedited the procedures. LPD staff also met with representatives of the refinery's investor group to discuss potential liability for historical contamination. They explained the recent federal protections from liability created by the

Small Business Liability Relief and Brownfields Revitalization Act of 2002, an amendment to the Superfund law. The amendment clarifies "innocent landowner protection from Superfund liability" and gives Contiguous Property Owner and Bona Fide Prospective Purchaser protections. The investor group wanted assurance that its purchase met Bona Fide Prospective Purchaser protection requirements to avoid acquiring Superfund liability for historical environmental impacts. LPD helped

them understand both the law and EPA's interpretation of Superfund protections.

Ventura Refining hopes the Thomas Refinery will be on line by summer of 2006, producing 14,000 barrels a day. The refinery, expected to create 30 to 40 new jobs, is the first of its kind to become operational in Custer County in 20 years. The assistance provided by three DEQ programs working together has proved invaluable to Ventura Refining and the startup of the Thomas Refinery.



Photo of dormant Thomas refinery

SBAP Partners with Marginal Well Commission to Host Workshops in Oklahoma



DEQ's Small Business Assistance Program (SBAP) partnered with the Oklahoma Marginal Well Commission to present an informational workshop for owners and operators of marginal oil and gas wells in December 2005. Attendees received current information on issues concerning environmental regulations. The workshops were held in four locations — Oklahoma City, Enid, Ada and Tulsa. Kyle Arthur (SBAP) and Grover Campbell (Air

Quality Division) spoke and answered questions on topics such as proper waste disposal, SARA Title III filing requirements, and the new air quality general permit for oil and gas facilities, among others.

The owners and operators expressed appreciation for the session, crucial to the success of their environmental compliance efforts. Many stressed that small business owners are unable to hire

environmental consultants and must themselves be aware of regulations and compliance issues. The collaboration of DEQ and the Oklahoma Marginal Well Commission resulted in a forum in which the owners and operators felt comfortable expressing concerns and asking questions. The workshops helped to forge professional relationships among the agency, commission, owners and operators that will benefit all.

DEQ Changes Mercury Advisory Level for Fish Consumers



In 2005, DEQ reevaluated the level of mercury found in Oklahoma fish that triggers consumption advisories, responding to changes in EPA's fish consumption guidance. CSD, WQD and AQD convened a joint work group to examine the risk and causes of mercury contamination in fish and to recommend appropriate changes to DEQ's advisory levels for Oklahoma. The work group recommended that the level at which water-body-specific advice be given should be lowered from 1.0 mg/kg to 0.5 mg/kg. In addition, a statewide advisory was issued recommending that women and children limit consumption of predator fish caught in Oklahoma to one meal per week.

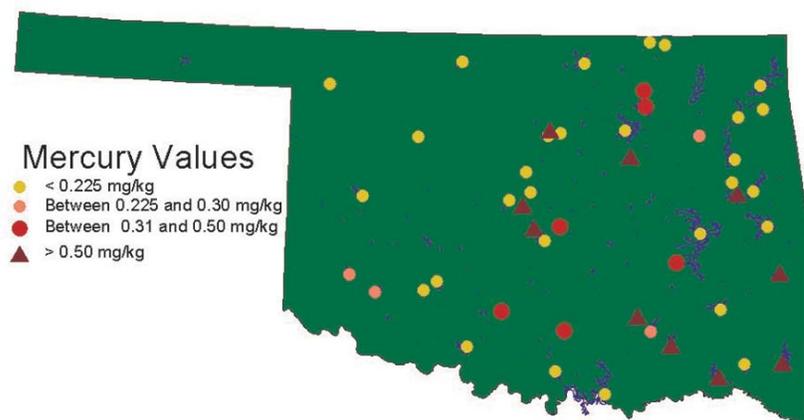
Because mercury contamination in fish is due to the deposit of atmospheric mercury into water bodies, changing the advisory level required the input of staff

from all three divisions. Informational meetings were held with external stakeholders including wildlife officials,

Continued on next page

Mercury in Oklahoma Lakes

Carnivores Collected Since 1996



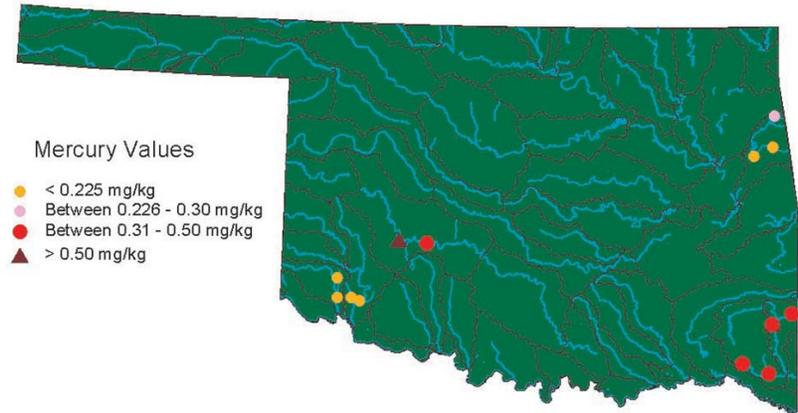
Map of lakes sampled and levels of mercury in fish.

other state and federal natural resource agencies, local government organizations, and industry groups that might be affected by changes to mercury emission rules. Presentations were made to the Oklahoma Clean Lakes and Watersheds Association, Environmental Federation of Oklahoma (EFO) and the Oklahoma State University Water Conference.

The work group identified large data gaps in both the coverage of fish collections and air deposition. To address these shortcomings, CSD purchased instruments to analyze fish cost-effectively. The division developed plans and sought funding to sample additional lakes and streams. CSD is also partnering with other agencies to obtain fish from lakes and streams where no data now exists. AQD began monitoring mercury deposition at two sites in 2006, with plans to add another site later this year.

Mercury in Oklahoma Streams

Fish Collected Since 2001



Map of streams sampled and levels of mercury in fish.