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# Office of Legislative Auditor

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## Informational Report: Potential Duplication With Fish/Shellfish Sampling

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### About This Informational Report

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Louisiana Revised Statute 24:522(C) requires the Louisiana Legislative Auditor (LLA) to evaluate programs and services of state government agencies and identify areas needing improvement. In the last regular session, the legislature formed the Commission on Streamlining Government (Commission), and LLA has been assigned to assist the Commission. One of the topics the Commission is focusing on is duplication of services provided by two or more programs.

To assist the Commission, we will report on areas of potential duplication by two or more agencies in delivering services. We defined duplication as identical or similar activities performed by more than one agency leading to accomplishment of the same or similar goal. We will issue individual reports addressing different areas of duplication.

To be responsive in a timely manner, we obtained information from state law, budget documents, agency interviews, and other sources. We did not conduct an audit in accordance with all government auditing standards. Though we performed procedures adequate to identify potential duplication, we did not perform sufficient procedures to make definitive conclusions or estimate potential savings, if any, that may result from any action taken by these entities to eliminate such potential duplication.

**We identified three agencies that perform fish/shellfish sampling.** The Department of Environmental Quality (LDEQ), Office of Environmental Compliance; the Department of Health and Hospitals (DHH), Office of Public Health; and the Department of Wildlife and Fisheries (LDWF), Office of Fisheries all perform fish or shellfish sampling.

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### Potential Duplication Among LDEQ, DHH, and LDWF

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**LDEQ, DHH, and LDWF all perform fish/shellfish sampling to test for environmental conditions of fish/shellfish growing areas.** They use the same (or similar) sampling methods and test for water quality conditions. It should be noted that for a period of three years (in the mid-1990s), LDEQ contracted with LDWF to collect marine fish tissue samples from coastal boat landings for mercury testing. This is evidence that sampling can be handled by one agency.

In the three agencies, a total of 132 employees perform fish/shellfish sampling as an aspect of their full-time job for a total cost of at least \$3.07 million (this figure does not include all costs for LDWF because they could not give us exact expenditure information). These dollars include state and federal funds. Exhibit 1 on page 2 contains a summary comparison of the fish/shellfish programs among the three agencies. In addition, we present more details on the programs and activities where potential duplication exists in the sections that follow the exhibit.

POTENTIAL DUPLICATION WITH FISH/SHELLFISH SAMPLING

Exhibit 1: Comparison of Fish/Shellfish Sampling Among LDEQ, DHH, and LDWF

Program/Activity	Purpose of Testing	Sampling Method	Staff	Equipment	Expenditures FY 2009
<b>LDEQ</b>					
Mercury Testing Program	To determine the levels of mercury in the water body and in fish	<ul style="list-style-type: none"> <li>Collect fish by electroshock in fresh water (a small electrical current in the water causes fish to rise to the surface)</li> <li>Collect fish by hook attached to a line in brackish or saline waters</li> </ul>	3 employees	2 electroshock boats	\$284,844 (state general funds)
Use Attainability Analysis (UAA) Studies	To determine: <ul style="list-style-type: none"> <li>Number of fish and their species</li> <li>Water quality properties such as salinity, oxygen, nutrient, and dissolved mineral levels</li> </ul>	<ul style="list-style-type: none"> <li>Collect fish by electroshock</li> <li>Collect fish by seining (using a net to catch fish)</li> </ul>	3 to 20 employees who sample 3 to 8 weeks of the year	1 electroshock boat	\$90,336 (federal grants)
				<b>Total Cost</b>	<b>\$375,180</b>
<b>DHH</b>					
Molluscan Shellfish Program	To determine the level of fecal coliform in shellfish growing areas	<ul style="list-style-type: none"> <li>Collect a water sample and the temperature at one foot of water depth</li> <li>Collect oyster meat as needed</li> </ul>	14 employees who work from 33% to 100% of their work time	13 boats of various types	\$728,686 (approximately \$669,144 of this amount is from state general funds)
<b>LDWF</b>					
Various Fish Sampling Programs	To determine: <ul style="list-style-type: none"> <li>Number and size of all fish types</li> <li>Water quality properties such as salinity and oxygen levels</li> </ul>	<ul style="list-style-type: none"> <li>Collect fish with electroshocking, gill nets, and other methods</li> </ul>	95 employees who perform fish sampling for 10% to 80% of their work time	*A maximum of 138 boats are available for use	**LDWF could not provide exact expenditure estimates because of the way each division tracks expenditures.
<b>Total</b>			<b>132 employees</b>	<b>154 boats</b>	<b>At least \$3.07 million</b>
<p>*These boats are available for all Office of Fisheries' programs and not necessarily dedicated just to fish sampling.</p> <p>**The Office of Fisheries, Marine Fisheries Division's fish sampling expenditures for fiscal year 2009 were \$1,969,000 to \$2,439,000. LDWF could not calculate an approximate estimated expenditure amount for the Inland Fisheries Division.</p> <p><b>Source:</b> Prepared by legislative auditor's staff based on information provided by LDEQ, DHH, and LDWF.</p>					

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## LDEQ

LDEQ performs two types of activities requiring fish sampling: mercury testing and use attainability analysis (UAA) studies. The mercury-testing program tests for the risk to human health by analyzing the amount of mercury in fish tissue. LDEQ conducts the UAA studies to determine relevant water quality properties including continuously monitored dissolved oxygen, salinity, pH, the type and amount of nutrients, and the type and amount of dissolved minerals in the water body. The information collected allows LDEQ to determine where unsafe mercury levels exist and to refine or set water quality criteria to support fish and wildlife population in a water body.

LDEQ uses two primary methods to sample fish: electroshocking and seining. Electroshocking involves sending a small electrical current into the water that causes fish to rise to the surface. Seining is use of a net that drops vertically from the surface of the water. LDEQ also uses a hook attached to a line. LDEQ's fish sampling requires the use of additional scientific protocols for the fish tissue samples so that they are not contaminated.

According to agency officials, three LDEQ employees conduct the mercury related fish collections using two electroshock boats. Three to 20 LDEQ employees collect samples for the UAA studies for three to eight weeks a year and have access to one electroshock boat. (In fiscal year 2009, LDEQ performed the sampling for the UAA studies solely on foot). In fiscal year 2009, LDEQ spent \$284,844 (\$192,769 for sampling + \$92,075 for laboratory analysis and human health risk assessment) in state general funds on mercury testing and \$90,336 in federal grants on use attainability analysis. In total, LDEQ spent \$375,180 (\$284,844 + \$90,336) on fish sampling.

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## DHH

DHH, through the molluscan shellfish program, tests for fecal coliform in the water surrounding oyster beds. According to an agency official, 14 employees spend varying amounts of time on the program (from 33 percent to 100 percent). Nine crew members sample year round using 13 boats of various types to collect these samples. These crews collect samples Monday through Thursday. On Fridays, the crews investigate the sewage systems at camps to prevent fecal contamination of nearby oyster beds.

The main sampling technique DHH uses is that employees record the temperature and take a water sample at one foot below water level. Occasionally, they will also take oyster meat samples by dredging the oyster bed.

The information collected goes into a database that allows DHH to determine where to draw the lines for the harvesting area. However, setting the harvesting area is only one aspect of managing the shellfish harvest. LDWF manages the other two aspects: enforcing the harvesting lines and setting the harvesting seasons.

In fiscal year 2009, DHH spent \$728,686 on the molluscan shellfish program, according to a program official. State general funds comprised approximately \$669,144 of this amount, and the remaining \$59,542 was funded by statutory dedications and self-generated revenue.

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## LDWF

According to agency officials, LDWF's various fish testing and sampling programs test for various water quality properties such as salinity and oxygen levels in a water body and for the abundance and size of all fish types. The data collected allows LDWF to manage the fish populations in a water body.

LDWF uses various sampling methods from electroshocking to gill net sampling. Electroshocking involves putting a small electrical current into the water that causes fish to rise to the surface. A gill net is a flat fishnet suspended vertically in the water to entangle fish by their gills.

In total, the Office of Fisheries has available 138 boats to perform fish sampling and other Office of Fisheries' duties. Ninety-five of the Office of Fisheries' 180 full-time employees perform fish sampling 10%-80% of their work time. Fifty additional employees can perform some fish sampling as needed by LDWF.

According to an agency official, the Office of Fisheries' Marine Fisheries Division's (MFD) fish sampling expenditures for fiscal year 2009 were approximately \$1,969,000 to \$2,439,000. No accurate estimate for the Inland Fisheries Division (IFD) could be calculated. LDWF could not provide exact expenditure estimates for MFD and IFD because of the way each division tracks expenditures.

FOR QUESTIONS RELATED TO THIS INFORMATIONAL REPORT,  
CONTACT MIKE BATTLE, PERFORMANCE AUDIT MANAGER,  
AT (225) 339-3800.

A copy of this report is available at our Web site [www.lla.la.gov](http://www.lla.la.gov).

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