



Commonwealth of Massachusetts
Office of the State Auditor
Suzanne M. Bump

Making government work better

Official Audit Report – Issued March 17, 2020

Department of Fish and Game

For the period July 1, 2016 through December 31, 2018





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March 17, 2020

Mr. Ronald Amidon, Commissioner
Department of Fish and Game
251 Causeway Street, Suite 400
Boston, MA 02114

Dear Commissioner Amidon:

I am pleased to provide this performance audit of the Department of Fish and Game. This report details the audit objectives, scope, methodology, finding, and recommendations for the audit period, July 1, 2016 through December 31, 2018. My audit staff discussed the contents of this report with management of the agency, whose comments are reflected in this report.

I would also like to express my appreciation to the Department of Fish and Game for the cooperation and assistance provided to my staff during the audit.

Sincerely,

A handwritten signature in blue ink, appearing to read "SMBump".

Suzanne M. Bump
Auditor of the Commonwealth

cc: Kathleen A. Theoharides, Secretary, Executive Office of Energy and Environmental Affairs

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LIST OF ABBREVIATIONS

CFO	chief fiscal officer
CMR	Code of Massachusetts Regulations
CR	cash receipt
DER	Division of Ecological Restoration
DFG	Department of Fish and Game
DFW	Division of Fisheries and Wildlife
DMF	Division of Marine Fisheries
EOEEA	Executive Office of Energy and Environmental Affairs
EOTSS	Executive Office of Technology Services and Security
FBA	Office of Fishing and Boating Access
MFH	MassFishHunt
MMARS	Massachusetts Management Accounting and Reporting System
OSA	Office of the State Auditor

EXECUTIVE SUMMARY

In accordance with Section 12 of Chapter 11 of the Massachusetts General Laws, the Office of the State Auditor has conducted a performance audit of the Department of Fish and Game (DFG) for the period July 1, 2016 through December 31, 2018. In this performance audit, we determined whether DFG properly charged and reported revenue from fees, licenses, and permits.

Below is a summary of our finding and recommendations, with links to each page listed.

Finding 1 Page 7	DFG lacks segregation of duties within the Division of Marine Fisheries (DMF) Boston revenue process.
Recommendations Page 8	<ol style="list-style-type: none">1. DFG should revise its policy and procedures to include segregation of duties for the processing of revenue.2. DFG should segregate duties for collecting funds, reconciling transactions, and preparing daily deposits.3. DFG should ensure that all users have their own usernames and passwords for the Fish system once it is upgraded.

Post-Audit Action

On December 16, 2019, after our fieldwork ended and in response to an informal conference in which we discussed our preliminary recommendations with the agency, DFG published two policies to address our recommendations:

1. "Compliance with the Commonwealth's Third-Party Information Security Standard"
2. "Protocol for Approving Changes to Fees for [Division of Fisheries and Wildlife] and DMF Licenses to Be Charged through MassFishHunt or DMF's Fish System"

OVERVIEW OF AUDITED ENTITY

The Department of Fish and Game (DFG) was established in accordance with Sections 7, 8, and 11B of Chapter 21A; Chapter 130; Chapter 131; and Chapter 131A of the Massachusetts General Laws. It is one of six state agencies under the general oversight of the Executive Office of Energy and Environmental Affairs (EOEEA). It is a semi-decentralized¹ state agency that is headed by a commissioner appointed by the Governor. It currently has four major divisions: the Division of Fisheries and Wildlife (DFW), the Division of Marine Fisheries (DMF), the Office of Fishing and Boating Access (FBA), and the Division of Ecological Restoration (DER). As of April 2019, DFG had approximately 310 full-time-equivalent positions.

- DFW consists of two sections: Fisheries and Wildlife. According to its 2017 annual report,

The fisheries section operates an extensive hatchery program that provides an excellent fishery for brook, brown, rainbow and tiger trout. . . .

The fisheries section also carries out research and management on streams, rivers, lakes, and ponds designed to monitor fish communities statewide. . . .

The Wildlife Section is responsible for the conservation, management, and research of wildlife and game populations within the Commonwealth of Massachusetts; habitat management . . . ; responding to human-wildlife conflicts; guiding and supporting the agency's Large Animal Response Team (LART); and supporting wildlife-dependent recreational opportunities.

DFW's main office is in Westborough.

- According to DMF's 2017 annual report,

DMF is the agency responsible for the development and promulgation of the Commonwealth's regulations governing commercial and recreation fishing in marine environment[s].

DMF has five offices, which are in Boston, New Bedford, Oak Bluffs, Newburyport, and Gloucester. Payments for commercial licenses and permits can be purchased at the Boston, New Bedford, and Gloucester locations.

- According to its website, FBA "provides boat and canoe access sites, shore fishing areas, and sport fishing piers at more than 290 locations on coastal waters, great ponds and rivers throughout Massachusetts." FBA's main office is in Westborough.

1. DMF and DFW, although they fall under DFG, have separate boards established by the Legislature that oversee their operations.

- According to its website, DER “restores and protects rivers, wetlands, and watersheds in Massachusetts for the benefit of people and the environment.” DER has two offices, which are in Boston and Westfield.

DFG uses two systems to record fees, licenses, and permits:

- MassFishHunt (MFH): According to DFG’s website, MFH is “the official licensing and harvest reporting system for Massachusetts, [used] to purchase and print saltwater and freshwater fishing, hunting, and trapping licenses, permits, and stamps [and] report a harvest.” DFG has contracted with a third party for the operation and security of MFH.
- Fish: This is a program built in 1999 that contains a database of commercial fishing permits issued. It is developed within, and managed by, EOEEA.

DFG’s budgets for fiscal years 2017 through 2019 were as follows:

	Direct Appropriations	Retained Revenue	Federal Grant Spending	Total Budget
Fiscal Year 2017	\$27,544,471	\$542,989	\$24,983,529	\$53,070,989
Fiscal Year 2018	\$28,978,897	\$542,989	\$9,891,604	\$39,413,490
Fiscal Year 2019	\$29,705,777	\$542,989	\$8,059,904	\$38,308,670

According to the Massachusetts Management Accounting and Reporting System, the actual revenue during our audit period (July 1, 2016 through December 31, 2018) was as follows.

	Fiscal Year 2017	Fiscal Year 2018	Fiscal Year 2019 [†]	Total
Federal Grants	\$ 9,233,436	\$ 7,694,178	\$ 2,198,553	\$19,126,167
Federal Reimbursement	8,270,619	9,001,307	4,162,994	21,434,920
Fees*	3,193,784	3,151,048	1,213,057	7,557,889
Fines and Penalties	3,620	3,750	220	7,590
Licenses and Permits*	7,807,563	7,968,211	1,972,393	17,748,167
Miscellaneous*	311,496	997,766	128,654	1,437,916
Other Contributions	41,120	45,207	18,300	104,627
Reimbursement for Services	516,519	529,570	331,615	1,377,704
Rent	53,927	61,451	29,272	144,650
Sale of Goods	23,942	44,719	17,829	86,490
Trust Contributions	6,948,589	4,719,835	1,094,496	12,762,920
Total Revenue	<u>\$36,404,615</u>	<u>\$ 34,217,042</u>	<u>\$ 11,167,383</u>	<u>\$81,789,040</u>

* This row corresponds to our audit objective.

† This column represents data through December 31, 2018.

These revenue categories are defined below.

- **Federal Grants:** This is funding received from the federal government for programs dedicated to preserving freshwater fish and wildlife in Massachusetts, including endangered plants and animals.
- **Federal Reimbursements:** These are payments received for services rendered to the federal government by DFG.
- **Fees:** These include fees for stamps required for wildlife and waterfowl hunting; environmental reviews; and information requests. Licenses and permits are required for hunting and fishing in the Commonwealth.
- **Fines and Penalties:** These are assessments for violation of Massachusetts gaming, fishing, and boating laws.
- **Licenses and Permits:** This category consists of revenue from fishing and hunting licenses and permits.
- **Miscellaneous:** This revenue includes one-time payments from private entities for use of state-owned land; donations on behalf of estates; and donations made for the conservation and protection of the natural habitats of Massachusetts wildlife.
- **Other Contributions:** These include donations from private citizens and other parties interested in promoting Massachusetts conservation and preservation projects.
- **Reimbursement for Services:** This category comprises reimbursement for the Marine Recreational Information Program and the Wallop Breaux Trust, which supports recreational boating safety activities.
- **Rent:** Rent is received from individuals and companies for the use of properties owned by the Commonwealth.
- **Sale of Goods:** This category encompasses revenue from publications, brochures, tags, posters, and wood products.
- **Trust Contributions:** This category encompasses revenue received from retail vendors that is not otherwise categorized as licenses or permits.

AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Section 12 of Chapter 11 of the Massachusetts General Laws, the Office of the State Auditor (OSA) has conducted a performance audit of certain activities of the Department of Fish and Game (DFG) for the period July 1, 2016 through December 31, 2018.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Below is our audit objective, indicating the question we intended our audit to answer, the conclusion we reached regarding the objective, and where the objective is discussed in this report.

Objective	Conclusion
1. Does DFG charge and report revenue from fees, licenses, and permits in accordance with Sections 4.02(321) and (322) of Title 801 of the Code of Massachusetts Regulations (CMR)?	Partially; see Finding <u>1</u>

To achieve our objective, we gained an understanding of the internal controls we deemed significant to the objective through interviews and observations. We evaluated the design and effectiveness of those controls and assessed whether they operated as intended during the audit period as they related to the charging and reporting of revenue from fees, licenses, and permits. In addition, we performed the following procedures to obtain sufficient, appropriate evidence to address our audit objective.

- We compared the MassFishHunt (MFH) and Fish fee schedules to the fee schedule in 801 CMR 4.02 to determine whether they agreed, and we investigated any discrepancies we found.
- We selected a nonstatistical, judgmental sample of 21 different charges from a population of 82 charges in MFH to ensure that the proper amount was generated in MFH; we did this by simulating actual transactions.
- We performed a statistical test of 24 daily revenue totals (representing \$1,312,405) out of 8,735 (representing \$26,743,973) for the audit period from the Massachusetts Management Accounting and Reporting System (MMARS), the official financial record of the Commonwealth. We did this using a 90% confidence level, a 10% tolerable error rate, and a 0% expected error rate. We verified that the revenue agreed to DFG's cash-out reports, daily agency cash reports,

reconciliations, and deposits. We traced lump sum deposits to bank statements and reviewed cash receipt (CR) entries in MMARS. From the same population, we selected five additional transactions described as miscellaneous income, totaling \$967,505, and verified that the revenue agreed to DFG's reconciliations. We also traced lump sums to bank statements, and we reviewed CR entries in MMARS.

Data Reliability

In 2018, OSA performed a data reliability assessment of MMARS that focused on testing selected system controls (access controls, application controls, configuration management, contingency planning, and segregation of duties) for the period April 1, 2017 through March 31, 2018. As part of our current audit, we compared the MMARS data to source documentation (financial data provided by DFG) from the audit period. We also reviewed selected security management controls established by DFG for access to MMARS, to ensure that they addressed security awareness and personal security controls.

Based on the results of these data reliability assessment procedures, we determined that the information obtained for our audit period was sufficiently reliable for the purposes of our audit work.

DETAILED AUDIT FINDINGS WITH AUDITEE'S RESPONSE

1. The Department of Fish and Game lacks segregation of duties within the Division of Marine Fisheries Boston revenue process.

There is only one employee—the Boston office revenue coordinator—who is responsible for the entire daily revenue process for the Division of Marine Fisheries (DMF). This employee collects funds from the lockbox daily, reconciles the cash received with the cash out report (a summary of daily transactions from the Fish program), resolves any variances by generating a discrepancy report (a detailed list of all daily transactions), and prepares the daily deposit. As a result, the Department of Fish and Game (DFG) cannot be certain that funds are adequately protected from potential theft, loss, or misuse.

In addition, the Boston revenue coordinator uses DMF's chief fiscal officer's (CFO's) username and password to access the Fish program. This program contains permits' types, amounts paid, transaction dates, expiration dates, and purchaser names and dates of birth, as well as noting whether the purchasers are Massachusetts residents. As a result of using the CFO's username and password, the revenue coordinator has inappropriate access to DMF's commercial revenue process.

Authoritative Guidance

Section 10.04. of the Comptroller of the Commonwealth's *Internal Control Guide* for June 2015, which DFG is required to follow, states,

Management should divide or segregate key duties and responsibilities among different people to reduce the risk of error, misuse, or fraud. This includes separating the responsibilities . . . so that no one individual controls all key aspects of a transaction or event.

The Executive Office of Technology Services and Security (EOTSS) Enterprise Security Office is responsible for writing, publishing, and updating all enterprise information security policies and standards that apply to all executive department offices and agencies. Section 6.1.2.2 of EOTSS's "Access Management Standard" IS.003 states that a "privileged interactive account" such as the CFO's "is assigned to one and only one user" and that "passwords for these accounts must not be shared."

Reasons for Issues

DFG's management stated that there were not enough employees to process funds, which resulted in the lack of segregation of duties. In addition, the policy and procedures do not address who is responsible for preparing daily/monthly reconciliations.

Because of the age of the Fish system, DFG could not add new users or make changes to various management functions within the system and therefore could not obtain the proper access for the revenue coordinator. DFG management stated that they were in the process of replacing Fish with a new system to account for all commercial permits.

Recommendations

1. DFG should revise its policy and procedures to include segregation of duties for the processing of revenue.
2. DFG should segregate duties for collecting funds, reconciling transactions, and preparing daily deposits.
3. DFG should ensure that all users have their own usernames and passwords for the Fish system once it is upgraded.

Auditee's Response

The Draft Report found that DFG "lacks segregation of duties within the Division of Marine Fisheries Boston Revenue Process." Specifically, the finding focuses on a single employee, "the Boston revenue coordinator [who] is responsible for collecting funds from the DMF lock box daily, reconciles the cash received with the cash out report (a summary of daily transactions from the DMF FISH program), resolves any variances by generating a discrepancy report (a detailed list of all daily transactions), and also prepares the daily deposit." To place this finding in context, it is important to reiterate that DMF's existing controls appear to have been sufficient: the audit team testing (as noted in the [Office of the State Auditor, or OSA] Draft Report) did not find that any revenue was misappropriated or unaccounted for in DMF. Nevertheless, DFG agrees that existing controls could be supplemented by adopting the three recommendations made by the audit team, and has instituted corrective action.

The first two recommendations were that DFG should (1) revise its policy and procedures to include segregation of duties for the processing of revenue and (2) should segregate duties for collecting funds, reconciling transactions, and preparing daily deposits. DMF has redundant controls in place to ensure no one person is responsible for collecting, reconciling, and reporting cash receipts. The OSA audit team was provided with the DMF Internal Control Plan and all pertinent documents necessary to review and understand the revenue collection process. One of the documents provided, "Issue: Policy and Procedure for Accounts Receivable, No: IPPG-03" . . . , lays out the steps taken by the Boston office revenue coordinator to ensure multiple

levels of oversight. On page 2 . . . the policy states, "The Revenue Coordinators report the daily deposit information to the Revenue Supervisor, who verifies that all of the previous day's revenue is accurate and attributed to the correct revenue source (General Fund, Recreational Fund, Shellfish Plant or Trust Account). Spreadsheets with daily transactions are created and maintained by the Revenue Supervisor and revenue is checked daily against Bank of America's Cash Pro and the sweep account in [the Massachusetts Management Accounting and Reporting System] to monitor any irregularities. Hard copies of bank statements are reviewed when received by the Revenue Coordinator in Boston to confirm that all deposit information is accurate." What this means is that all cash receipts reconciled by the Revenue Coordinator in Boston are independently reviewed and verified by the Revenue Supervisor in the Gloucester office. The Revenue Supervisor runs her own reports to verify all cash receipts reported by the Revenue Coordinator are accurate and she does not rely on the reports the Revenue Coordinator prepares as part of her daily reconciliation.

The third recommendation was to ensure that all users have their own usernames and passwords for the FISH system once it is upgraded. This recommendation arises out of the audit team learning that two employees were using a shared password for the FISH permit application, a standalone system used to issue DMF commercial fishing permits outside of the MassFishHunt system. While it is theoretically possible that one of the employees could have used this shared password to issue unauthorized commercial fishing permits, because of the multiple layers of checks and balances in place for all permit issuance, any attempt by that employee to issue a permit would be detected the following day. Nevertheless, DFG agrees with the audit team that individual users should have unique credentials for all systems, including the FISH permit application. Accordingly, DMF has worked with [Executive Office of Energy and Environmental Affairs information technology] to overcome technical issues associated with the age and the limitation of the Oracle based FISH system and has been able to ensure that no two users of the FISH program utilize the same credentials.

Auditor's Reply

The work is independently reviewed and verified by the revenue supervisor; however, because the revenue coordinator and the CFO are the only people who have access to the CFO's username and password, no other reviewer would be aware of changes made using that login information. Therefore, any adjustments made would not be evident to the revenue supervisor. Based on its response, DFG is taking measures to address our concerns on this matter.

APPENDIX A

Fishing and Hunting Permits Issued during the Audit Period²

<i>Permit or License Type</i>	<i>Total Issued</i>
<i>Quabbin Antlerless Deer Permit</i>	<i>1,032</i>
<i>Problem Animal Control Permit + Coyote Certificate</i>	<i>118</i>
<i>Non-Resident (Alien) Hunting, Small Game</i>	<i>37</i>
<i>Non-Resident Trapping Permit</i>	<i>98</i>
<i>Resident (Alien) Sporting</i>	<i>279</i>
<i>Charter Boat (Non-resident)</i>	<i>91</i>
<i>Resident (Citizen) Hunting, Age 65–69</i>	<i>2,612</i>
<i>Non-Resident (Citizen) Hunting, Small Game</i>	<i>3,173</i>
<i>Resident (Citizen/Alien) Fishing, 3 Day</i>	<i>6,208</i>
<i>Non-Commercial Lobster <17</i>	<i>32</i>
<i>Charter Boat (Resident)</i>	<i>1,601</i>
<i>Non-resident (Citizen/Alien) Minor Fishing, Age 15–17</i>	<i>859</i>
<i>Resident Citizen Sporting</i>	<i>72,617</i>
<i>Non-resident (Alien) Hunting, Big Game</i>	<i>51</i>
<i>Non-resident Commercial Shooting Preserve (1 Day)</i>	<i>215</i>
<i>Problem Animal Control Permit + Coyote Certificate, Age 70 and Over</i>	<i>7</i>
<i>Head Boat (Non-resident)</i>	<i>13</i>
<i>Resident (Citizen) Trapping</i>	<i>1,521</i>
<i>Non-commercial Lobster (Resident)</i>	<i>13,548</i>
<i>Propagation Falconry Permit</i>	<i>17</i>
<i>Resident (Alien) Fishing</i>	<i>10,326</i>
<i>Archery Stamp</i>	<i>79,827</i>
<i>Bear Permit</i>	<i>35,261</i>
<i>Resident (Citizen) Hunting</i>	<i>42,008</i>
<i>Wildlands Stamp, Non-resident</i>	<i>45,004</i>
<i>Apprentice Falconry Permit</i>	<i>24</i>
<i>Primitive Firearms Stamp</i>	<i>86,299</i>
<i>Waterfowl Stamp</i>	<i>26,154</i>
<i>Blue Hills Antlerless Deer Permit</i>	<i>2,339</i>

2. The text in this table is quoted from MassFishHunt.

Permit or License Type	Total Issued
General Falconry Permit	68
Resident (Citizen) Trapping, Age 65–69	138
Quabbin Reservoir Fishing, 1 Day	1,189
Resident (Alien) Hunting—Bow Only	63
Resident (Citizen) Fishing, Age 65–9	19,285
Head Boat (Resident)	94
Resident Citizen Sporting, Age 65–69	8,770
Master Falconry Permit	39
Non-resident Recreational Saltwater Fishing	42,416
Problem Animal Control Permit, Age 70 and Over	16
Resident Commercial Shooting Preserve (1 Day)	183
Salvage Falconry Permit	34
Non-Commercial Lobster (Non-resident)	248
Problem Animal Control Permit	448
Resident (Citizen) Minor Hunting, Age 15–17	3,308
Resident Recreational Saltwater Fishing	253,028
Surplus Antlerless Deer Permit	56,701
Turkey Permit	55,784
Non-resident (Citizen) Hunting, Big Game	7,836
Resident (Alien) Hunting	337
Resident (Citizen) Fishing	226,651
Antlerless Deer Permit	62,884
Non-resident (Citizen/Alien) Fishing	24,860
Non-resident (Citizen/Alien) Fishing, 3 Day	7,975
Resident (Citizen) Minor Trapping, Age 12–17	8
Wachusett Reservoir Zone Antlerless Deer Permit	373

APPENDIX B

Commercial Fishing Permits Issued during the Audit Period³

<i>Permit Type</i>	<i>Total Issued</i>
<i>Rod & Reel Permit</i>	<i>1,320</i>
<i>Offshore Lobster Permit</i>	<i>428</i>
<i>Shellfish Propagation Permit</i>	<i>1,855</i>
<i>Seasonal Lobster Permit</i>	<i>211</i>
<i>Master Digger Permit</i>	<i>13</i>
<i>Shellfish Relay (Contaminated) Permit</i>	<i>86</i>
<i>Coastal Lobster Permit</i>	<i>2,581</i>
<i>Offshore Lobster—Non-Trap Permit</i>	<i>623</i>
<i>Boat 60–99 Ft Permit</i>	<i>584</i>
<i>Shellfish & Rod & Reel Permit</i>	<i>1,013</i>
<i>Retail Boat Permit</i>	<i>241</i>
<i>Scientific Permit</i>	<i>181</i>
<i>Bait Dealer Permit</i>	<i>366</i>
<i>Retail Truck Permit</i>	<i>90</i>
<i>Subordinate Digger Permit</i>	<i>77</i>
<i>Retail Store Permit</i>	<i>2,401</i>
<i>Wholesale Dealer Permit</i>	<i>1,052</i>
<i>Shellfish & Seaworms Permit</i>	<i>2,089</i>
<i>Boat 0–59 Ft Permit</i>	<i>8,654</i>
<i>Individual Permit</i>	<i>489</i>
<i>Aquaculture Permit</i>	<i>30</i>
<i>Wholesale Truck Permit</i>	<i>553</i>
<i>Wholesale Broker Permit</i>	<i>107</i>
<i>Endorsement Only Permit</i>	<i>1,454</i>
<i>Boat 99 Ft+ Permit</i>	<i>71</i>

3. The text in this table is quoted from the Fish program.