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A Performance Audit of the Pennsylvania Fish and Boat Commission

Conducted Pursuant to the Fish and Boat Code

May 2010

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Report Summary and Recommendations

When the General Assembly increased the Pennsylvania Fish and Boat Commission's (PFBC) license and fee structure in 2004, an amendment was added to the Fish and Boat Code requiring a cyclical performance audit. Act 2004-159 directs the Legislative Budget and Finance Committee to conduct a performance audit of the PFBC on a three-year cycle beginning in 2007. This is the second study under this provision. The initial audit under the Fish and Boat Code mandate focused on the PFBC's implementation of its multi-year *Strategic Plan (April 2005)*, agency performance in selected program and activity areas, and Commission finances, and the financial condition of the Fish Fund and Boat Fund. This report includes the results of our inquiry in these areas and a follow-up on the recommendations included in the first report.

The PFBC is an independent administrative agency responsible for the Commonwealth's aquatic resources. This includes responsibility for (1) the encouragement, promotion, and development of the fishery interests; (2) the protection, propagation, and distribution of fish; (3) the management of boating and the operation of boats; and (4) the encouragement, promotion, and development of recreational boating. The Commission's mission is "to protect, conserve, and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities."

Findings and Conclusions

We found the following:

The PFBC Has Formally Adopted a "Resource First" Policy That Supports Its Decision-Making

The PFBC modified its mission statement in July 2007 to more clearly emphasize resource protection and conservation (see above). In 2008, the Commission formally adopted a resource first philosophy stating that this "management strategy demands continual assessment of the resource, an ongoing evaluation of the impact of angling pressure on that resource, and a commitment to making changes as conditions dictate." This policy recognizes the Commission's fundamental role in fulfilling and supporting the provisions of Article I, Section 27 of the Constitution of the Commonwealth of Pennsylvania that states, in part, that the public's natural resources belong to all the people and that the Commonwealth is a trustee and shall conserve and maintain them for future generations. The philosophy, therefore, established the ethical principle that the PFBC's primary role is that of a conservation agency.

The mission of the agency, which reflects this philosophy, is reiterated in its policies related to real property acquisition, use, management, and disposition as well as its recent policy on oil and natural gas extraction. In both cases, the policies seek to temper the potential financial and other benefits of these activities with the overall mission to protect, conserve, and enhance the water resource. Other examples of activities of the Commission directed at resource maintenance and improvement include dam removal, assessing trout waters, and addressing invasive species.

PFBC Projects That the Fish Fund and Boat Fund Reserve Balances Will Become Insufficient to Meet the Commission's Cash Flow Needs by FY 2012-13 (Fish Fund) and by FY 2015-16 (Boat Fund)

The PFBC relies almost entirely on revenues generated from license sales, boat registrations, and federal grants. In FY 2008-09, PFBC revenues totaled \$49.8 million, including \$36.7 million (74 percent) deposited in the Fish Fund and \$13.1 (26 percent) deposited in the Boat Fund. Currently, each fund has a projected beginning balance (i.e., the amount of money in the fund at the start of the fiscal year) adequate to support PFBC operations for FY 2009-10 through FY 2011-12. The required reserve balance for the Fish Fund is \$9.3 million; for the Boat Fund it is \$6.3 million.

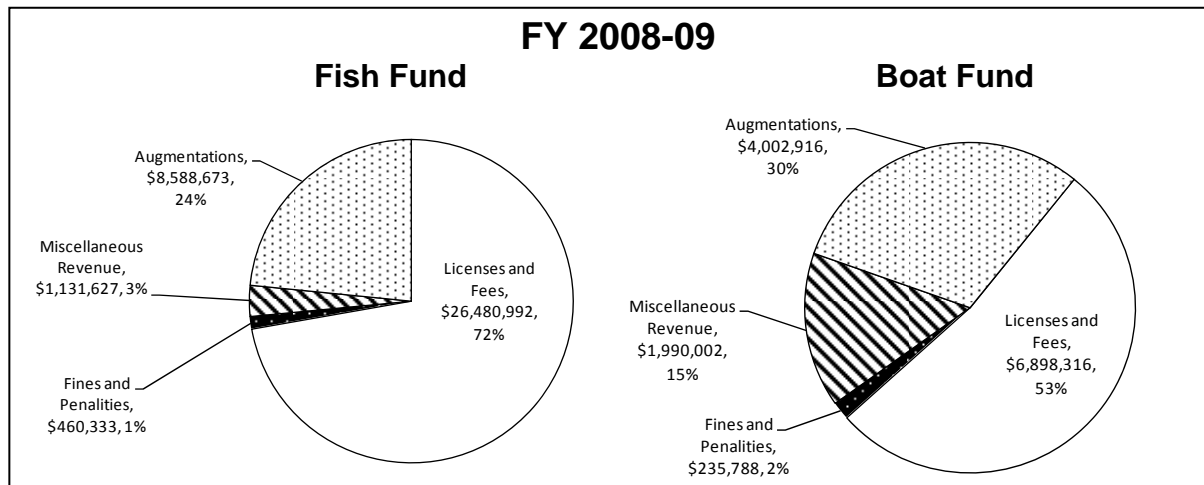
Total combined revenue to the Fish Fund and the Boat Fund increased only marginally (0.5 percent) from FY 2006-07 to FY 2008-09. However, the funds exhibited varying trends during this period. Total revenue to the Fish Fund increased by 2.8 percent, whereas Boat Fund revenue declined by 5.3 percent. The PFBC projects that, in the absence of new or additional revenue sources, the expenditures necessary to provide services at existing levels will soon begin to reduce reserves below levels needed to operate. The PFBC experienced a similar annual deficit situation in the few years prior to the enactment of Act 2004-159, the most recent license and fee rate increase. Current projections indicate that, for the Fish Fund, this point will be reached in FY 2012-13, and for the Boat Fund in FY 2015-16.

The major sources of license and fee revenue to the Fish Fund in FY 2008-09 are the resident fishing license (which provided about \$16.1 million), the trout-salmon permit (\$4.8 million), and the non-resident fishing license (\$2.1 million). Of approximately 14 license types and 3 permits, these three provided 87 percent of the total license and fee revenue and about 63 percent of the total non-restricted revenue to the Fish Fund. Augmentations represented 24 percent of the Fish Fund's revenue. The federal Sport Fish Restoration Act Program (\$6.6 million) and State Wildlife Act Grant Program (\$1.2 million) constituted 91 percent of revenue in the augmentation category. Fines and penalties and miscellaneous revenue totaled about 4 percent of the Fund's revenue in FY 2008-09.

The major source of license and fee revenue to the Boat Fund is boat registration fees (\$6.2 million), which represented about 90 percent of the licenses and fees

category in FY 2008-09. The augmentations category comprised 30 percent of the Boat Fund's total revenue, of which the U.S. Coast Guard Grant for Recreational Boating Safety (\$2.8 million) and the federal Sport Fish Restoration Act Program (\$1.1 million) were the major contributors. Reimbursement from the Motor License and Liquid Fuels Tax funds (\$1.7 million) was the major funding source under the miscellaneous revenue category. Altogether, four sources (boat registration fees, U.S. Coast Guard Grant for Recreational Boating Safety, Sport Fish Restoration Act, and reimbursement from the Motor License and Liquid Fuels Tax funds) represented 90 percent of the Boat Fund revenues in FY 2008-09.

The graphs below show the type and percentage of the various revenue sources deposited into the Fish Fund and into the Boat Fund for FY 2008-09. As shown, licenses and fees accounted for 72 percent of all Fish Fund revenues. Regarding the Boat Fund, the licenses and fees category accounted for 53 percent of all Boat Fund revenues.



While combined revenue increased 0.5 percent, total combined spending increased by 4.3 percent for the two year period FY 2006-07 to FY 2008-09. However, as with revenue, expenditure levels from each fund were different with total spending from the Fish Fund increasing by 9.9 percent over this period, and total spending from the Boat Fund decreasing by 8.6 percent. Personnel expenditures increased by 1.5 percent from FY 2006-07 to FY 2008-09, and operating expenses increased by 15.9 percent in the same period.

The PFBC Has Implemented Many of the Objectives of Its Strategic Plan (April 2005) But Did Not Have a Formal Mechanism to Measure Their Accomplishment

The PFBC adopted a strategic plan in 2005 that included six long-range strategies and nine prioritized objectives, which are shown on the next page. As

noted in our 2008 report, the Commission has no formal mechanism to track progress on the objectives and coordinate those activities with other Commission plans. For example, the PFBC uses an *Annual Plan of Work (APOW)* to measure and evaluate the annual progress of the executive director. The activities on the APOW, however, are not directly linked to the strategies or the objectives of the strategic plan.

PFBC Strategic Plan Long-Range Strategies	
Strategy 1	PFBC will position itself as an organization known for serving the fishing and boating public and the resources it protects.
Strategy 2	PFBC will invest in activities, resources and programs in order to increase boating and fishing participation in the Commonwealth.
Strategy 3	PFBC will explore and implement methods in order to increase traditional and non-user fee based sources of revenue.
Strategy 4	PFBC will enhance relationships, leading to partnership opportunities with stakeholder groups, corporations, natural resource agencies, non-government organizations and others.
Strategy 5	PFBC will develop the internal structure and processes needed to effectively protect and manage aquatic resources and fishing and boating activities.
Strategy 6	PFBC will develop a coordinated, agency-wide approach to aquatic resource management, protection and conservation.
Source: Developed by LB&FC staff from the PFBC document, Pennsylvania Fish and Boat Commission <i>Strategic Plan (April 2005)</i> .	

PFBC Strategic Plan Prioritized Objectives	
Prioritized Objective 1	Develop specific marketing and public relations initiatives targeted at key audiences.
Prioritized Objective 2	Develop and implement a Boating Access Improvement Program.
Prioritized Objective 3	Develop a systematic approach to improve streamside and shoreline angling opportunities.
Prioritized Objective 4	Reengineer trout fishing opportunities to improve the attractiveness to anglers.
Prioritized Objective 5	Increase revenue from “soft” sources (mitigation, habitat, grants, etc.).
Prioritized Objective 6	Seek legislation to capture an equivalent portion of General Fund revenue generated by fishing and boating.
Prioritized Objective 7	Identify and communicate the roles of the Commissioners and agency.
Prioritized Objective 8	Develop an agency-wide employee development and succession plan.
Prioritized Objective 9	Develop a coordinated, agency-wide approach to aquatic resource management, protection, and conservation.
Source: Pennsylvania Fish and Boat Commission <i>Strategic Plan (April 2005)</i> .	

Additionally, the PFBC did not include baseline data for its objectives that would have provided clear measurement of the progress to complete the objective. Therefore, although many activities related to each objective were completed, the

PFBC does not have a direct measurement of the outcome it sought to obtain. For example, although objective 4 (see above) seeks to improve trout fishing attractiveness to anglers, the PFBC did not have baseline data to measure the then current level of satisfaction (the last angler survey had been completed in 1991) and compare it to a new measurement after they made adjustments to the program. Since then they have surveyed anglers and used that data, in part, to assist in developing the *Strategic Plan for Management of Trout Fisheries in Pennsylvania 2010-2014*. We made recommendations in our 2008 report to address these concerns.

The PFBC Is Establishing a New Strategic Plan for July 2010-June 2015 That Incorporates Other PFBC Plans and Clearer Outcome Measures

The PFBC is in the process of developing a new strategic plan for the time period of July 2010 through June 2015. Although the PFBC did not amend its *Strategic Plan (April 2005)* in response to the concerns discussed above, it has sought to address them in developing the new strategic plan. In addition, the PFBC has solicited input from stakeholders and staff to identify the goals to be included in the new plan.

A significant difference in the approach to the draft *Strategic Plan July 2010-June 2015* is the specific link with the *Annual Plan of Work (APOW)*. The APOW will be developed on a fiscal year basis (as opposed to calendar year as had been done previously) to more closely align with the strategic plan. Additionally, those activities in the APOW will specifically link with goals and objectives of the strategic plan. The PFBC has also solicited the assistance of the Office of Administration's Office of Strategic Services in developing meaningful performance measures for major goals in the plan that can be included in the Governor's Performance Report and allow more useful reporting of goal accomplishment.

The PFBC Is Evaluating the Success of Its Marketing Efforts in Impacting the Number of Licensees

The PFBC created a marketing specialist position to address a strategy in the *Strategic Plan (April 2005)* to invest in activities, resources, and programs in order to increase boating and fishing participation. The number of fishing licenses sold in Pennsylvania and elsewhere has been in a general decline for two decades. The PFBC has lost 261,642 resident fishing licensees since 1990, a 25.8 percent decline. This reduction in the number of persons participating in the sport of fishing mirrors a national trend that has been attributed to various factors, including the aging of the population, fewer persons growing up in rural areas, less free time to fish, and competing recreational and leisure time activities.

One effort by the PFBC to address the decline in license sales is the lapsed angler direct mail campaigns. In 2008 and 2009, the PFBC entered into an

agreement with the Recreational Boating and Fishing Foundation (RBFF)¹ to develop and implement a retention direct mail marketing campaign targeted at lapsed anglers. Using data from the Pennsylvania Automated Licensing Service (PALS), RBFF staff identified lapsed anglers and sent reminders to encourage them to renew their licenses. In 2008, a total of 2,464 customers purchased licenses after receiving one or both of the mailings for a response rate of 11.35 percent. The return on investment for the campaign was calculated to be 23 cents in net revenue for each dollar spent (i.e., \$1.23). In 2009, the response rate was only 6 percent with 3,569 of the identified lapsed anglers purchasing licenses. But, the resulting revenue generated by the campaign was a return of \$1.61 for each dollar spent by the PFBC. The PFBC is initiating a similar campaign for 2010.

The two completed angler retention campaigns have had mixed results. In addition, the position of marketing specialist has been vacant since October 2008. The PFBC chose to use that complement position for a press secretary rather than a marketing specialist, as the press secretary was viewed as a higher priority for the agency. The Commission has indicated that it does not plan to fill the marketing specialist position at this time.

Fishing License Sales Have Been Declining But Increased in 2009

As noted above, fishing license sales have been declining steadily over the last decade. The trend in declining fishing license sales, however, reversed in 2009, when 33,948 more resident licenses were purchased than in 2008, a 4.7 percent increase. Also, non-resident licenses increased by 4.2 percent, and the total number of fishing licenses were 4.3 percent higher than the total number purchased in 2008. Increases also occurred for the trout-salmon and Lake Erie permits, and the combination permits, with trout-salmon and Lake Erie permits showing a 3 percent increase and combination trout-salmon/Lake Erie Permits increasing by 7 percent. Unlike the number of fishing licenses sold, the number of boat registrations did not increase in 2009.

This recent increase in fishing license sales is not unique to Pennsylvania. The American SportFishing Association reported that, as of September 1, 2009, state fish and wildlife agencies reported a 7.7 percent positive change in the number of licenses sold year-to-date compared to the same months in the prior year (i.e., January–July 2009 vs. January–July 2008). Explanations for this increase have included the slow economy, which may allow people more time to engage in outdoor activities, to recreational fishing being a lower cost alternative to other forms of recreation. The PFBC has also cited the impact of its multi-year direct marketing campaign efforts targeted at lapsed anglers for this increase in Pennsylvania.

¹The Recreational Boating and Fishing Foundation (RBFF) is a non-profit organization dedicated to increasing participation in fishing, boating, and aquatic stewardship. In 2009, RBFF partnered with 30 states to conduct direct mail marketing campaigns.

Although the PFBC Has Implemented Many of Its Objectives Related to Improving Fishing, It Did Not Complete Its Hatcheries Review and Costs Are Rising

The Bureau of Fisheries has undergone organizational restructuring, changes in fish (particularly trout) propagation policy and practice, and the use of strategic and annual planning techniques to focus Bureau activities to achieve intended goals and objectives. In recent years, the PFBC has organized the Bureau's efforts in line with its "Resource First" policy and enhanced the Bureau's role and responsibilities in habitat restoration and the maintenance and monitoring of the Commonwealth's aquatic resources. The Bureau's organizational structure appears well-configured to handle its responsibilities in both the recreational and environmental areas.

The Bureau of Fisheries' responsibilities include fish production, fisheries management, and research. The Bureau consumed the largest share of the Commission's financial resources by spending a total of \$18.9 million, or 39 percent of the Commission's total budget in FY 2008-09. The operation of the state fish hatcheries constituted 57 percent of the Bureau's total expenditures in that same period. The costs of the hatchery operations are affected by the increasing cost of fuel, fish food, and liquid oxygen.

Trout production costs comprise the largest portion of the Bureau of Fisheries expenditures. A trout cost study (based on cost data for FY 2006-07 and FY 2007-08) by the Bureau of Fisheries' Division of Fish Production reported that the total cost to the PFBC for the stocked trout program is about \$12.4 million per year. The majority of these costs, \$8.2 million or 66 percent, are incurred by the Division of Fish Production. The additional 23 percent of program expenditures come from the divisions and bureaus that support the program and indirect costs. Approximately 5 percent of the costs may be assigned to the fixed assets and capital projects undertaken each year at the hatcheries, and Growing Greener II projects (non-PFBC budget) account for another 6 percent of the annual expenses for the stocked trout program.

The trout cost study also found that the agency spends \$2.17 to produce an average adult trout (in terms of direct costs), which is competitive with retail prices at commercial hatcheries. The average price of similar sized adult trout from three Pennsylvania commercial trout farms was \$2.57. However, if total stocked trout program costs are included in the calculation, the PFBC per trout cost increases to \$2.73.

In 2007, the PFBC undertook a full hatchery review that was intended to evaluate all fish production needs, current and potential hatchery production, and potential future modifications in hatchery alignment and staffing. This review was not completed. Due to the large percentage of the agency's expenditures currently being directed to the hatcheries, determining how they can be more efficient and effective could reasonably be expected to produce cost savings.

The PFBC Has No Specific Funding to Address Marcellus Shale Activities

The PFBC has recently adopted an administrative policy to address oil and gas exploration, extraction, access, and transmission on PFBC-owned properties and water withdrawals from PFBC-owned waters and PFBC-owned access areas. This policy is applicable to Marcellus Shale, a significant source of natural gas that has recently attracted the interest of drilling companies. The Marcellus Shale is a rock formation that underlies much of Pennsylvania and portions of New York and West Virginia at a depth of 5,000 to 8,000 feet and is believed to hold trillions of cubic feet of natural gas. See Exhibit 13 on page 76 for a map of the Marcellus Shale formation. In Pennsylvania, it is primarily located from the southwestern corner through to the northeastern corner of the state. In 2008, DEP issued 476 permits and 195 wells were drilled, and in 2009, DEP issued 1,984 permits and 763 wells were drilled, a 391 percent increase in the number of wells drilled.

Although the Commission owns relatively little land, approximately 33,500 acres (compared to the Department of Conservation and Natural Resources' 2.1 million acres), in addition to having property in the areas of the state with Marcellus Shale resources, the PFBC may grant access to water resources that may be used to facilitate drilling efforts. Although the PFBC has not leased or granted access to water for drilling as of early 2010, it has been contacted by a number of companies seeking drilling sites, water resources, or access rights. The PFBC, however, has limited staff resources available for pursuing these matters. The Commission also does not know its subsurface ownership rights for approximately 81 percent of its property (not including designated sensitive areas).

The lack of drilling sites on PFBC property, however, does not mean Marcellus Shale drilling activities have not affected the PFBC. Since drilling sites on lands near a water resource may affect the water resource, the PFBC voluntarily used its waterways conservation officers (WCOs) in 2009 and early 2010 to conduct inspections of these sites due to limited Department of Environmental Protection (DEP) inspection staff. Concerns about potential damage to water resources without inspections led the former PFBC executive director to direct the WCOs to conduct inspections of Marcellus Shale drilling sites that were within 1/8 mile of a water resource in order to focus their efforts on proactively protecting the resource from damage.

The WCOs conducted 126 inspections of sites within 1/8 mile of a water resource and 22 inspections as the result of complaints. In 65 cases, problems were found at the sites (multiple problems may have been found at the same site). No citations or criminal actions were filed by the WCOs; however, potential violations were forwarded to DEP and may have been cited by that agency. Other matters were referred to the PFBC's Division of Environmental Services for further testing. This inspection effort may not be ongoing since DEP recently announced the hiring

of inspectors; however, the WCOs continue to respond to complaints related to drilling sites. Also, the PFBC is discussing concerns with DEP regarding oil and gas matters in an effort to improve resource protection. Although the PFBC has Memoranda of Understanding (MOU) with DEP and PennDOT for permit-related matters that provide funding to the Commission, the PFBC did not have an MOU in place or receive funding for this activity.

The PFBC Is Targeting Waterways Access to Provide Adequate Access Statewide

The PFBC's *Strategic Plan (April 2005)* directs the agency to "invest in activities and programs in order to increase boating and fishing participation in the Commonwealth." Thus, PFBC staff has made preserving and improving public access points a priority. Although the PFBC controls about 33,500 acres of land on which there are four dozen public lakes and nearly 250 boating access/shoreline fishing areas, access to many prime fishing destinations is controlled by private landowners necessitating actions by the PFBC to maintain access to these waters.

Access to private lands has been affected by poor behavior by anglers and boaters, privatization of the land (i.e., private fishing clubs), and the lack of clear protection for the landowner under the Recreational Use of Land and Water Act (RULWA). While the definition of "land" under the RULWA specifically includes "buildings, structures and machinery or equipment when attached to the realty," Pennsylvania courts have held that RULWA coverage does not extend to certain situations concerning property that has been improved. As noted in our 2008 report, the PFBC believes the protection afforded by the RULWA is a major factor leading many public and private landowners to permit free public hunting, fishing, boating, and other recreational uses of lands and waters. However, the PFBC still considers it unclear as to whether the legal protections of the RULWA apply to fishing and boating related improvements to realty such as access ramps and paths (including ramps for persons with disabilities), fishing and boating piers, boat launch ramps, docks, stream improvement projects, dams, and impoundments and parking lots.

The PFBC has administered several programs directed at providing access to waters for fishing and boating activities, including the Erie Access Improvement Program, the Boating Facilities Grant Program, and the Boating Infrastructure Grant Program as well as seeking shoreline and streamside access for fishing. Only recently, however, has the PFBC developed a plan to direct those efforts based on the specific need of an area for access. Prior to this, certain grants were made available and awarded based on application versus a directed solicitation due to identified need, although access points to pursue through land acquisitions, leases, and easements are often identified by the Commission staff. The draft *Pennsylvania's Fishing and Boating Access Strategy* seeks to prioritize watersheds and create

access plans for a minimum of five of the watersheds each year. Overall, however, the PFBC has been successful in continuing to add to and improve existing access points throughout the Commonwealth. For example, between July 2007 and January 2010, the Commissioners approved 26 fishing access projects.

Recommendations

1. The PFBC should proceed with its efforts to identify and secure sustainable revenue streams.

The new executive director has also indicated his desire to seek sustainable funding beyond license fees. This could include a portion of a severance tax on natural gas drilling (as provided for in House Bills 2009-1489 and 2009-2443, and Senate Bill 2009-997), a portion of oil and gas permitting fees being designated for the Commission as well as other funding. The PFBC should also continue to identify “partners” who may assist it with their programs, especially considering that the General Assembly has indicated that the proposed incremental license concept will not be considered at this time.

2. The General Assembly should consider providing additional resources to the PFBC so it can continue to make efforts to protect water resources from potential degradation by Marcellus Shale drilling efforts.

The “fracking” process used to access the Marcellus Shale gas uses and degrades large quantities of water. This process, and the damage that can be caused by related drilling activities, poses serious threats to Pennsylvania’s waterways. These threats appear real in that PFBC staff have identified 52 environmental/water quality problems in the 92 inspections it conducted of Marcellus Shale drilling sites in CY 2009. Similarly, DEP’s inspections of 200 Marcellus Shale drilling sites in CY 2009 have resulted in 178 enforcement actions, including 21 resulting in monetary penalties. These statistics suggest that, in all likelihood, Pennsylvania will continue to experience high rates of environmental, health, and safety violations at Marcellus Shale drilling sites. Given this new threat, we recommend the General Assembly take action, such as provided for in House Bills 2009-1489 and 2009-2443, and Senate Bill 2009-997, to ensure the PFBC, together with the DEP, has sufficient resources to carry out its mission “to protect, conserve, and enhance the Commonwealth’s aquatic resources. . . .”

3. The PFBC should complete its review of the fish hatchery program to identify possible operational efficiencies that could result in cost savings.

The Bureau of Fisheries accounts for 39 percent of the expenditures of the PFBC, and, therefore, savings in that area could be significant. Although a complete hatchery review was undertaken in 2007, it remains ongoing. The

Strategic Plan for Management of Trout Fisheries in Pennsylvania 2010-2014 highlights many of the issues that were to be addressed under the hatchery program review, but the completion of a complete review in a timely manner is important. In completing this review, the PFBC should create a broad-based working group assigned primary responsibility to identify strategies for promoting cost savings (including hatchery consolidation strategies) in the operation of the state fish hatcheries with the least adverse effects on services to the angling public. The results of the working group's efforts should be compiled in a written report within one year of its commencement, and this report should be formally presented to the House and Senate Game and Fisheries Committees. PFBC may want to engage the services of the Office of Strategic Services, which is currently reviewing the operation of the Division of Environmental Services, to assist with this effort.

4. The PFBC should evaluate its marketing plans in light of the limited return of the 2009 lapsed angler program.

At the completion of the 2010 lapsed angler marketing campaign, the PFBC should analyze the effectiveness of the program over the last three years to determine whether future similar efforts directed toward lapsed anglers would be in the best interest of the Commission. In addition, the PFBC should continue to pursue the expanded use of PALS data to identify specific populations to target with their marketing efforts and develop measurement standards to evaluate marketing efforts including but not limited to, survey instruments. Using the PALS data, the PFBC should survey its licensees to determine what changes in programs, for example, would influence their decision to continue to purchase licenses. As part of these efforts, the Commission should determine the reasons for the slow decline in boat registrations and the efforts that could be undertaken to increase registrations. Once the Governor's hiring freeze is over, the Commission should evaluate the need to replace the marketing specialist position to address the marketing needs identified by the PFBC.

5. The General Assembly should consider amending the Recreational Use of Land and Water Act (RULWA) to clarify and broaden the scope of legal protection afforded to landowners who wish to make their property (i.e., land and water areas) available for public recreational purposes such as fishing and boating.

RULWA protection is a major factor leading landowners to permit free public hunting, fishing, boating, and other recreational uses of lands and waters. According to the PFBC, the lack of legal clarity as to what fishing and boating-related improvements to land are covered under the RULWA has discouraged some landowners, clubs, and organizations from going forward with proposed projects. The General Assembly should consider amending the RULWA, 68 P.S. §§477-1-477-8, by clarifying and broadening the scope of legal protection afforded by the act to cover certain fishing and boating related improvements

to land, which could include improvements such as boating access and launch ramps, fishing piers, boat docks, ramps, access to and parking for these areas, and hiking trails.

I. Introduction

Act 2004-159 directs the Legislative Budget and Finance Committee to conduct a performance audit of the Pennsylvania Fish and Boat Commission (PFBC) on a three year cycle beginning in 2007. This is the second study under this provision.

Scope and Objectives Statement

1. To survey and review overall agency operations and staffing and assess the efficiency and effectiveness of selected agency programs and processes.
2. To examine the Commission's strategic planning process and evaluate the implementation status of selected operational objectives.
3. To examine and analyze PFBC revenues and expenditures and determine the current and projected financial condition of the Fish Fund and Boat Fund.
4. To develop findings and recommendations, as appropriate.

Methodology

We focused our audit on the implementation of the PFBC's *Strategic Plan (April 2005)*, agency performance in selected key areas of responsibility, agency revenues and expenditures, the financial condition of the Fish Fund and the Boat Fund, and actions taken by the Commission to implement recommendations made in our first performance audit of the Commission pursuant to the audit provisions of the Fish and Boat Code, 30 Pa.C.S. §503(a). We attended the January and April 2010 PFBC quarterly Commission meetings to assess the opportunity for public input. To obtain audit input and perspectives, we sent questionnaires to the PFBC Commissioners and 14 PFBC stakeholder groups. We also sent a letter soliciting comments on the study to members of the House and Senate Game and Fisheries Committees. We met with the executive director and former executive director of the PFBC and pertinent staff of the Commission.

To review the status of recommendations made in our 2008 report, we sent follow-up requests to the Commission and sought documentation of their responses. We also reviewed Commission meeting minutes and quarterly activity reports to identify actions taken by the agency and staff in areas of responsibility specific to the *Strategic Plan (April 2005)* as well as general areas of responsibility for carrying out agency functions. We discussed the process involved in drafting the new strategic plan with pertinent staff and reviewed a draft of that document.

To analyze PFBC revenues, expenditures, and financial condition, we examined budget and fiscal records and reports for the period FY 2006-07 through FY 2008-09, inclusive. The report provides detailed information on the Commission's revenues and expenditures for FY 2006-07 through FY 2008-09. We did not independently audit the financial information presented in the report and, accordingly, do not express an opinion or any other form of assurance on the accuracy of the financial statements.¹

We analyzed revenues, by source, identifying trends and variances among the three recent fiscal years. Historical revenue trend analyses for a ten-year period were also completed for both the Fish Fund and the Boat Fund using, in part, information developed for our 2008 report.

We analyzed expenditures by major object and by organizational unit. Audit staff met with the Director of the Bureau of Administration and the Manager of Budget and Fiscal Management to discuss major factors impacting Commission costs as well as cost-containment measures. We further examined minor objects of expenditure that varied significantly from year to year.

To assess the current and projected financial condition of the Fish Fund and the Boat Fund, we examined historical patterns of operating surpluses and deficits. We also examined the effects of past license increases on the financial condition of the funds, both by an examination of license sales and associated revenues and through an examination of PFBC staff prediction models.

The examination of the Commission's marketing efforts included the review of marketing evaluation reports for similar recruitment and retention campaigns conducted in partnership with the Recreational Boating and Fishing Foundation (RBFF) in eight other states as well as the preliminary 2009 data for 26 states (including Pennsylvania). We discussed the in-house evaluation of Pennsylvania's direct mail campaigns with Commission staff. We looked at advertising budget requests and reviewed various print advertisements and press releases produced by the PFBC during the time covered in this report. We also examined historical license sales data for all states and the accompanying federal Sport Fish Restoration Act Program apportionments.

Our review included an assessment of the functions and activities of the Bureau of Fisheries, especially its trout-related programs. We reviewed the staffing and financing of the Bureau and a number of reports produced by its staff, including a trout management plan and a report on the costs of the stocked trout program. The Director of the Bureau of Fisheries was also interviewed.

¹ The PFBC has requested the Office of Administration's approval for a complete financial audit to be conducted of the agency. The Bureau of Audits indicated that it would not be conducting the audit due to other priorities.

We met with Law Enforcement staff to discuss activities related to Marcellus Shale inspections. We discussed these efforts with PA Department of Environmental Protection (DEP) personnel involved in Marcellus Shale activities and reviewed DEP data on the number of permits issued, wells drilled, and enforcement actions taken. We reviewed PFBC data on the land it controls to determine its ownership of oil and gas rights. We reviewed the PFBC's policies on land acquisition and usage. We also reviewed newspaper articles concerning Marcellus Shale drilling activities in Pennsylvania.

In our examination of the Commission's efforts to increase fishing and boating access, we reviewed DCNR's recently published *Statewide Comprehensive Outdoor Recreation Plan (SCORP)* as well as a draft of *Pennsylvania's Fishing and Boating Access Strategy* under development by PFBC and the Pennsylvania Environmental Council. Additionally, we looked at the policies and procedures governing the grant programs administered by the Commission, including a check of the fund balances of the Lake Erie Restricted Revenue Account for the past three years. To develop trend analysis of boating accidents and fatalities, we reviewed Recreational Boating Safety Program Performance reports.

Our review focused on FYs 2006-2008 and CYs 2007-2009. During this period, tensions existed between the executive director and the Board of Commissioners. At the July 2009 quarterly Commission meeting, the Commissioners announced that they had reassigned the executive director's work responsibilities exclusively to pursuing and securing federal conservation program initiatives. He carried out this function until his retirement in January 2010. A new executive director was appointed by the Commission in March 2010. The Deputy Director for the Office of Administration, Boating and Engineering served as acting executive director during the interim period. The new executive director is a long-time employee of the PFBC and most recently was the Chief of the Division of Environmental Services. We chose not to address the relationship between the former executive director and the Board since the relationship was ending as our review began.

Also during this period, the waterways conservation officers (WCOs) were in contract negotiations, having certified a new union as their representative in July 2007. Their last contract expired June 30, 2007. Finally, the Governor issued a general hiring freeze in September 2008. The freeze was applicable to salaried, wage, annuitant, and other temporary staff as well as paid interns. Although the PFBC is an independent agency, its employees are appointed and their compensation is fixed in accordance with the classification and compensation plans established by the Executive Board. Our report notes those instances where the freeze has specifically affected the accomplishment of agency activities under our review.

Acknowledgements

We acknowledge and appreciate the excellent cooperation and assistance provided by the Pennsylvania Fish and Boat Commission and its staff during the audit. In particular, appreciation is extended to John Arway, Executive Director; Douglas J. Austen, Ph.D., former Executive Director; Brian Barner, Director, Office of Administration, Boating and Engineering; Timothy D. Schaeffer, Ph.D., Director, Bureau of Policy, Planning and Communications; Laurie E. Shepler, Chief Counsel; Bernard Matscavage, Director, Bureau of Administration; Jim Potteiger, Budget and Fiscal Management; Leroy Young, Director, Bureau of Fisheries; Daniel G. Martin, Director, Bureau of Boating and Access; Eric Levis, Division of Communications; Jackie Kramer, Bureau of Boating and Access; and Laurel Anders, Strategic Initiatives and Projects, who served as our liaison. We also thank the stakeholders who took the time to respond to our questionnaire and staff of other Commonwealth agencies who responded to our questions.

Important Note

This report was developed by Legislative Budget and Finance Committee staff. The release of this report should not be construed as an indication that the Committee or its individual members necessarily concur with the report's findings and recommendations.

Any questions or comments regarding the contents of this report should be directed to Philip R. Durgin, Executive Director, Legislative Budget and Finance Committee, P.O. Box 8737, Harrisburg, Pennsylvania 17105-8737.

II. The PFBC Has Implemented Many of the Objectives of Its Strategic Plan and Is Establishing a New Plan for July 2010 – June 2015

The current PFBC *Strategic Plan (April 2005)* was adopted by the Commission in 2005 following a development process that began in the fall of 2003. The plan consists of six long-range strategies and nine prioritized objectives. As noted in our prior audit, however, there is no formal, central tracking and internal reporting of progress made towards fulfillment of *Strategic Plan (April 2005)* activities, tracking of output and outcome measures, or detail steps. PFBC officials report, however, that since our last report, the goals and objectives of this plan have been generally completed as measured by the implementation of the activities associated with the prioritized objectives.¹ The PFBC is developing a new strategic plan for July 2010 through June 2015, which it plans to review at its July 2010 Commission meeting.²

Implementation Status of *Strategic Plan (April 2005)* Operational Objectives

The *Strategic Plan (April 2005)* has six long-range strategies as shown on Exhibit 1. The plan also includes nine prioritized objectives as shown on Exhibit 2.

Exhibit 1

PFBC Strategic Plan Long-Range Strategies

Strategy 1	PFBC will position itself as an organization known for serving the fishing and boating public and the resources it protects.
Strategy 2	PFBC will invest in activities, resources and programs in order to increase boating and fishing participation in the Commonwealth.
Strategy 3	PFBC will explore and implement methods in order to increase traditional and non-user fee based sources of revenue.
Strategy 4	PFBC will enhance relationships, leading to partnership opportunities with stakeholder groups, corporations, natural resource agencies, non-government organizations and others.
Strategy 5	PFBC will develop the internal structure and processes needed to effectively protect and manage aquatic resources and fishing and boating activities.
Strategy 6	PFBC will develop a coordinated, agency-wide approach to aquatic resource management, protection and conservation.

Source: Developed by LB&FC staff from the PFBC document, Pennsylvania Fish and Boat Commission *Strategic Plan (April 2005)*.

¹ The PFBC notes, however, that one of the difficulties in determining whether an operational objective was successful was the lack of baseline data against which to measure the activity.

² A new executive director was appointed by the PFBC Commissioners on March 2, 2010. He asked for the draft strategic plan to be held until the July meeting in order to give him an opportunity for review and comment. The plan had been expected to be on the April 2010 Commission meeting agenda.

Exhibit 2

PFBC Strategic Plan Prioritized Objectives

Prioritized Objective 1	Develop specific marketing and public relations initiatives targeted at key audiences.
Prioritized Objective 2	Develop and implement a Boating Access Improvement Program.
Prioritized Objective 3	Develop a systematic approach to improve streamside and shoreline angling opportunities.
Prioritized Objective 4	Reengineer trout fishing opportunities to improve the attractiveness to anglers.
Prioritized Objective 5	Increase revenue from “soft” sources (mitigation, habitat, grants, etc.).
Prioritized Objective 6	Seek legislation to capture an equivalent portion of General Fund revenue generated by fishing and boating.
Prioritized Objective 7	Identify and communicate the roles of the Commissioners and agency.
Prioritized Objective 8	Develop an agency-wide employee development and succession plan.
Prioritized Objective 9	Develop a coordinated, agency-wide approach to aquatic resource management, protection, and conservation.

Source: Pennsylvania Fish and Boat Commission *Strategic Plan (April 2005)*.

The PFBC does not directly measure the six long-range strategies, instead focusing on the implementation of the prioritized objectives. Since our last report, the PFBC reports the following accomplishments of the prioritized goals:

1. *Develop Specific Marketing and Public Relations Initiatives Targeted at Key Audiences:* As reported in our prior report, a marketing function was established and a marketing specialist was hired. This position, however, is currently vacant, and the PFBC has no immediate plans to fill it choosing instead to use the complement position for the creation of a press secretary position. See Finding IV for further discussion of the marketing function.
2. *Develop and Implement a Boating Access Improvement Program:* In 2005, the PFBC implemented the Boating Facility Grant Program. This program is designated for public entities that have or will have the capability to provide boat access facilities that are open and available for general public use. A competitive grant program was developed to support planning, acquisition, development, expansion, or rehabilitation of public boating facilities. In addition to these grants, the PFBC improves approximately 12 PFBC-owned access sites per year. The PFBC has a draft plan, *Pennsylvania’s Fishing and Boating Access Strategy*, to guide fishing and boating access planning, development, and funding. See Finding VIII for further discussion of actions taken by the PFBC to improve boating access.

3. *Develop a Systematic Approach to Improve Streamside and Shoreline Angling Opportunities:* During FY 2006-07, the PFBC initiated the Lake Erie Access Improvement Program to provide grants to county and municipal governments and qualifying organizations (501(c)(3) organizations) for acquisition of lands and/or other property rights, and the development, improvement, or rehabilitation of public access sites located on the waters of the Commonwealth in the Lake Erie watershed. The PFBC is using the Lake Erie approach as a model for a statewide approach to securing streamside and shoreline angling opportunities. See Finding VIII for further discussion of these efforts and the draft access plan, *Pennsylvania's Fishing and Boating Access Strategy*.
4. *Re-engineer Trout Fishing Opportunities to Improve the Attractiveness to Anglers:* The PFBC has recently completed its *Strategic Plan for Management of Trout Fisheries in Pennsylvania 2010-2014*. The stated purpose of the strategic plan is to “identify the goals for trout management in Pennsylvania and develop action steps to achieve them.” To develop the plan, the PFBC conducted a number of evaluations including surveys to anglers in Pennsylvania. See Finding V for further discussion of the trout management and hatcheries program.
5. *Increase Revenue From “Soft” Sources Like Pollution and Habitat Mitigation, Grants, and Other Partnerships:* As reported in our prior report, the PFBC created the position of Conservation Coordinator (located within the Bureau of Policy, Planning and Communications) to undertake efforts to increase revenue from “soft” sources. Revenue from non-traditional or “soft” sources includes grant money from both public and private sources. Funding received is used primarily in habitat management/restoration, study and/or protection of endangered or non-game species, and pollution mitigation projects. PFBC efforts include pursuit of funding sources that directly serve to further agency functions and activities, especially in the area of habitat management, as well as assisting various non-profit organizations and conservancies to apply for funding as partners with the PFBC in other projects that further the PFBC’s mission.

Although our prior audit report stated that the PFBC was developing a database for tracking the pursuit and receipt of non-traditional funding sources, we were informed that such a database was still in process. In order to assess PFBC’s efforts in relation to this strategic initiative, we requested outcome data, to the extent available, related to the pursuit (grants applied for) and success (grants received) in obtaining funding from non-traditional sources. We further requested this information be identified by whether funding was received by the PFBC or by partnering organizations. Table 1 provides estimated information regarding “soft money” grants applied for and received and dollar amounts from CY 2007 through CY 2009. Although the number of grants pursued by the PFBC

on its own has declined, the number of grants received has remained about the same and the amount of funds received has increased.

Table 1

Non Traditional (i.e., Soft Money) Grants Applied for and Received, by PFBC and Partners* (CYs 2007 Through 2009)			
	<u>2007</u>	<u>2008</u>	<u>2009</u>
PFBC			
Number of Grants Applied for by PFBC.....	12	11	8
Number of Those Grants Received by PFBC.....	9	9	8
Total Dollar Amount of Successful Grants.....	\$637,500	\$668,000	\$864,500
PARTNERS			
Number of Grants PFBC Helped Partners Prepare.....	20	15	13
Number of Those Grants Received by Partners.....	18	13	12
Dollar Amount of Successful Grants to Partners.....	\$1.414 Million	\$1.220 Million	\$375,500

*Does not include funding provided annually by the State Wildlife Act Grant Program or through the Sport Fish Restoration Act Program (i.e., Dingell-Johnson). Numbers and dollar amounts are PFBC estimates.

Source: Developed by LB&FC staff based upon survey submitted through Bureau of Policy, Planning and Communications.

6. *Develop and Implement a Comprehensive Legislative Strategy:* A legislative strategy highlighting the priority legislative needs is included as part of the *Annual Plan of Work (APOW)*.³ In addition, the staff developed a compilation of “minor” changes needed to the Fish and Boat Code. In 2009, the legislative strategy was to “develop and work to obtain passage of a legislative package that will include a fishing license fee pricing system that incorporates annual fee modifications to address cost increases, habitat and/or access, youth programs, flexibility to create marketing programs and family license packages, and a review interval that will allow for appropriate legislative oversight, or some combination of one or more of the above-listed features.” A similar strategy was pursued in early 2010. As of March 15, 2010, no bill has been introduced in the legislature to make the changes sought by the PFBC. See Appendix A for pending bills related to the PFBC.
7. *Identify and Communicate the Roles of the Commissioners and Staff:* In 2007, the Commissioners adopted a policy manual for the PFBC. The PFBC plans to update two sections of this manual related to the strategic plan. Specifically, the PFBC plans to amend the vision statement and the process for the development and implementation of the APOW.

³The APOW, discussed later in this finding, is adopted annually by the Commissioners to measure and evaluate the annual progress of the executive director.

8. *Develop an Agency-wide Employee Development and Succession Plan:* The PFBC continues to use the retirement projections developed by the Office of Administration (OA) to produce information related to potential agency workforce retirements. OA is helping the Commission gather human resource data and analyze it. The 2008 agency reorganization resulted from these analyses.

The PFBC has used a consultant, Progress Associates, to provide the Natural Resources Leadership Development Program to staff (limited to management level) since 2006. In FY 2006-07, 12 staff received the basic training; in FY 2007-08, 16 staff received the basic training; and in FY 2008-09, 23 staff received basic training and 15 staff received continuing education/advanced training (available only to staff who participated in the FY 2006-07 and the FY 2007-08 training). As part of the draft *Strategic Plan July 2010 – June 2015*, the PFBC Leadership Workgroup is compiling a *Leadership Development Plan* to provide “a comprehensive, ongoing strategy for providing high quality development opportunities for all Commission staff, from new hires to seasoned managers of all levels” (emphasis in original). This workgroup identified a leadership development program offered by the Association of Fish and Wildlife Agencies. One of their programs is scheduled for June 2010 and another for late summer 2010. This program is expected to complement the previous program.

9. *Develop a Coordinated, Agency-wide Approach to Aquatic Resource Management, Protection and Conservation:* This activity is addressed by the implementation of Pennsylvania’s *Wildlife Action Plan* (WAP) through State Wildlife Act Grant Program (SWG) funded projects. The SWG funding is an annual congressional appropriation and, therefore, funding levels from year-to-year may vary. Approximately 48 projects have been funded from 2004 through September 2009.

Although the PFBC has completed many of the activities related to this objective, it has not yet developed maps of “hot spots” for protection, stressors, and other factors for species of greatest conservation need. One of the SWG funded projects is directed at this activity and, once completed, reportedly will allow for the development of a process to identify conservation opportunity areas for Pennsylvania WAP species and habitats and the development of associated maps and future land use patterns to help resource agencies with prioritization of limited conservation funds by understanding the immediacy of predicted land use changes.

The WAP is required to be updated in 2015. The revision is expected to begin in 2013. A database for tracking projects, species, and habitats studied through the SWG has been completed. Built on a Microsoft Access Database Platform, the system contains information from the

Wildlife Action Plan including goals, objectives (strategic and operational), species of greatest conservation need, habitats, and projects addressing specific goals and objectives within the WAP. Developed within the PFBC, the database was delivered to the Pennsylvania Game Commission (PGC) in late 2009. Data is being entered, maintained, and updated by both the PFBC and PGC. The database is expected to provide a mechanism to assess progress on the implementation of the WAP. Please see Finding VI for further discussion.

Annual Plan of Work

The Commission also adopts an *Annual Plan of Work* (APOW). The APOW is defined in the PFBC Policy Manual⁴ as a mechanism for the Commissioners to measure and evaluate the annual progress of the executive director. This plan is adopted by the Commissioners for each calendar year and the status of APOW activities is reported to the Commissioners at their quarterly meetings. The APOW is to include the following:

- a listing and description of proposed activities for the upcoming year;
- the expected results to be achieved during the upcoming year;
- anticipated longer-term results;
- the expected timing of results; and
- fiscal and personnel implications of each activity.

The 2009 APOW included 14 activities, shown on Exhibit 3, 13 of which were included in the 2008 and, in some cases, the 2007 APOWs. As shown on Exhibit 3, many of the activities on the APOW remained ongoing at the end of 2009. This has occurred with each APOW. Many of the activities listed, however, are unlikely to be accomplished in a single year. This carry-over from one year to the next is expected for statutory activities such as developing a new licensing and fee package for introduction in the General Assembly, or for the ongoing development of the new strategic plan. Other activities, however, did not meet expected completion dates, including the development of the trout management plan, and carried over for two years with expected completion dates changing each year. In other cases, the activity on the plan did not have an expected completion date and was carried forward on the next APOW.

⁴ Adopted by the PFBC July 17, 2007.

Exhibit 3

PFBC 2009 Annual Plan of Work

- A. During the spring 2009 legislative session, develop and introduce a new license and fee package.^a Status: *Ongoing*.
- B. During the 2009 congressional session work to obtain passage of the National Fish Habitat Conservation Act and Wallup-Breaux reauthorization. Status: *Ongoing*.
- C. During 2009 and working into the 2010 gubernatorial elections work with partners to develop state funding initiatives for PFBC conservation, land acquisition/easement programs, and infrastructure efforts.^{a,b} Status: *Ongoing*.
- D. By the October 2009 Commission meeting develop and present a new agency strategic plan, and, by December 31, 2009, finalize a corresponding one-year plan of work for 2010.^a Status: *Scheduled for the July 2010 PFBC meeting*.
- E. By October 2009 Commission meeting develop a new trout management plan.^{a,b} Status: *Completed*.
- F. Implement community-based fish sampling throughout 2009.^{a,b} Status: *Ongoing*.
- G. Develop a fisheries and ecological framework for improved management of the flow releases for the Upper Delaware River system.^a Status: *Ongoing*.
- H. Throughout 2009, work with partners to advance understanding of Susquehanna River bass disease and water quality issues.^a Status: *Ongoing*.
- I. Throughout 2009 continue with Growing Greener 2 hatchery updates.^{a,b} Status: *Ongoing*.
- J. By July 1, 2009, apply for state funding for all PFBC high hazard unsafe dam renovations through appropriate programs.^{a,b} Status: *Application completed; engineering ongoing*.
- K. By July 1, 2009, complete Harrisburg office renovation and throughout 2009 continue to work on Pleasant Gap office rebuild options.^a Status: *Harrisburg Office completed; other ongoing*.
- L. By December 31, 2009, complete a full hatchery program review.^{a,b} Status: *Ongoing*.
- M. By July 1, 2009, complete a full economic evaluation of costs and benefits of stocked trout program.^a Status: *Report completed*.
- N. By July 1, 2009, finalize strategic plan for Three Rivers Ecological Research Center and begin plan implementation.^{a,b,c} Status: *Ongoing*.

^aCarried over from 2008 *Annual Plan of Work*.

^bCarried over from 2007 *Annual Plan of Work*.

^cAt the April 2010 quarterly Commissioners' meeting, the PFBC voted to terminate the Three Rivers Ecological Research Center in Pittsburgh.

Although its activities may further many of the objectives and overall goals of the *Strategic Plan (April 2005)*, as reported in our prior report, the APOW is not specifically linked to the plan. Therefore, it is difficult to crosswalk activities to determine whether the APOW is directly furthering those goals and objectives cited in the *Strategic Plan (April 2005)*.

According to PFBC officials, the Commission is developing the new APOW to more closely align with the strategic plan expected to be adopted for the July 2010 through June 2015 time period. The APOW will include those items in the strategic plan that are to be accomplished in the given fiscal year of the APOW. However, specific activities may be carried from year to year as they have been in the prior APOWs.

Status of Prior LB&FC Recommendations Related to the PFBC Strategic Plan

Our prior report made several recommendations regarding the *Strategic Plan (April 2005)* including creating a process to track progress of plan goals. Although the PFBC did not amend the current strategic plan to address our concerns, the PFBC reported using many of the recommendations in developing the new strategic plan covering the July 2010 through June 2015 time period.

The PFBC implementation of LB&FC recommendations related to the *Strategic Plan (April 2005)* follows:⁵

1. *Follow through with recently stated plans to restore a full-time strategic planner position to the agency complement. Status:* In November 2007, the PFBC filled the position of strategic initiatives and projects coordinator within the Bureau of Policy, Planning and Communications. In addition to coordinating the agency's strategic planning efforts, the coordinator assists with other agency planning efforts, including the recently completed *Strategic Plan for Management of Trout Fisheries in Pennsylvania 2010-2014* and the pending *Pennsylvania's Fishing and Boating Access Strategy*, to ensure that those plans align with the overall direction of the agency. This position is also responsible for providing the necessary consistency and support across the agency to develop meaningful performance measures, track progress, and make stronger linkages between the strategic plan, *Annual Plan of Work*, and the agency's budget. Finally, the coordinator works with other agencies to ensure consistency throughout Commonwealth plans and recently served as a member of the Technical Advisory Committee for the 2009-2013 *State Comprehensive Outdoor Recreation Plan*.

⁵ See Appendix B for the status of all recommendations from our 2008 report.

2. *With Commissioner participation, convene a planning session(s) to establish and define the strategic planning process (in policy statement and procedural form) and the role of the strategic plan in day-to-day PFBC operations.* **Status:** The Commissioners participated in various planning sessions and discussions during the development of the draft *Strategic Plan July 2010-June 2015* from mid-2008 through the end of 2009. Under the guidance of a contracted business management consultant, staff established the current strategic planning process. The strategic planning process and the role of the strategic plan in day-to-day operations was reiterated and reinforced at all planning meetings with the Commissioners, Executive Team, and Steering Team. However, the Commission has not established or defined it in agency policy and/or procedural form as of late April 2010.
3. *Define and clarify the interface/relationship between the Strategic Plan and the Executive Director's Annual Plan of Work.* **Status:** Upon completion of the draft *Strategic Plan July 2010-June 2015*, a corresponding APOW for the period July 1, 2010, to June 30, 2011, will be compiled of all items in the strategic plan with completion dates within that same fiscal year. Review of strategic plan accomplishments and timelines is to occur on an annual basis thereafter in order to develop the executive director's APOW. The Commission plans to revise this process in the Commissioner Handbook within the policy statement entitled "Board Relationship with the Executive Director."
4. *Update the current Strategic Plan (April 2005) taking into consideration and drawing upon the list of "strategic actions/operational objectives" the Commissioners and PFBC senior staff and leadership identified for strategic planning purposes in 2004.* **Status:** In addition to identifying current issues, the Commission reviewed remaining strategic actions/operational objectives from the *Strategic Plan (April 2005)* during recent strategic planning efforts and the development of recent years' APOWs. Those items requiring additional effort or continuing focus are expected to be included in the *Strategic Plan July 2010-June 2015*. The PFBC did not, however, officially update the *Strategic Plan (April 2005)*.
5. *Establish a specific time frame for the updated Strategic Plan (April 2005) and a formal method of internal quantification of output and outcome measures.* **Status:** The Commission's new strategic plan is for the time frame July 1, 2010, through June 30, 2015. The Commission is working with the Office of Administration's Office of Strategic Services (OSS) to develop meaningful performance measures (including outputs and outcomes as appropriate) to help quantify progress toward reaching the goals contained within the strategic plan and corresponding APOWs, and to comply with the Governor's Performance Report requirements. The plan is to cross-walk the contents of the strategic plan and the APOW with the Governor's Performance Report format to allow a more accurate depiction of their

progress. Although they have an agreement in place, the work with OSS is behind schedule.

6. *More consistently monitor and track Strategic Plan (April 2005) implementation progress and submit Strategic Plan status reports to the Commissioners at the regularly scheduled Commission meetings.* **Status:** Progress on the executive director's APOW is reported quarterly. However, enhanced linkages between the APOW, budget, and the strategic plan will result in more consistent reporting on strategic plan progress to the Commissioners on a regular basis. As part of the development of meaningful performance measures during early 2010, the Commission plans to develop a system for consistent staff monitoring and tracking of implementation progress of the strategic plan. The PFBC is seeking to be able to report on progress toward a goal versus reporting the completion of specific activities.

Based on recommendations from previous performance audits, the Commission instituted a process to review bureau budget requests based on "Strategic Initiative Submission" worksheets for each strategic plan initiative assigned to a bureau. The Commission plans to enhance the existing linkage between the strategic plan and agency budget by implementing the strategic plan and corresponding APOWs on a state fiscal year rather than calendar year. Current challenges to making a direct linkage between the budget and strategic plan include the requirement for the PFBC to budget by organizational unit and fund, and major and minor objects of expenditures within organizational units for both the Fish Fund and Boat Fund. The Commission has requested OSS assistance with making stronger connections between the strategic plan and the agency budget.

7. *Further link the Strategic Plan (April 2005) to the agency budget.* **Status:** As noted above, the Commission instituted a process to review bureau budget requests based on "Strategic Initiative Submission" worksheets for each strategic plan initiative assigned to a bureau. This will be accomplished to some extent by implementing the strategic plan and corresponding APOWs on a state fiscal year rather than calendar year. Also noted above, the Commission has requested OSS's assistance with making stronger connections between the strategic plan and agency budget.
8. *Undertake a concerted effort to communicate and generate "buy-in" of the updated Strategic Plan (April 2005) from employees at all levels throughout the agency. Also, make the Plan readily available to key stakeholder groups.* **Status:** Since mid-2008, the Commission has made efforts to improve internal and external communications about the current strategic planning process in an effort to gain buy-in of the *Strategic Plan July 2010-June 2015*. Nearly all full-time PFBC staff participated in face-to-face informational sessions describing the planning process and allowing for small

group and individual input. The Commission received nearly 1,100 useable responses to a confidential and anonymous staff and stakeholder survey from 671 anglers and boaters; 288 Commission employees; 7 Commissioners; 6 members of the Governor's Advisory Council for Hunting, Fishing and Conservation; 4 Boating Advisory Board Members; 1 legislator; and 101 individuals who identified themselves as "other."⁶

The input received from these contacts was used to develop common themes identified by the participants. These themes were validated through the steering committee and the Commissioners. In an effort to have a diverse cross-section of agency representatives involved in the planning effort, 26 staff representing rank-and-file, mid-level managers, and executive level staff comprised a Strategic Planning Steering Team that met repeatedly throughout 2009 to refine issues and goals for an updated strategic plan. The Executive Team, consisting of twelve upper-management and key positions (some of whom were also on the Steering Team), further refined goals and timelines with high-level guidance initially provided by the Commissioners in mid-2008 and continually throughout 2009.

Status updates of the planning process were included in agency-wide electronic updates to staff, and monthly and quarterly updates to Commissioners since mid-2008. Key staff attended regularly scheduled meetings of stakeholder organizations to explain the planning process and provide status reports. Staff plans to conduct another round of informational meetings for all employees to learn about the contents of the *Strategic Plan July 2010-June 2015* upon its completion and assist bureau directors and mid-level management to determine how employees and their job responsibilities fit into the new *Strategic Plan July 2010-June 2015*. In addition, the *Strategic Plan July 2010-June 2015* will be a key informational item at the Commission's new employee orientation program.

The PFBC plans to keep the agency's *Strategic Plan July 2010-June 2015* in the forefront of the Commission's efforts and utilize it to build and enhance partnerships with its stakeholders. For example, the PFBC plans to conduct presentations of the plan to the several organizations that have expressed an interest in scheduling a presentation. The completed *Strategic Plan July 2010-June 2015* will be available on the Commission's website (as is the current plan).

⁶PFBC staff reports, however, that no safeguards were used to confirm identities of the questionnaire respondents, potentially allowing for multiple responses from one individual.

Development of the *Strategic Plan July 2010-June 2015*

As noted above, the PFBC is addressing many of the concerns with their *Strategic Plan (April 2005)* we identified in our last report as they develop their new plan. For example, the Commission involved staff, stakeholders, Commissioners, advisory council members, and others in the development of the plan (see discussion above). Also, the PFBC is more closely aligning the strategic plan and the APOW by having both use a fiscal year basis as well as specifically linking the activities in the APOW with the strategies in the *Strategic Plan July 2010-June 2015*. The difficulties with linking the *Strategic Plan (April 2005)* and the budget that were identified in the last report remain, although the PFBC is seeking to more closely align these functions with the assistance of the OSS.⁷

The draft *Strategic Plan July 2010-June 2015* includes goals that are specifically linked to each strategy of the plan. Each goal includes specific activities to be conducted in attaining the goal. In some cases, the specific activity has a time frame shorter than that of the overall plan, although other activities have no deadlines associated with them. The accomplishment of some of the activities is clearly measurable—i.e., by June 2015, facilitate or complete at least 25 small dam removals—although the accomplishment of others is more subjective—by July 2014, “evaluate and improve gamefish management programs. . . .” In general, however, the draft *Strategic Plan July 2010-June 2015* provides for a link between the strategy, goal, and activities to accomplish the goal in a more easily measurable manner than the current plan. The new *Strategic Plan July 2010-June 2015* is expected to be presented to the Commission members for formal action at the July 2010 PFBC Commission meeting.

⁷ It was noted in our 2008 report that the Office of the Budget requires the PFBC to craft the agency budget by major and minor objects of expenditure within organizational units for both the Fish Fund and the Boat Fund. As stated in that report, “this requirement makes budgeting for initiatives in which multiple bureaus are responsible for partial implementation very difficult, since PFBC staff currently does not have an accounting system equipped to, in a reasonable expeditious fashion, accurately account for all costs within each organizational unit assigned responsibility for completion of an initiative.”

III. The PFBC Projects That the Fish Fund and Boat Fund Reserve Balances Will Become Insufficient to Meet the Commission's Cash Flow Needs by FY 2012-13 (Fish Fund) and by FY 2015-16 (Boat Fund)

The PFBC, which relies almost entirely on revenues generated from fishing license sales, boat registrations, and federal grants, has arrived at the point where annual expenditures from both the Fish Fund and the Boat Fund will consistently exceed annual revenues. The PFBC experienced a similar annual deficit situation in the years prior to the enactment of Act 2004-159, the most recent license and fee rate increase. Currently, each Fund projects a beginning balance (i.e., the amount of money in the Fund at the start of the fiscal year) adequate to support PFBC operations for FY 2009-10 through FY 2011-12. The established reserve balance for the Fish Fund to maintain cash flow is \$9.3 million; for the Boat Fund it is \$6.3 million. However, the PFBC projects that, in the absence of new or additional revenue sources, the expenditures necessary to provide services at existing levels will begin to reduce funds below levels needed to operate core services. Current projections indicate that, for the Fish Fund, this point will be reached in FY 2012-13, and for the Boat Fund, in FY 2015-16.

Revenues

The PA Fish and Boat Commission (PFBC) is financially supported through two separate special funds: the Fish Fund and the Boat Fund. In accordance with the Fish and Boat Code, the Fish Fund is intended to provide for the administration and enforcement of the fish laws and the protection and propagation of aquatic life. Similarly, the Fish and Boat Code mandates that the Boat Fund is to provide for the administration and enforcement of programs relating to boats and boating activities.

Revenue Sources

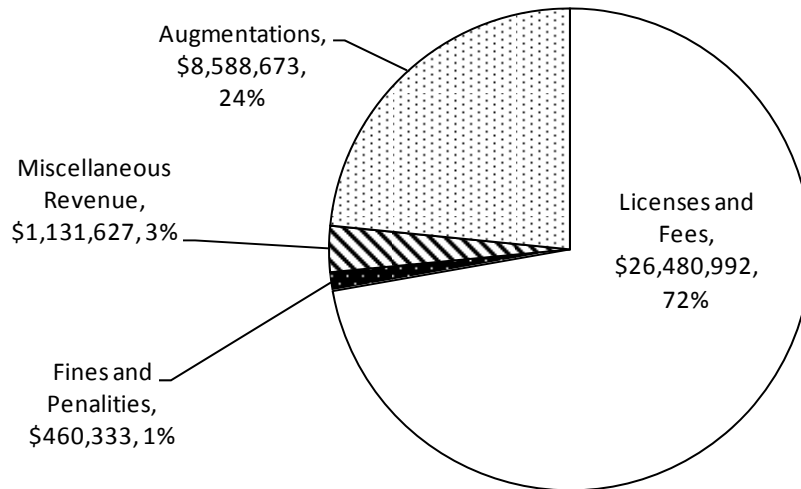
The Fish Fund and the Boat Fund are comprised of monies derived from licenses and fees (i.e., user fees paid by anglers or boaters), fines and penalties, miscellaneous income (e.g., interest on deposits, sales of property, royalties), and augmentations (e.g., contributions from federal programs). In FY 2008-09, PFBC revenues totaled \$49.8 million, including \$36.7 million (74 percent) deposited in the Fish Fund and \$13.1 (26 percent) deposited in the Boat Fund.

Exhibit 4 shows the type and percentage of the various revenue sources deposited into each fund for FY 2008-09. As shown, licenses and fees accounted for 72 percent of all Fish Fund revenues, and 53 percent of all Boat Fund revenues.

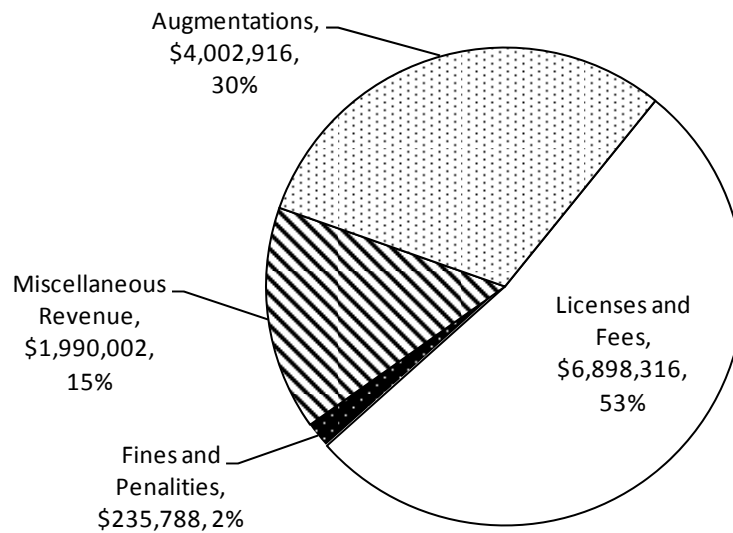
Exhibit 4

Fish Fund and Boat Fund Revenue
FY 2008-09

Fish Fund



Boat Fund



Source: Developed by LB&FC staff based on the PFBC monthly financial statement for June 30, 2009.

The major sources of license and fee revenue to the Fish Fund are the resident fishing license (which provided about \$16.1 million), the trout-salmon permit (\$4.8 million), and the nonresident fishing license (\$2.1 million). Of approximately 14 license types and 3 permits, these three provided 87 percent of the total license and fee revenue and about 63 percent of the total non-restricted revenue to the Fish Fund for FY 2008-09. Augmentations represented 24 percent of the Fish Fund's revenue. The Sport Fish Restoration Act Program (\$6.6 million) and State Wildlife Act Grant Program (\$1.2 million) constituted 91 percent of revenue in the augmentation category. Fines and penalties and miscellaneous revenue totaled about 4 percent of the Fund's revenue in FY 2008-09.

The major source of license and fee revenue for the Boat Fund is boat registration fees (\$6.2 million), which represented about 90 percent of the licenses and fees category in FY 2008-09. The augmentations category comprised 30 percent of the Boat Fund's total revenue, of which the U.S. Coast Guard Grant for Recreational Boating Safety (\$2.8 million) and the Sport Fish Restoration Act Program (\$1.1 million) were the major contributors. Reimbursement from the Motor License and Liquid Fuels Tax funds (\$1.7 million) was the major funding source under the miscellaneous revenue category. At 15 percent of the total revenue to the Boat Fund, the miscellaneous revenue category was proportionately larger than the Fish Fund's miscellaneous revenue category (at 3 percent) for FY 2008-09. Altogether, four sources (boat registration fees, U.S. Coast Guard Grant for Recreational Boating Safety, federal Sport Fish Restoration Act Program, and reimbursement from the Motor License and Liquid Fuels Tax funds) represented 90 percent of the Boat Fund's revenues in FY 2008-09.

(See Appendices C and D for a detailed breakdown of revenue sources for the Fish Fund and the Boat Fund for FY 2006-07 through FY 2008-09.)

Table 2 provides a three-year history of PFBC revenues to both the Fish Fund and Boat Fund. As shown, the total combined revenue to the PFBC during this period fluctuated, increasing by 10.3 percent between FY 2006-07 and FY 2007-08,¹ and then decreasing by nearly 9 percent in FY 2008-09. However, for the entire period, total revenue increased only slightly, by just 0.5 percent. Reviewing each Fund separately, the table shows that total revenue in the Fish Fund was 2.8 percent higher in FY 2008-09 than in FY 2006-07. On the other hand, total revenue in the Boat Fund was 5.3 percent lower in FY 2008-09 than in FY 2006-07.

¹ The FY 2007-08 revenue spike was caused primarily by a 47 percent revenue increase in the Fish Fund's augmentations category. PFBC indicates that this was due, in part, to the timing of funding received from the federal Sport Fish Restoration Act Program and State Wildlife Act Grant Program and the receipt of \$500,000 from the PA Department of Transportation for habitat assessments. The amount of these receipts was, according to PFBC officials, a fortunate and occasional event (resulting from the variation between the state and federal fiscal years) in the pattern of revenue for the Fish Fund, resulting in both a 10 percent increase in total PFBC revenues and a 16 percent increase in the Fish Fund revenue. Returning to normal levels in the following year, the Fish Fund experienced an 11 percent decline, and total revenue was down 8.9 percent for FY 2008-09.

Table 2

PFBC Fish Fund and Boat Fund Revenues

(FY 2006-07 Through FY 2008-09)

Fish Fund

<u>Category</u>	<u>FY 06-07</u>	<u>FY 07-08</u>	<u>FY 06-07 to FY 07-08 % Diff.</u>	<u>FY 08-09</u>	<u>FY 07-08 to FY 08-09 % Diff.</u>	<u>FY 06-07 to FY 08-09 % Diff.</u>
Lic. & Fees.....	\$24,196,643	\$26,444,060	9.3%	\$26,480,992	0.1%	9.4%
Fines & Penalties .	447,931	470,140	5.0	460,333	(2.1)	2.8
Misc. Rev.....	\$3,684,279	\$3,470,292	(5.8)	1,131,627	(67.4)	(69.3)
Augmentations	<u>7,340,704</u>	<u>10,797,341</u>	47.1	<u>8,588,673</u>	(20.5)	17.0
Fish Fund Total	\$35,669,557	\$41,181,832	16.1%	\$36,661,624	(11.0%)	2.8%

Boat Fund

Lic. & Fees.....	\$ 6,724,240	\$ 6,593,087	(2.0%)	\$ 6,898,316	4.6%	2.6%
Fines & Penalties..	212,887	240,640	13.0	235,788	(2.0)	10.8
Misc. Rev.	3,823,258	2,895,851	(24.3)	1,990,002	(31.3)	(48.0)
Augmentations.....	<u>3,105,332</u>	<u>3,718,258</u>	20.0	<u>4,002,916</u>	7.7	29.5
Boat Fund Total	\$13,865,716	\$13,447,836	(3.0%)	\$13,127,022	(2.4%)	(5.3)

Fish Fund and Boat Fund Combined

PFBC Total	\$49,535,273	\$54,629,668	10.3%	\$49,788,646	(8.9%)	0.5%
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Source: Developed by LB&FC staff from PFBC monthly Financial Statements for June 30, 2008, and June 30, 2009.

Over the three-year period, the licenses and fees revenue category increased for both the Fish Fund (9.4 percent) and the Boat Fund (2.6 percent). This translates to an approximate annual increase of 4.7 percent for the Fish Fund and 1.3 percent for the Boat Fund. However, it should be noted that licenses and fees in the Fish Fund increased by only \$36,932 (or 0.1 percent) from FY 2007-08 to FY 2008-09. Also, licenses and fees for the Boat Fund declined by \$131,153 (a 2 percent decrease) between FY 2006-07 and FY 2007-08, before increasing by \$305,229 (or 4.6 percent) in FY 2008-09.

The augmentations category for both funds increased during this period, by 17 percent for the Fish Fund and by 29.5 percent for the Boat Fund. In the case of the Fish Fund, the increase was largely due to increased funding received on behalf of the Sport Fish Restoration Act Program and the State Wildlife Act Grant Program; both federal programs. Significant annual increases in the U.S. Coast

Guard Grant for Recreational Boating Safety are the major reason for the Boat Fund's increase in augmentations.

Revenues are down significantly for the miscellaneous category in both the Fish Fund and the Boat Fund. Declines were noted over the three-year period in most of the items in this category. Substantial impact, however, occurred in the specific revenue item "Interest on Securities and Deposits" which, in FY 2008-09, was reduced below zero in the Fish Fund (therefore becoming a net expenditure) and by 88 percent in the Boat Fund. The PFBC did not control these funds. As the statutory guardian of virtually all state agency funds, the Pennsylvania Treasurer has the responsibility for monitoring and safeguarding money and securities, and is entrusted with the exclusive management of and full power to place these moneys in any investments subject to a standard of prudence and diligence.

Additionally, revenue derived from fines and penalties increased in both funds during this period but, as indicated previously, account for only 1 to 2 percent of each fund's receipts.

Historical Revenue Trends

As previously noted, total combined revenue from the Fish Fund and the Boat Fund increased only marginally (0.5 percent) from FY 2006-07 to FY 2008-09. However, the funds exhibited varying trends during this period. Total revenue to the Fish Fund increased by 2.8 percent, whereas Boat Fund revenue declined by 5.3 percent.

Fish Fund. For purposes of trend analysis, it is useful to examine each fund's total revenue over an extended period. Table 3 shows the Fish Fund revenues over the ten-year period, FY 1999-00 through FY 2008-09. As shown, the Fish Fund recorded revenue decreases from FY 2000-01 through FY 2002-03. Since FY 2003-04, the Fund has recorded increases until FY 2008-09 when it recorded nearly an 11 percent decrease (see footnote 1 for explanation). However, the revenue received in FY 2008-09 was nearly \$1 million more than was received in FY 2006-07. Additionally, the amount of revenue going to the Fish Fund in FY 2008-09 (\$36.7 million) was 23.7 percent higher than it was in FY 1999-00.

A general license and fee increase took effect in January 2005 (during fiscal year 2004-05). Although one can easily observe the effect of this increase on total revenues accruing to the Fish Fund, what is not shown is the negative effect which a rate increase has on license purchases despite the fact that total revenue itself may increase. See discussion beginning on page 23.

Table 3

Fish Fund Revenues
FY 1999-00 Through FY 2008-09

Fiscal Year	Total Revenue	Increase/(Decrease)	Percent Increase/(Decrease)
1999-00.....	\$29,638,017	\$ 208,588	0.7%
2000-01.....	28,888,793	(749,224)	(2.5)
2001-02.....	28,373,241	(515,552)	(1.8)
2002-03.....	27,337,587	(1,035,654)	(3.7)
2003-04.....	27,792,920	455,333	1.7
2004-05 ^a	31,523,691	3,730,771	13.4
2005-06.....	35,248,782	3,725,091	11.8
2006-07.....	35,669,557	420,775	1.2
2007-08.....	41,181,832	5,512,275	13.4
2008-09.....	36,661,624	(4,520,208)	(10.9)

^aDenotes a fiscal year within which a license increase became effective.

Source: Developed by LB&FC staff using information obtained from the PFBC.

Boat Fund. Table 4 shows the annual trend in the Boat Fund revenues from FY 1999-00 through FY 2008-09. As shown, from FY 1999-00 through FY 2003-04, Boat Fund revenue fluctuated annually within a relatively narrow range (between \$10.4 million and \$10.9 million). In January 2005, a license fee increase took effect, helping to boost Boat Fund revenue to about \$11.1 million. Revenue increased by 22.7 percent in FY 2005-06, the first 12-month accounting period experiencing the full effect of the license and fee increases. However, following a slight revenue increase in FY 2006-07, the total Boat Fund revenues declined in the subsequent two fiscal years shown. In the ten-year period, total revenue accruing to the Boat Fund increased by 25.2 percent.

Licenses and Fees Revenue Trends

Although it is important to review trends over time in total revenues going into the Fish Fund and the Boat Fund, it is also useful to isolate revenue trends for the licenses and fees category, because this would be the area that is directly affected by statutory increases in license and registration fees. In FY 2008-09, licenses and fees accounted for 67 percent of total PFBC revenue (and 72 percent of the Fish Fund and 53 percent of the Boat Fund revenues).

Table 4

Boat Fund Revenues			
FY 1999-00 Through FY 2008-09			
<u>Fiscal Year</u>	<u>Total Revenue</u>	<u>Increase/(Decrease)</u>	<u>Percent Increase/(Decrease)</u>
1999-00	\$10,487,202	\$ 163,989	1.6%
2000-01	10,925,653	438,451	4.2
2001-02	10,550,159	(375,494)	(3.4)
2002-03	10,436,958	(113,201)	(1.1)
2003-04	10,738,510	301,552	2.9
2004-05 ^a	11,147,689	409,179	3.8
2005-06	13,683,550	2,535,861	22.7
2006-07	13,865,716	182,166	1.3
2007-08	13,447,826	(417,890)	(3.0)
2008-09	13,127,022	(320,804)	(2.3)

^aDenotes a fiscal year within which a license increase became effective.

Source: Developed by LB&FC staff using information obtained from the PFBC.

Over the past ten fiscal years, total revenue from licenses and fees has increased from \$24,329,869 to \$33,379,308 (a 37.2 percent increase). From FY 1999-00 through FY 2008-09 this revenue source increased at a slightly higher rate for the Fish Fund (37.7 percent) than for the Boat Fund (35.2 percent). Following a rate increase in 2005, license and fee revenue increased from nearly \$28 million to \$30.4 million (an 8.6 percent increase) in FY 2005-06, and to \$31 million in FY 2006-07. Total license and fee revenue continued to increase to slightly more than \$33 million in FY 2007-08, and remained at that approximate level through FY 2008-09. See Table 5.

Exhibit 5 presents the information provided in Table 5 as a line graph. Displayed in this manner, one may conclude that the licenses and fees revenue going to the Boat Fund has been relatively flat (when compared with the steeper lines representing the Fish Fund and total revenue), and was only marginally affected by fee increases that became effective in January 2005. Many factors could account for this difference including the relative difference in the revenue totals between the funds, the scale used in presenting the line graph, and differences in the impact of license increases of one group (boaters) as compared to the other group (anglers).

License fee increases frequently have a direct negative impact on fishing license purchases. In some cases the impact can be substantial. For example, in 1995 the General Assembly approved a general fishing license increase which raised rates from \$12.00 to \$16.25 for a resident fishing license and from \$25.00 to \$34.25 for a nonresident license (most other categories of license and permit fees did not change at this time). As expected, the number of licenses sold immediately following the rate increase declined.

Table 5

Fish Fund and Boat Fund License and Fee Revenues

FY 1999-00 Through FY 2008-09

<u>Fiscal Year</u>	<u>Fish Fund</u>	<u>Boat Fund</u>	<u>Totals</u>
1999-00.....	\$19,229,368	\$5,100,501	\$24,329,869
2000-01.....	19,607,839	5,461,471	25,069,310
2001-02.....	19,302,403	5,130,246	24,432,649
2002-03.....	18,722,925	5,109,325	23,832,250
2003-04.....	18,835,709	5,453,642	24,289,351
2004-05.....	21,403,392	6,552,099	27,955,491
2005-06.....	23,410,558	6,957,590	30,368,148
2006-07.....	24,196,643	6,724,240	30,920,883
2007-08.....	26,444,060	6,593,087	33,037,147
2008-09.....	26,480,992	6,898,316	33,379,308

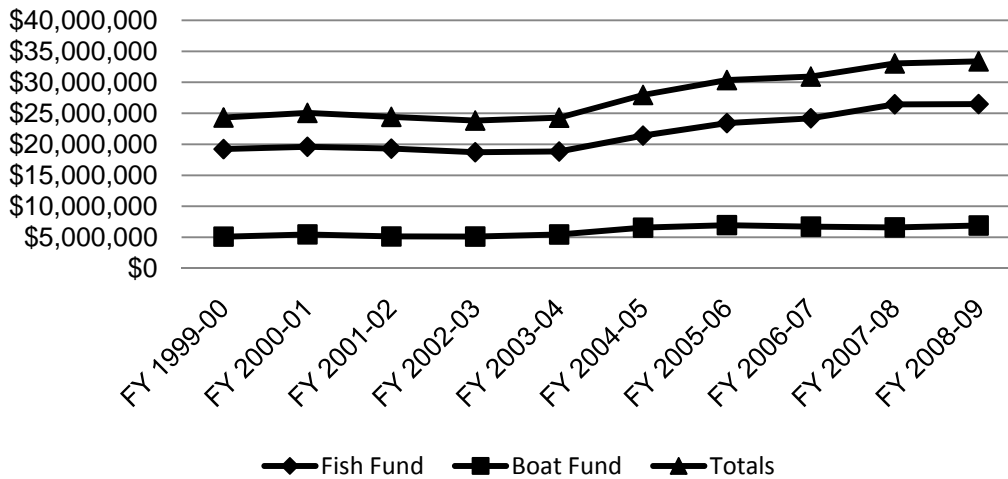
Source: Developed by LB&FC staff using information obtained from the PFBC.

Exhibit 5

Fish Fund and Boat Fund License and Fee Revenue

FY 1999-00 Through FY 2008-09

Fish Fund and Boat Fund License and Fee Revenue
(FY 1999-00 Through FY 2008-09)



Source: Developed by LB&FC staff using information obtained from the PFBC.

Similarly, Act 2004-159, which increased most fees and added new fees, also had a significant impact on specific licensee categories as well as the overall number

of licensees. See Exhibit 6 for Fish Fund license fee rates.² During 2005, when the rate increases took effect, the number of resident licenses declined from 785,091 to 719,125, an 8.4 percent decline, nonresident licenses declined by 22.4 percent, and the overall license population declined by 9.6 percent. In that year, resident licenses increased from \$16.25 to \$21.00, and the nonresident licenses increased from \$34.25 to \$51.00. Act 2004-159 also increased the fees for boat registrations (by different amounts based on boat length) and other categories of boat registration were added. See Exhibit 7 for Boat Fund license and permit fee rates. However, the impact of these fee increases on boat registrations was negligible when compared to the impact on purchases of fishing licenses. See Finding IV.

Fish Fund Restricted Revenue

Several sources of revenue earmarked for specific purposes are also deposited in the Fish Fund. In the period FY 2006-07 through FY 2008-09, the Fish Fund had the following six restricted revenue categories:

Lake Erie Special Fishing Permits. Anglers fishing on the Pennsylvania waters of Lake Erie, Presque Isle Bay, and their tributaries must possess an annual special permit for such fishing or a combination trout-salmon/Lake Erie permit. Monies from the sale of the Lake Erie permit (\$8) and \$6 (of \$14) from the sale of each combination trout-salmon/Lake Erie permit is recorded in this revenue code. Monies are used to provide public fishing access on or at Lake Erie and its watersheds.

Natural Resources – Damage Recoveries. Revenues received from negotiated pollution settlements are recorded under this code. Revenues have increased during this period, from \$65,683 in FY 2006-07 to \$125,744 in FY 2008-09. See Appendix F.

Conservation Acquisition Partnership Account. Monies donated to the Commission specifically for the purchase of access areas to Commonwealth waterways are recorded under this code. Receipts vary according to the number and amount of donations received; however, during the FY 2006-07 through FY 2008-09 period, revenue under this code has increased.

Voluntary Waterways/Watersheds Conservation Program. Donations made that are designated specifically for supporting the Commission's waterways protection and conservation efforts are recorded in this revenue code. Revenue from this source has declined significantly in the three-year period.

²See Appendix E for fishing license fees charged in other states.

Exhibit 6

Fish Fund License Fee Rates*

<u>License Type^a</u>	<u>Current Fee^b</u>	<u>Year of Most Recent Change</u>	<u>Prior Fee</u>
Resident Annual Fishing	\$ 21.00	2005	\$16.25
Senior Resident Annual Fishing.....	10.00	2005	3.25
Senior Resident Lifetime Fishing	50.00	2005	15.25
Non-Resident Annual Fishing	51.00	2005	34.25
7-Day Tourist Fishing	33.00	2005	29.25
3-Day Tourist Fishing	25.00	2005	14.25
1-Day Resident Fishing (after May 1 only).....	10.00	2005	New
1-Day Tourist Fishing	25.00	2005	New
Trout-Salmon Permit	8.00	2005	5.00
Lake Erie Permit.....	8.00	2005	New
Comb. Trout-Salmon & Lake Erie Permit.....	14.00	2005	New
Replacement License.....	5.00	2008	4.25
Disabled Veteran.....	No Cost		
PA National Guard/Armed Forces Reserve	1.00	2005	New
POW Resident Fishing.....	1.00	2005	New
POW Lifetime Senior Resident Lifetime.....	1.00	2005	New
Senior Lifetime Upgrade	5.00	2005	New
Resident Charter Boat/Fishing Guide Permit.....	100.00	2005	New
Nonresident Charter Boat/Fishing Guide Permit...	400.00	2005	New

*The Fish and Boat Code is Act 1980-175, as amended. Prior fees noted do not date before Act 175.

^a Fishing licenses and related permits are valid for the year printed on the license certificate or permit, and the month of December of the preceding year, except for 1-day and tourist licenses that are valid for the dates specified on the license certificate.

^b Licenses purchased from an issuing agent include an additional \$1.00 "issuing agent fee." There is also a PALS transaction fee, which is to be equal to the actual cost of the service, but not to exceed \$1. Currently, the PALS fee is \$.70.

Source: Developed by LB&FC staff using information obtained from the PFBC.

Exhibit 7

Boat Fund License and Permit Fee Rates

<u>License Type</u>	<u>Current Fee^a</u>	<u>Year of Most Recent Change^b</u>	<u>Prior Fee</u>
Owner Registration (Motorboats Less Than 16')	\$13.00/yr.	2005	\$10.00/yr.
Owner Registration (Motorboats 16' to 20')	19.50/yr.	2005	15.00/yr.
Owner Registration (Motorboats 20'+)	26.00/yr.	2005	20.00/yr.
Owner Registration (Unpowered Boats)	9.00/yr. ^c	2005	5.00/yr.
Duplicate Owner Registration	3.00 ea.	1991	1.00 ea.
Dealer Registration	15.00/yr.	1980	NC ^d
Commercial Passenger Boat Registration	25.00 ea.	1991	New
Operator License/Passenger Carrying Boat	5.00 ea.	1991	New
Capacity Plate	5.00 ea.	1991	2.00 ea.
Floating Structure/Private Aids to Navigation	10.00 ea.	1991	New
Certificate of Title	15.00 ea.	1996	New
Duplicate Certificate of Title	5.00 ea.	1996	New
Changing Information/Providing Copies of Certificate of Title	5.00 ea.	1996	New
Transfer Multi-year Boat Registration	5.00/yr.	1989	New
Non-powered Boat Use Permit (1-year).....	10.00/yr. ^e	2005	New
Non-powered Boat Use Permit (2-year).....	9.00/yr. ^e	2005	New
Boat and Marine Forfeiture	50.00	2005	New

^a Boat registrations are issued on a biennial basis; if a boat registration is purchased from an issuing agent, the agent may charge a fee not to exceed \$2.

^b The current Fish and Boat Code is Act 1980-175, as amended. Prior fees noted do not date before Act 1980-175.

^c The Fish and Boat Code specifies that the fee for owner registration for unpowered boats (canoes, kayaks, rowboats, etc.) is to be adjusted from time to time to remain equal to the fees charged by the Department of Conservation and Natural Resources for boat launch permits for state park lakes.

^d NC=Fee not changed since the enactment of the current Fish and Boat Code in 1980.

^e While unpowered boats are exempt from the registration requirements of the Fish and Boat Code, owners of unpowered boats that use Commission property have the option of registering the boat or purchasing a launch permit. The cost of this launch permit for residents is \$10 for one year and \$18 for two years, and for non-residents the cost for one year is \$15 and for two years is \$28.

Source: Developed by LB&FC staff using information obtained from the PFBC, the Fish and Boat Code, and DCNR.

Recreational Fishing and Boating Enhancements. Revenues available through a 1998 settlement agreement between the PFBC and AES Ironwood, L.L.C. related to the operation of an electric generation facility located in South Lebanon Township, Lebanon County. AES Ironwood agreed to provide a contribution to the watersheds from which they are withdrawing water to assist with power production. The program will continue on a regular basis through the life of the AES Ironwood Plant. Grants are given for stream restoration, habitat enhancement, and recreational enhancement activities on streams located in the Tulpehocken and Quittapahilla Creek watersheds.

Sinnemahoning Creek Watershed Restoration Program. Proceeds from a settlement agreement between PFBC and the Norfolk Southern Railroad Corporation in response to a natural resources damage caused by a derailment are recorded under this code. As part of the settlement, Norfolk Southern is to pay the PFBC \$3,582,000. Monies in this account may only be used for development and implementation of projects that benefit recreational fishing and boating and the aquatic resources of Cameron, McKean, Elk, and Potter Counties. See Appendix F.

(See Appendix C for detailed financial information on restricted revenue from FY 2006-07 through FY 2008-09.)

Sources of Funding for Fish and Boat Agencies

Traditionally, state agencies charged with managing and protecting fish and wildlife have relied on funding generated by fees related to fish and wildlife, for example, hunting and fishing license and permit fees, motorboat fuels taxes, enforcement penalties paid, and federal funding. Although over half of the states' wildlife agencies receive at least some general fund monies (often as a part of a larger state executive branch agency), the others, including the PFBC, do not. See Appendix G which shows the funding sources available to these agencies.

As conservation demands grow, state agencies face the challenge of expanding their revenue sources to meet the increasing needs. Thus, in order to increase revenue, several states have enacted, or tried to enact, new funding sources dedicated solely to support fish and wildlife agencies' efforts. Examples of these new funding sources are included on Exhibit 8.

In recent years, the PFBC has pursued license fee increases through a proposed legislative package that would incorporate automatic annual license fee increases, youth license fees to fund youth programs, flexibility to establish special pricing packages, and an access and habitat fee built into the fishing license fee. The executive director, however, has proposed, and the Commissioners have been receptive to, an effort to shift funding from mainly the licensees to other sources. For example, a portion of well permit application fees, recently increased by the

Other States' Funding Mechanisms

- Alaska – In March 2003, a bill was introduced that would require non-residents who view wildlife through a commercial tour to buy an annual viewing pass. The bill was known as the “Wildlife Viewing Pass.” By making the definition of “tour” broad, the Alaska Division of Wildlife Conservation sought to require those who enjoy wildlife, but do not contribute through the purchase of hunting or fishing licenses, to support wildlife conservation. This bill was not enacted.
- Arizona – In 1990, Arizona voters passed the Heritage Initiative into law under Proposition 200. The Heritage Initiative, referred to as the Arizona Heritage Fund, earmarks up to \$10 million per year of state lottery revenues for acquisition, development, and protection of recreational, natural, wildlife, and cultural resources. Heritage Fund monies are equally split between the Arizona Department of Game and Fish and the Arizona Parks Department.
- Arkansas – In 1996, Arkansas passed a constitutional amendment that raised the general sales tax by 1/8th-cent and dedicated that revenue to four departments: the Arkansas Game and Fish Commission, the Arkansas Parks and Tourism Commission, the Department of Arkansas Heritage, and the anti-litter Keep Arkansas Beautiful Commission. The Arkansas Game and Fish Commission receives 45 percent of the revenue generated for the “control, management, conservation, and restoration” of fish and wildlife species.
- Colorado – In 1992, Colorado voters approved the Great Outdoors Colorado (GOCO) amendment, which dedicates the net proceeds of the state lottery to programs that preserve, protect, enhance, and manage the state's wildlife, parks, rivers, trails, and open space heritage. All allocations are made through the Colorado Division of Wildlife for the protection and restoration of crucial wildlife habits, programs to maintain Colorado's diverse wildlife heritage, wildlife watching, and educational programs.
- Florida – A portion of document recording fees on the transfer of real estate is dedicated to the state wildlife agencies for land protection. Additionally, Florida's Nongame Wildlife Trust Fund is supported by revenues generated by fines assessed on speeding violations. For example, for exceeding the speed limit by 6-9 miles per hour, a 25-cent fine is assessed, and for exceeding the speed limit by 30 mph and above, a \$10 fine is assessed.
- Georgia – Two nongame license plates benefit wildlife diversity programs administered by the Department of Natural Resources Wildlife Resources Division. The first license plate went on sale at the beginning of the 1997 tag cycle and generated approximately \$13.6 million for the Division's wildlife diversity program. As of August 2004, the second plate has raised approximately \$4.5 million. In 1998, the Georgia Wildlife Federation ran a public campaign in support of an amendment that would have raised millions of dollars for wildlife conservation through a tax on the state's real estate transfer fee. Known as the Heritage Fund Amendment, the General Assembly approved the amendment but the public defeated the ballot initiative by a narrow margin.
- Maine – The Maine Outdoor Heritage Fund (MOHF), created in a 1995 statute, is an additional lottery game that was integrated into Maine's lottery system. The fund is for the sole purpose of maintaining, improving, and expanding state and local natural resource conservation programs and associated compatible public uses. The MOHF has its own unique lottery ticket, sold as \$1 instant lottery tickets, which can be sold anywhere lottery tickets are sold. The MOHF ticket is distinguishable from the other lottery tickets because it states “Proceeds to Wildlife & Conservation” on the ticket.
- Minnesota – In 1980, Minnesotans were given the opportunity to contribute money to a new nongame wildlife check-off on state income and property tax forms. One-hundred percent of this revenue is allocated to the Minnesota Department of Natural Resources nongame program. Additionally, as a result of a ballot referendum that was approved by voters, beginning July 1, 2009, the state sales tax was increased by 1/8 percent to fund hunting and fishing resources.
- Missouri – In 1976, Missouri passed a constitutional amendment that raised the general sales tax by 1/8th of 1 percent and dedicated that revenue to the Missouri Department of Conservation.
- Nevada – In 2002, Nevada voters approved general obligation bonds that could be used for land protection and improvement of existing habitats.
- Texas – In 1993, a law was enacted dedicating the portion of the state's sales tax generated from the sale of sporting goods to the Texas Parks and Wildlife Department. The funding is divided among three programs: 48.5 percent to local parks; 48.5 percent to state parks; and 3 percent to TPWD's Fish and Wildlife Capital Fund.
- Virginia – In 1998, a law was enacted to allocate up to \$13 million per year in existing sales tax collections on the sales of hunters', anglers', and wildlife watchers' equipment purchases to the Virginia Department of Game and Inland Fisheries.
- Washington – The personalized license plate program in Washington State has generated funds for wildlife diversity for nearly 30 years. Earning approximately \$2.6 million each year, money from the sales of personalized or “vanity plates” goes to the Department of Fish and Wildlife expressly for the management of wildlife that is not hunted, fished, or trapped.

Source: McKinney, Cindy; Ris, Lauren; Rorer, Heather; and Williams, Sara. *Investing in Wildlife: State Wildlife Funding Campaigns*, April 2005.

DEP, could be designated to the PFBC. Additionally, as proposed in several pending bills, the PFBC could receive a portion of a natural gas severance tax. Although the executive director has indicated that a legislative licensing package is still being considered, the focus of future funding efforts at this time is on other sources.

Expenditures

The Fish and Boat Code authorizes appropriation of all monies in the Fish Fund and Boat Fund to the Commission to be used for the purposes authorized in the Code for each fund. The Code specifies that the Commission is to from time to time submit expenditure estimates to the Governor for approval “as in the case of other appropriations made to Commonwealth agencies.” In addition, the Code mandates that the State Treasurer may not honor any requisition for expenditures in amounts greater than what the Governor has approved or in excess of amounts available. Spending authority is granted through two separate executive authorizations; one each for the Fish Fund and the Boat Fund.

The existence of two separate funds necessitates a system for determining how much of an activity or expense is to be charged to each fund. The system used by the PFBC includes expenditure analysis and staff surveys. A comprehensive program cost analysis was conducted in FY 2006-07 as part of the budget process. To determine the percentage of qualified expenditures from the Fish Fund and the Boat Fund, the activities by each organizational unit were analyzed to identify those that relate to fishing (payments from the Fish Fund) versus those that relate to boats (payments from the Boat Fund).

Also, surveys distributed to all full-time employees were used as a means to assess how individual positions contributed to providing fishing and boating opportunities. Survey results were used to confirm or alter existing cost allocations as needed. With the exception of the Bureau of Fisheries, all bureaus within the PFBC have activities and operations that relate to both fishing and boating. According to PFBC officials, a subsequent comprehensive analysis of program costs is not under consideration at this time, as the nature of the work has not changed sufficiently to warrant a reassessment.

Expenditure Analysis

The PFBC accounting system provides for recording and analysis of expenditures on a major object, minor object, and organizational basis. “Major objects” of expenditure are first-level groups of expenditure classifications. The five major

object classifications are Personnel Services, Operational Expenses, Fixed Assets, Subsidies and Grants, and Interfund Transfers.³

Expenditures by Fund and Major Object. PFBC expenditures in FY 2008-09 totaled \$48,432,739. Of this amount, 73.7 percent, or \$35,712,794, was paid from the Fish Fund and \$12,719,945, or 26.3 percent, was drawn from the Boat Fund. Table 6 provides a three-year history of PFBC expenditures from the Fish Fund and the Boat Fund by major object category. As shown, total personnel services expenditures of \$30,523,298 comprised 63 percent of all expenditures from both funds. Also, operating expenses of \$12,670,025 constituted 26.2 percent of total costs, and the fixed asset, grants, and interfund transfer categories combined were 10.8 percent of total spending.

Total combined spending increased by 0.8 percent from FY 2006-07 to FY 2007-08, by 3.5 percent from FY 2007-08 to FY 2008-09, and by 4.3 percent for the entire period. However, total spending from the Fish Fund increased by 9.9 percent for the entire period, whereas the Boat Fund reflected an 8.6 percent decrease. Personnel expenditures increased by 1.5 percent from FY 2006-07 to FY 2008-09, and operating expenses increased by 15.9 percent in the same period.

Total Fish Fund expenditures were 9.9 percent higher in FY 2008-09 than in FY 2006-07. Personnel costs increased by 2.1 percent, but Fish Fund operating costs increased 23.1 percent during the entire period. Grant expenditures were up nearly 8.1 percent for the entire period and intrafund transfers increased by nearly 247 percent primarily between FY 2007-08 and FY 2008-09.

Regarding expenditures from the Boat Fund, overall expenditures declined by 8.6 percent from FY 2006-07 through FY 2008-09. Personnel services costs declined by 0.2 percent, and operating costs experienced a 2.5 percent decrease. As shown on Table 6, significant decreases were also experienced in fixed assets, grants, and interfund transfers.

Review of Minor Objects of Expenditure. “Minor objects” of expenditures are those items which are categorized under one of the major object headings. Examples include such things as salaries and overtime under “personnel services,” fish food under “operational expenses,” and watercraft and vehicles under “fixed assets.” Examination and analysis of minor objects is necessary to understand the fluctuations in major objects of expenditure.

³ This major object refers to the disbursement of funds not considered to be a cost of government. The PFBC uses this major object to account for its share of payments to the PA Game Commission for contractual costs related to its use of the Pennsylvania Automated Licensing Service (PALS) and for other services provided to the Commission by other Commonwealth agencies.

Table 6

PFBC Expenditures by Major Object: FY 2006-07 Through FY 2008-09

Fish Fund

<u>Category</u>	<u>FY 06-07</u>	<u>FY 07-08</u>	<u>FY 06-07 to FY 07-08 % Diff.</u>	<u>FY 08-09</u>	<u>FY 07-08 to FY 08-09 % Diff.</u>	<u>FY 06-07 to FY 08-09 % Diff.</u>
Personnel.....	\$21,902,874	\$21,414,537	(2.2%)	\$22,373,439	4.5%	2.1%
Operating.....	7,873,488	8,926,124	13.4	9,690,398	8.6	23.1
Fixed Assets.....	1,367,204	1,654,231	21.0	1,407,149	(14.9)	2.9
Grants.....	1,033,130	1,292,858	25.1	1,117,206	(13.6)	8.1
Interfund Transfers	<u>323,439</u>	<u>324,513</u>	0.3	<u>1,124,602</u>	246.6	247.7
Fund Total ^a	\$32,500,133	\$33,612,263	3.4%	\$35,712,794	6.2%	9.9%

Boat Fund

<u>Category</u>	<u>FY 06-07</u>	<u>FY 07-08</u>	<u>FY 06-07 to FY 07-08 % Diff.</u>	<u>FY 08-09</u>	<u>FY 07-08 to FY 08-09 % Diff.</u>	<u>FY 06-07 to FY 08-09 % Diff.</u>
Personnel.....	\$ 8,167,187	\$ 7,978,453	(2.3%)	\$ 8,149,859	2.1%	(0.2%)
Operating.....	3,056,840	2,938,100	(3.9)	2,979,627	1.4	(2.5)
Fixed Assets.....	1,252,762	843,408	(32.7)	796,230	(5.6)	(36.4)
Grants.....	1,430,374	1,398,894	(2.2)	792,980	(43.3)	(44.6)
Interfund Transfers	<u>11,495</u>	<u>11,408</u>	(0.8)	<u>1,249</u>	(89.1)	(89.1)
Fund Total ^a	\$13,918,657	\$13,170,263	(5.4%)	\$12,719,945	(3.4%)	(8.6%)

Fish Fund and Boat Fund Combined

<u>Category</u>	<u>FY 06-07</u>	<u>FY 07-08</u>	<u>FY 06-07 to FY 07-08 % Diff.</u>	<u>FY 08-09</u>	<u>FY 07-08 to FY 08-09 % Diff.</u>	<u>FY 06-07 to FY 08-09 % Diff.</u>
Personnel.....	\$30,070,060	\$29,392,991	(2.3%)	\$30,523,298	3.8%	1.5%
Operating.....	10,930,328	11,864,224	8.5	12,670,025	6.8	15.9
Fixed Assets.....	2,619,965	2,497,638	(4.7)	2,203,379	(11.8)	(15.9)
Grants.....	2,463,504	2,691,752	9.3	1,910,186	(29.0)	(22.5)
Interfund Transfers	<u>334,934</u>	<u>335,922</u>	0.3	<u>1,125,851</u>	235.2	236.1
Commission Total.....	\$46,418,791	\$46,782,526	0.8%	\$48,432,739	3.5%	4.3%

^aThe fund totals shown for the Fish Fund and the Boat Fund are actual final expenditures. These amounts are different from expenditures shown on Tables 8 and 10 which are based on executive authorizations.

Source: Developed by LB&FC staff using information obtained from the PFBC.

For example, regarding the Fish Fund, factors contributing to the 23 percent increase in operating costs between FY 2006-07 and FY 2007-08 included a 45 percent increase in vehicle fuel costs, a 16 percent increase in outlays for fish food, and a 104 percent increase in data processing expenditures resulting from the Pennsylvania Automated Licensing Service (PALS) becoming fully operational. Maintenance costs and liquid oxygen costs also increased. The Boat Fund expenditures, while consistent with expectations, were primarily affected by reductions in fixed asset expenditures (e.g., equipment and machinery, non-structural improvements, and buildings and structures) and grants and subsidies.

Expenditures by Organizational Unit. The PFBC accounting system also classifies and reports its expenditures by organizational units (i.e., bureau, section, etc.). As previously indicated, with the exception of the Bureau of Fisheries, every major organizational unit in the PFBC has activities and expenditures which relate to both fishing and boating.

Table 7 shows a breakdown of the FY 2008-09 expenditures by fund and by major organizational classification. As shown, expenditures of the Bureau of Fisheries were 39 percent of total expenditures. The Bureau of Law Enforcement is the next highest expense at more than 18 percent of total expenditures, followed by the Bureau of Administration at 13 percent, and the Bureau of Engineering and Property Services at 10.7 percent. Table 7 also shows the allocation of expenditures between the Fish Fund and Boat Fund among the bureaus and other organizational units.

One major expenditure category shown near the bottom of Table 7 is Special Projects and Programs. Although treated in the PFBC's accounting system as if it were an organizational unit, this category is used for budgetary purposes only for large expenditure items that are subject to the PFBC's "project prioritization process" during both the initial budget cycle as well as the rebudget process. According to PFBC officials, this process is used mainly as an internal control/cost control measure. Approved projects mainly consist of repairs, renovations, and fixed asset purchases (machinery, trucks, equipment, etc.). In FY 2008-09, \$4,232,285 was used for this purpose—\$3,019,286 from the Fish Fund and \$1,212,999 from the Boat Fund.

During the FY 2008-09 internal budget review process, PFBC executive staff met and discussed the agency's FY 2008-09 funding needs and identified roughly \$4 million or more in funding needs that were considered to be deferred and re-considered during the rebudget phase of the annual budget cycle. Projects approved as priorities included, for example, launch ramp replacements, ADA compliant facility installation, hatchery upgrade projects, and dam repairs.

Table 7

PFBC Expenditures by Bureau/Office and Funds
FY 2008-09

<u>Bureau/Office</u>	<u>Fish Fund</u>	<u>Boat Fund</u>	<u>Total</u>	<u>% of Total</u>
Fisheries.....	\$18,886,594	\$ 0	\$18,886,594	39.0%
Law Enforcement	5,317,810	3,554,014	8,861,824	18.3
Administration.....	3,772,289	2,542,906	6,315,195	13.0
Engineering & Property Services	2,523,284	2,651,403	5,174,687	10.7
Policy, Planning & Communications .	1,547,438	1,158,424	2,705,862	5.6
Executive Office	387,152	220,208	607,360	1.3
Boating and Access	142,322	1,274,620	1,416,942	2.9
Deputy Director for Admin. Boating and Engineering.....	<u>116,619</u>	<u>115,371</u>	<u>231,990</u>	0.5%
Bureau/Office Subtotal	\$32,693,508	\$11,506,945	\$44,200,453	91.3%
Special Projects & Programs	\$ 3,019,286	\$ 1,212,999	\$ 4,232,285	8.7%
Total PFBC Expenditures	\$35,712,794	\$12,719,945	\$48,432,739	100.0%

Source: Developed by LB&FC staff using information obtained from the PFBC.

In the FY 2009-10 budget request, over \$850,000 in fixed assets expenditures under this category were identified for the PFBC-owned state fish hatcheries. These projects are outside of those that are funded under the Growing Greener II program (see Finding V). The PFBC indicated that these projects are essential to the ongoing operational and infrastructure maintenance needs of the hatcheries, as well as a number of large-scale upgrades, improvements, and major maintenance projects for a number of PFBC owned and operated boating and fishing (public use) access areas. PFBC officials informed us that, as revenues become insufficient to fund ongoing operations, the special projects and programs category will be among the first areas to be closely examined to contain costs.

Financial Condition

In FY 2008-09, total PFBC revenues of \$49.8 million exceeded total expenditures of \$48.4 million, resulting in a \$1,355,907 operating surplus. This operating surplus included \$683,866 from the Fish Fund and \$262,543 from the Boat Fund, representing approximately 3 percent of the expenditures from each fund.

Beginning with FY 2004-05, when Act 2004-159—the most recent license and registration fee increase—took effect, annual revenues to the Fish Fund have steadily increased from \$31.5 million (FY 2004-05) to \$36.7 million (FY 2008-09), a 16.3 percent increase. However, in the case of the Boat Fund, revenues increased from \$11.1 million (FY 2004-05) to \$13.9 million (FY 2006-07), a 24.4 percent increase, but have since declined in the subsequent two fiscal years. Boat Fund revenue of

\$13.1 million in FY 2008-09 was about 5 percent less than the FY 2006-07 revenue receipts of \$13.9 million.

Increased revenues are anticipated for both the Fish Fund and the Boat Fund through FY 2009-10. However, from FY 2010-11 through FY 2014-15, for both funds a flat revenue stream is projected at the FY 2009-10 level for the Fish Fund but at a level that is 25 percent less than the FY 2009-10 revenue level for the Boat Fund because the revenue for this year includes a prior year lapse.⁴

Fish Fund

Table 8 presents the Fish Fund comparative financial statement for FY 2006-07 through FY 2008-09. As shown, the ending balance (or reserve balance) in the Fish Fund improved from \$24.3 million in FY 2006-07 to \$30.7 million in FY 2008-09, a 26.2 percent increase. In addition to annual revenue, the Fish Fund also benefited during this period from lapsed funds from the prior year (based on the difference between amounts expended versus amounts authorized).

Although the FY 2008-09 reserve balance in the Fish Fund reflects a generally healthy financial situation, it should be noted that the expenditures for FY 2008-09 are greater than the incoming revenue. This situation may potentially indicate a future trend of annual operating deficits which, over a period of years, will draw down the Fund to a level below that which is necessary to operate.

While it is difficult to identify precisely the point during a fiscal year in which the Fish Fund reserves become insufficient to fully fund operations, historical patterns in the timing of revenue receipts into the Fund are a key element in this consideration. Because the majority of the revenues to the Fish Fund are collected in the spring (during the second half of the fiscal year), the PFBC needs to begin each fiscal year with a Fish Fund balance that is adequate to cover expenses charged to the Fund during the first six to nine months of the fiscal year. According to PFBC officials, the required reserve balance for the Fish Fund is \$9.3 million. As such, Table 8 shows an ending or reserve balance that is not only increasing, but is well in excess of the Fish Fund's reserve requirements.

The PFBC tracks the financial condition of the Fish Fund using a detailed financial statement or "fund calculator." Determining fund projections depends upon an assessment of current revenue and expenditure trends as well as assumptions regarding future trends.

⁴ PFBC does not project prior year lapses when calculating future revenue levels.

Table 8

Fish Fund Balance			
(FY 2006-07 Through FY 2008-09)			
(\$000)			
	FY <u>2006-07</u>	FY <u>2007-08</u>	FY <u>2008-09</u>
Beginning Balance	\$20,748	\$24,336	\$27,446
Plus:			
Revenue	35,670	41,182	36,662
Prior Year Lapses	<u>2,827</u>	<u>2,409</u>	<u>6,869</u>
Total Funds Available.....	\$59,245	\$67,927	\$70,977
Minus:			
Expenditures ^a	<u>34,909</u>	<u>40,481</u>	<u>40,260</u>
Ending Balance	\$24,336	\$27,446	\$30,717

^aExpenditures reported are amounts granted by executive authorizations. To the extent that these amounts are not entirely spent in the fiscal year authorized, the remaining available balance is shown in the subsequent fiscal year as the "prior year lapse amount." As such, expenditure totals shown on this table differ from actual expenditures reported elsewhere in this report.

Source: Developed by LB&FC staff using information obtained from the PFBC.

Table 9 presents PFBC projections for the Fish Fund through FY 2014-15. As shown, starting with a beginning reserve balance of \$30.7 million for FY 2009-10, the fiscal year's projected ending balance is anticipated to be about \$27 million. The fund's ending balance continues to decline each year and by FY 2013-14 is projected to close with a deficit. Based on the Fish Fund's reserve requirement of \$9.3 million, Table 9 shows the Fish Fund balance to fall below the Commission's cash flow reserve needs at some point during FY 2012-13.

Assumptions used in these projections appear reasonable given the fund's recent revenue and expenditure history. Following a projected revenue increase of about 8 percent for FY 2009-10 (see Finding IV regarding the recent increase in fishing license purchases), revenue is expected to remain at that level for the subsequent five fiscal years. Although a flat revenue stream is assumed, the PFBC anticipates expenditure increases of about 7 percent for FY 2009-10, 4 percent for FY 2010-11 and 3 percent annually thereafter.⁵

If current revenue trends and expenditure projections are accurate, the PFBC projects that, by FY 2012-13, it will be necessary to pursue an increase in license fees or to seek sources of alternative funding to sustain operations at projected levels.

⁵ Projections using different assumptions were presented by PFBC staff at the April 2010 Commission meetings and showed a deficit occurring in FY 2014-15.

Table 9

PFBC Projections for the Fish Fund						
(FY 2009-10 Through FY 2014-15)						
(\$000)						
	Fiscal Year					
	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>2014-15</u>
Beginning Balance ...	\$30,717	\$27,013	\$21,388	\$14,407	\$ 6,030	(\$ 3,786)
Plus:						
Revenues	39,574	39,574	39,574	39,574	39,574	39,574
Less:						
Expenditures.....	43,278	45,199	46,555	47,951	49,390	50,871
Ending Balance ...	<u>\$27,013</u>	<u>\$21,388</u>	<u>\$14,407</u>	<u>\$ 6,030</u>	<u>(\$ 3,786)</u>	<u>(\$15,083)</u>
Operating						
Surplus/(Deficit)	(\$ 3,704)	(\$ 5,625)	(\$ 6,981)	(\$ 8,377)	(\$ 9,816)	(\$11,297)

Source: Developed by LB&FC staff using information obtained from the PFBC.

Boat Fund

Table 10 presents the Boat Fund comparative financial statement for FY 2006-07 through FY 2008-09. As shown, the ending (or reserve) balance declined between FY 2006-07 and FY 2007-08, from \$18.9 million to \$16.6 million, but increased slightly in FY 2008-09 to nearly \$17 million. As was the case with the Fish Fund, the Boat Fund balance was maintained by lapses in prior year funds ranging from about \$2 million in FY 2006-07 and FY 2007-08 to \$4.7 million in FY 2008-09. Also, in the case of the Boat Fund, expenditures were greater than revenue in each of the years shown.

PFBC officials informed us that a reserve balance of at least \$6.3 million is required to maintain operational cash flow. Table 11 presents PFBC projections for the Boat Fund through FY 2014-15. As shown, FY 2009-10 began with a reserve balance of nearly \$17 million. Revenues for FY 2009-10 are projected to increase slightly to \$17.4 million together with a prior year lapse of \$4.5 million that was also projected. Operating deficits were also found to exist, ranging from \$1.5 million (FY 2011-12 through FY 2014-15) to \$6.3 million for FY 2010-11.

As noted previously, an operating balance of about \$6.3 million, known as the reserve or reserve balance, is the critical threshold for the Boat Fund. Table 11 indicates that, although the reserve is declining each year, the Boat Fund is not expected to fall below the required reserve (i.e., the fund is not expected to have insufficient funds at any point during the year) until FY 2015-16, the first year after the final year indicated on Table 11.

If current revenue trends and expenditure projections materialize, the PFBC projects that, by FY 2015-16, it will be necessary to seek an increase in boat registration fees or seek sources of alternative funding in order to sustain operations at projected levels.

Table 10

Boat Fund Balance			
(FY 2006-07 Through FY 2008-09)			
(\$000)			
	FY <u>2006-07</u>	FY <u>2007-08</u>	FY <u>2008-09</u>
Beginning Balance	\$18,813	\$18,875	\$16,557
Plus:			
Revenue	13,866	13,448	13,127
Prior Year Lapses	<u>2,256</u>	<u>2,141</u>	<u>4,733</u>
Total Funds Available.....	\$34,935	\$34,464	\$34,417
Minus:			
Expenditures ^a	<u>16,060</u>	<u>17,907</u>	<u>17,440</u>
Ending Balance	\$18,875	\$16,557	\$16,977

^aExpenditures reported are amounts granted by executive authorizations. To the extent that these amounts are not entirely spent in the fiscal year authorized, the remaining available balance is shown in the subsequent fiscal year as the "prior year lapse amount." As such, expenditure totals shown on this table differ from actual expenditures reported elsewhere in this report.

Source: Developed by LB&FC staff using information obtained from the PFBC.

Table 11

PFBC Projections for the Boat Fund						
(FY 2009-10 Through FY 2014-15)						
(\$000)						
	Fiscal Year					
	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>2014-15</u>
Beginning Balance	\$16,977	\$19,110	\$12,858	\$11,316	\$ 9,774	\$ 8,232
Plus:						
Revenues	17,392	12,963	12,963	12,963	12,963	12,963
Prior Year Lapses	4,470	-	-	-	-	-
Less:						
Expenditures	19,729	19,215	14,505	14,505	14,505	14,505
Ending Balance.....	<u>\$19,110</u>	<u>\$12,858</u>	<u>\$11,316</u>	<u>\$ 9,774</u>	<u>\$ 8,232</u>	<u>\$ 6,690</u>
Operating						
Surplus/(Deficit)	(\$ 2,342)	(\$ 6,252)	(\$ 1,542)	(\$ 1,542)	(\$ 1,542)	(\$ 1,542)

Source: Developed by LB&FC staff using information obtained from the PFBC.

IV. The PFBC Is Evaluating the Success of Its Marketing Efforts in Impacting the Number of Licensees

Fishing license sales have declined over the previous two decades and have remained flat at about 850,000 annually for the past five years. In addition to the direct revenues obtained from license sales, the PFBC's apportionment of the federal Sport Fish Restoration Act Program funding is determined in part by the number of licenses sold.

The PFBC established a marketing program in which each component of the marketing effort is related, directly or indirectly, to angler retention and expansion to increase the number of resident and non-resident fishing licenses sold or to stimulate interest in a particular fishing or fishing-related activity. The PFBC marketing effort directly addresses the first two strategies of the *Strategic Plan (April 2005)*, i.e., to position the Commission as the organization serving the fishing and boating public and the resources it protects and to invest in activities, resources, and programs in order to increase boating and fishing participation. Although the PFBC has had some success recently with increasing license sales, these sales mirror nationwide trends and may be more affected by changing social and economic conditions than by marketing efforts. The impact of marketing efforts to increase the public's awareness of PFBC programs and activities is also difficult to ascertain.

Trends in Fishing License Sales

The number of fishing licenses sold in Pennsylvania and elsewhere has been in a general decline for two decades. Table 12 presents data on the number of resident, non-resident, and total fishing licenses purchased during calendar years 1990 through 2009. The PFBC has lost 261,642 resident fishing licensees since 1990, a 25.8 percent decline. This reduction in the number of persons participating in the sport of fishing mirrors the national trend. Over the years, various reasons have been offered as explanations including the aging of the population, fewer persons growing up in rural areas, less free time to fish, and competing recreational and leisure time activities.

This trend reversed in 2009, however, when 33,948 more resident licenses were purchased than in 2008, a 4.7 percent increase. Also, non-resident licenses increased by 4.2 percent, and the total number of fishing licenses sold was 4.3 percent higher than the total number purchased in 2008.

Table 12

PFBC Fishing Licenses Issued

CY 1990 Through CY 2009

License Year	Resident Licenses Issued	Percent Inc./.(Dec.)	Non-Resident Licenses Issued	Percent Inc./.(Dec.)	All Licenses Issued	Percent Inc./.(Dec.)
1990.....	1,015,134	N/A	73,893	N/A	1,163,758	N/A
1991.....	943,017	(7.1)%	69,226	(6.3)%	1,074,774	(7.6)%
1992.....	952,936	1.1	69,548	0.5	1,086,249	1.1
1993.....	950,588	(0.2)	67,502	(2.9)	1,074,112	(1.1)
1994.....	933,036	(1.8)	66,513	(1.5)	1,050,652	(2.2)
1995.....	948,004	1.6	68,007	2.2	1,068,698	1.7
1996.....	864,989	(8.8)	48,356	(28.9)	975,849	(8.7)
1997.....	861,003	(0.5)	47,281	(2.2)	973,405	(0.3)
1998.....	865,673	0.5	47,555	0.6	978,162	0.5
1999.....	844,094	(2.5)	46,907	(1.4)	953,793	(2.5)
2000.....	832,038	(1.4)	48,408	3.2	947,571	(0.7)
2001.....	839,488	0.9	51,044	5.4	960,159	1.3
2002.....	804,122	(4.2)	51,362	0.6	925,196	(3.6)
2003.....	777,089	(3.4)	49,957	(2.7)	895,038	(3.3)
2004.....	785,091	1.0	50,709	1.5	906,550	1.3
2005.....	719,125	(8.4)	39,368	(22.4)	819,514	(9.6)
2006.....	729,738	1.5	38,812	(1.4)	834,322	1.8
2007.....	739,314	1.3	39,990	3.0	850,713	2.0
2008.....	719,544	(2.7)	39,760	(0.6)	834,836	(1.9)
2009.....	753,492	4.7	41,445	4.2	870,876	4.3

Note: Total licenses issued each year include the following: Resident, Senior Resident, Senior Lifetime, 1-Day Resident, National Guard/Reserve, Non-Resident, 7-Day, 3-Day, 1-Day, and free licenses.

Source: Developed by LB&FC staff from information obtained from the PFBC.

Sales of specialty permits also increased in 2009. Table 13 provides historical information for the trout-salmon, Lake Erie, and the combination permits, for the years during which those permits were available. In 2009, sales increased about 3 percent for the trout-salmon and Lake Erie permits, and an increase of more than 7 percent was experienced for the combination permits. The table also displays the changes in the amount of revenue derived from these sales, and, in the case of the trout-salmon permit, the percentage of the purchasers who are already licensed buyers (since its introduction in 2000, this percentage has been declining steadily, including through 2009).

Table 13

PFBC Sales of Trout-Salmon, Lake Erie, and Combination Permits
(CY 2000 Through CY 2009)

Trout-Salmon						
<u>Year</u>	<u>Units</u>	<u>Revenue</u>	<u>Sales % Change</u>	<u>% License Buyers With Permit</u>		
2000	689,494	\$3,447,470	(1.1%)	72.8%		
2001	700,820	3,504,100	1.6	73.0		
2002	669,114	3,345,570	(4.5)	72.3		
2003	651,959	3,259,795	(2.6)	72.8		
2004	661,434	3,307,170	1.5	72.8		
2005	503,208	4,025,664	(23.9)	61.1		
2006	510,878	4,087,024	1.5	61.2		
2007	502,993	4,023,944	(1.5)	59.1		
2008	484,803	3,878,424	(3.6)	58.1		
2009	500,752	4,331,939	3.3	57.5		

Lake Erie				Combination		
<u>Year</u>	<u>Units</u>	<u>Revenue</u>	<u>Sales % Change</u>	<u>Units</u>	<u>Revenue</u>	<u>Sales % Change</u>
2005	25,235	\$201,880		65,820	\$ 921,480	
2006	20,648	165,184	(18.2%)	74,051	1,036,714	12.5%
2007	21,169	169,352	2.5	80,482	1,126,748	8.7
2008	18,864	150,912	(10.9)	85,685	1,199,590	6.5
2009	19,457	168,577	3.1	91,959	1,346,015	7.3

Source: Developed by LB&FC staff from information obtained from the PFBC.

With some exceptions, a licensee is required to purchase a trout-salmon permit in order to fish for trout or salmon in Pennsylvania waters. A Lake Erie permit is required to fish on Lake Erie, Presque Isle Bay, and their tributaries. In some cases, an angler may need both a trout-salmon permit and a Lake Erie permit to fish in the Erie area; a combination permit is available for that purpose.

This recent increase in fishing license sales is not unique to Pennsylvania. The American SportFishing Association reported that, as of September 1, 2009, state fish and wildlife agencies reported a 7.7 percent positive change in the number of licenses sold year-to-date compared to the same months in the prior year (i.e., January–July 2009 vs. January–July 2008).

The PFBC credits the impact of its multi-year direct marketing campaign (in cooperation with the Recreational Boating and Fishing Foundation) directed at lapsed anglers in part for this increase in license sales. Other explanations have been provided for the 2009 license sales increases, ranging from a slow economy,

which may allow people more time to engage in outdoor activities, to recreational fishing being a lower cost alternative to other forms of recreation.

Pennsylvania Automated Licensing Service (PALS)

The Pennsylvania Automated Licensing Service (PALS) is the system through which the PFBC distributes and sells fishing licenses and permits. The system allows the PFBC and license issuing agents to process and print fishing licenses for applicants at the point-of-purchase. PALS was activated for the sale of fishing licenses and permits in December 2006. The system was designed to increase the ease to purchase a license as well as to develop a database to be used for future marketing efforts. This database would allow the PFBC to accomplish the *Strategic Plan's (April 2005)* prioritized objective 1: Develop specific marketing and public relations initiatives targeted at key audiences. According to a PFBC official, as of spring 2010 the PALS database had captured sufficient records to allow trend analysis of specific demographics for future targeted marketing efforts.

Marketing Efforts

In response to declining license sales, the PFBC created and staffed a marketing specialist position in July 2005. PFBC marketing and public relations efforts utilize a variety of public relations best practices and principles to maintain and build interest in fishing, boating, and the Commonwealth's aquatic resources. These efforts are undertaken to promote local fishing, increase non-resident participation, retain the current customer base while gaining new constituents, and to identify the Commission as the preferred source of Pennsylvania fishing and boating information.

PFBC also works with the Pennsylvania Tourism Office and local destination marketing organizations, supplying fishing and boating content, images, and maps for their travel guides, websites, print advertisements, and brochures. The Tourism Office assists the PFBC with direct mail and advertising campaigns targeting non-resident anglers and boaters. Staff has worked with the PA Wilds Marketing Corporation to develop region-specific fishing brochures and additional content on the Commission website. PFBC staff is also present at several outdoor recreation shows annually to provide information and sell licenses in limited situations.

Marketing and promotional efforts by the PFBC over the past three years have included:

- Marketing/advertising programs focused on five general seasons: holiday, opening day, early summer, safe boating, and fall/steelhead fishing—a mix of radio ads, print ads, and sponsorships of outdoor radio segments.

- Multimedia and direct mail campaigns to promote the two opening days of trout season. This included a spring trout campaign that used one million inserts mailed by PennDOT, a statewide radio campaign through the Radio PA Network, and a promotional giveaway at Gander Mountain.
- Multimedia campaign to promote water trails.¹
- Multimedia campaign to promote boating safety using an insert with annual boat registration renewal mailings to 175,000 boat owners and a four-week statewide radio campaign to promote both water trails and safe boating.
- Multimedia campaign to build awareness of opportunities for steelhead fishing and to increase combo permit sales including print ads in *Fly Fisherman* magazine, direct mail to *Fly Fisherman* subscribers in New York and Pennsylvania, and banner ads on the PFBC web page.
- Director's tour during National Fishing and Boating Week highlighting fishing and boating access, land management, fishing and boating recreation tourism, and media relations and conservation/habitat projects in Northeastern Pennsylvania.
- License Gift Voucher Radio Campaign consisting of a four-week campaign of three radio ads in every county encouraging parents and grandparents of teenagers, and wives/girlfriends of lapsed anglers to purchase gift vouchers.
- Various media activities for the Forest Wood Cup bass fishing tournament including a webcast by the former executive director.
- Development of a standardized sports show management and procedures manual and a presence at sport, travel, and boat shows annually.

Lapsed Angler Direct Mail Campaign

A major marketing initiative by the PFBC is the lapsed angler direct mail campaign. In 2008, the PFBC entered into a three-year agreement with the Recreational Boating and Fishing Foundation (RBFF)² to implement a retention direct mail marketing campaign targeted at lapsed anglers. Specifically, past license holders that have failed to renew their license for the current year are mailed reminder notices.

¹ Water trails are boat routes designed for single or multiple-day trips suitable for canoes, kayaks, and small motorized watercraft and are comprised of access points, boat launches, day use sites, and (in some cases) overnight camping areas. Trails and trail corridors are conceived and maintained by a network of volunteers, property owners, civic groups, and associations. The PFBC publishes water trail guides that provide a detailed map of the trail, background information about the trail, tips on navigating and fishing the waterway, natural resource highlights, and transportation infrastructure information along the trail (railroads, bridges, etc.), basic boating regulations, and safety information. Water trail guides are available in print form and electronically through the Commission's website.

² The Recreational Boating and Fishing Foundation is a non-profit organization dedicated to increasing participation in fishing, boating, and aquatic stewardship. In 2009, RBFF partnered with 30 states to conduct direct mail marketing campaigns.

Methodology. Using data from PALS, RBFF staff identified 24,544 anglers who had purchased fishing licenses in prior years, but had not renewed their licenses for 2008. An oversized postcard was mailed to these lapsed anglers at the end of May to remind and encourage them to renew their licenses. A second notice, this time a reminder letter, was sent out at the end of July to 20,974 anglers who had not responded to the postcard. A statewide radio advertising campaign was conducted over Radio PA³ along with print ads and banners on the Commission's website in conjunction with the mailings.

A total of 2,464 customers purchased licenses after receiving one or both of the mailings for a response rate of 11.35 percent. The cost of this initial campaign was just over \$42,000, and the revenues produced were almost \$52,000, for a net return on investment for the campaign calculated to be a dollar and twenty-three cents in revenue for each dollar expended (i.e., \$1.23).⁴

PFBC staff decided that the results of the 2008 campaign warranted an expanded program and in 2009, the PFBC and RBFF conducted a second direct mail marketing campaign. As before, data from PALS was used and 65,000 anglers that had purchased licenses in 2007, but not in 2008, nor as of a cut-off date of April 30, 2009, were targeted to receive the mailings. The anglers were mailed a postcard to generate interest in renewing their fishing licenses, followed by a second postcard to those not responding to the first. RBFF also bought time for a radio campaign that began the week before and ended the week after the marketing pieces were mailed.

The response rate for the 2009 campaign, however, was only 6 percent, with just 3,569 of the identified lapsed anglers purchasing licenses. But, the resulting \$86,000 generated by the campaign was a return of \$1.61 for each \$1.00 spent by the PFBC for printing and mailing.

The third year's campaign will be similar to the one conducted in 2009 (i.e., using two postcard mailings, the first at the end of May and the second at the end of June). The mailings will coincide with RBFF's nationwide radio advertising buy over the ESPN radio network which will involve at least nineteen AM stations located throughout Pennsylvania. This year's radio promotion is designed to focus on listening audiences with a higher interest in fishing and boating and will run three times longer than the 2009 campaign. According to PFBC officials they anticipate spending about the same amount in 2010 for printing and mailing as they did in 2009.

³ Radio PA provides news, weather, and sports to an urban, suburban, and rural audience over a network of 60 affiliated stations located throughout the Commonwealth.

⁴ In both 2008 and 2009, RBFF reimbursed PFBC for 50 percent of direct mail marketing campaign costs, up to \$25,000 per year, which are not reflected in the totals presented above.

Similar Marketing Efforts in Other States. As many as thirty other states have also partnered with the RBFF in direct mail marketing campaigns aimed at lapsed anglers. The campaigns were very similar in design to the one used in Pennsylvania, i.e., direct mail reminders to lapsed anglers identified through a licensing database combined with other marketing efforts including radio and TV advertising, billboards, and various print media.

The impact of the 2009 campaign varied widely among the participating states. As can be seen in Table 14, preliminary data shows that the campaigns in both Iowa and Washington returned over five dollars for each dollar expended, while the campaigns in Mississippi, North Carolina, and Pennsylvania, for example, generated less than a dollar in revenue for each dollar spent.⁵ RBFF was only able to provide preliminary data from 26 of the participating states.

At a conference of the participating states held in the summer of 2009, the RBFF presented the preliminary results from the 2009 campaign shown on Table 14. According to a PFBC official who attended the conference, for many of the states there was no statistical difference between the target and control groups, suggesting the direct mail campaign had little impact on the decision by lapsed anglers to renew their license. As of April 2010, the RBFF had not published the final results for the 2009 campaigns.

Adjustments to Direct Mail Campaign by Michigan. According to an official with the PFBC, agencies in each state closely observe the efforts by agencies in the other states to see what marketing initiatives may be effective. For example, PFBC has considered including incentives in their direct mail campaign similar to those attempted by Michigan's Department of Natural Resources.

In 2005, the Michigan Department of Natural Resources tried a further inducement with its lapsed angler direct mail campaign, offering a discount card pilot program with Gander Mountain. The discount card offered a 10 percent discount on a wide range of merchandise for an extended period of time, but was limited to the one retailer. According to an evaluation report published by RBFF, the renewal rate for the target group was 7 percent higher than the control group. Gander Mountain reported significantly increased retail sales over the previous year, while non-participating retailers reported a decline in sales over the test period. The resulting \$60,501 in license sales, when combined with \$21,175 of matching federal Sport Fish Restoration Act Program (SFR) funds, provided Michigan with over \$80,000 in additional revenues.

⁵ This ROI analysis uses RBFF media costs plus state printing and mailing costs. This explains Pennsylvania's return of \$1.04 versus the \$1.61 stated earlier.

Table 14

State Results for 2009 Lapsed Angler Direct Mail Marketing Campaign*

	Response Rate	Net Increase in Licensed Anglers ^a	Program Revenues	Estimated SFR Funds	Total Revenue	Program Costs ^b	ROI
Alabama.....	11.9%	27	\$ 94,924	\$ 60,430	\$155,354	\$85,532	\$0.82
Arkansas.....	14.3	381	105,960	79,596	185,556	72,923	1.54
Colorado.....	21.3	332	255,393	97,466	352,859	84,857	3.16
Florida.....	12.2	75	236,320	65,763	302,082	63,152	3.78
Idaho.....	15.6	392	171,193	57,050	228,243	47,343	3.82
Illinois.....	10.7	363	97,555	58,736	156,290	88,298	0.77
Indiana.....	13.6	73	227,084	97,946	325,031	103,479	2.14
Iowa.....	22.2	1,269	261,461	115,709	377,170	60,357	5.25
Kansas.....	14.2	659	113,731	47,436	161,167	44,556	2.62
Kentucky.....	14.7	737	339,944	117,288	457,232	114,022	3.01
Louisiana.....	23.7	485	145,785	114,549	260,334	88,812	1.93
Minnesota.....	23.1	343	328,894	122,004	450,898	83,659	4.39
Mississippi.....	6.5	96	28,419	23,958	52,378	116,329	-0.55
Missouri.....	22.7	319	155,191	91,957	247,148	92,112	1.68
New Jersey.....	8.8	262	107,823	33,160	140,983	72,502	0.94
New York.....	10.8	392	166,313	65,153	231,465	121,743	0.90
North Carolina..	9.5	236	67,004	29,849	96,852	84,192	0.15
Oklahoma.....	6.9	154	97,149	25,118	122,267	55,791	1.19
Oregon.....	17.2	599	251,022	72,889	323,912	57,045	4.68
Pennsylvania..	6.1	-23	85,693	27,231	112,924	108,981	0.04
South Carolina .	19.8	649	178,127	90,461	268,588	81,330	2.30
Tennessee.....	8.8	-24	61,718	21,738	83,456	53,173	0.57
Utah.....	12.0	133	251,618	80,352	331,969	96,133	2.45
Virginia.....	15.0	262	190,901	81,382	272,283	74,141	2.67
Washington.....	23.2	-637	558,107	184,196	742,302	107,087	5.93
Wisconsin.....	28.1	434	256,091	108,735	364,826	84,555	3.31

*Only data for 26 of 32 participating states available.

^a - Net increase represents difference between expected number of renewals for targeted group and actual number of renewals from the direct mail marketing campaign.

^b Program costs are RBFF media buy and state printing and mailing costs.

Source: Developed by LB&FC staff using RBFF preliminary data from the 2009 Lapsed Angler Direct Mail Marketing Program State Results Summary.

In 2006, rather than a discount card for a single retailer, Michigan tried using a coupon book program that included discount coupons from eight different retailers. The coupon book resulted in an additional \$51,744 in license sales and an estimated SFR benefit of \$20,155, or a total of \$71,899. Although it was assumed that the discount card and the coupon book would achieve similar results, RBFF concluded that the coupon book program did not provide enough incentive to merit investing in a fishing license.

Trends in Boat Registrations

Unlike the number of fishing licenses sold, the number of boat registrations did not increase in 2009. State law requires the registration of any boat that uses gasoline, diesel, or an electric motor for primary or auxiliary power and boats documented by the U.S. Coast Guard for recreational purposes (e.g., large pleasure boats such as yachts). Unpowered boats are not required to be registered or have a launch permit—unless used at a PFBC access area or lake, at Pennsylvania state parks and state forests; or required by the owner (one example is the U.S. Army Corps of Engineers). Boat registrations are valid for up to two years. As shown on Table 15, registrations have decreased slightly since 2000. The PFBC has speculated that one of the reasons cited for this decline is the increase in fuel costs.

Table 15

PFBC Sales of Boat Registrations (CY 2000–CY 2009)

	<u>Number of Registrations</u>	<u>Percent Change</u>
2000.....	360,361	
2001.....	359,706	(0.2%)
2002.....	354,643	(1.4)
2003.....	352,130	(0.7)
2004.....	350,927	(0.3)
2005.....	346,330	(1.3)
2006.....	341,045	(1.5)
2007.....	338,841	(0.7)
2008.....	334,690	(1.2)
2009.....	334,591	(0.03)

Source: Developed by LB&FC staff from information obtained from the PFBC.

Personnel Issues That Could Impact Marketing Efforts

The PFBC lost its marketing specialist to another agency in 2008 and chose not to request an exemption from the statewide hiring freeze to fill the position. The Commission chose instead to request, and was granted, permission to hire a press secretary.

Loss of Marketing Specialist

The PFBC had, until October 2008, a marketing specialist that oversaw the development and implementation of a marketing plan. Duties for that position have since been assumed by the Communications Division chief. The PFBC is, as are all agencies under the Governor's jurisdiction, operating under a hiring freeze.

Positions lost during this time period cannot be re-filled without direct approval from the Governor's Office. We were informed that other vacancies within the division were of a higher priority for replacement at this time.

Approval to Hire Press Secretary

The PFBC submitted a request for an exception to the hiring freeze to the Governor's Office in 2009 for a press secretary. According to this request, the press secretary would be expected to plan, organize, and coordinate time-sensitive and priority media relations for events of statewide significance including news releases, press kits, reports, television and radio scripts, and similar public information; to write and edit written materials, including press releases, speeches, articles, and content for website and other publications; and to serve as the principal spokesperson for the agency. PFBC has received permission to hire a press secretary and has posted the position, intending to fill the position by fall 2010.

Success of Marketing Effort

PFBC analysis of the lapsed angler direct mail campaigns show that they have been successful, to a degree, in generating renewals. However, the cost effectiveness of this undertaking is in question when the media dollars spent by RBFF are included in the ROI analysis. The advertising to promote gift vouchers generated an increase in renewals and, in fact, license sales as a whole increased in 2009. PFBC officials, however, have suggested that other causal factors, such as the economy, may have had as much or more impact on sales as the Commission's marketing efforts. This illustrates the difficulty faced by Commission staff in measuring the overall success of their marketing—not just with license sales but also with the public's awareness of Commission programs and activities. A marketing professional able to devote the time needed for planning, implementing, monitoring, and evaluating the marketing effort could provide the Commission with information useful for developing policy and strategic direction. The expanded use and analysis of the PALS data could help guide the PFBC in developing future marketing efforts. However, Commission staff has informed us that marketing has not been identified as a critical task needed to achieve the goals of the new five-year strategic plan and will not be pursued at this time.

V. The Costs Associated With Hatchery Operations, Particularly With the Production of Adult Trout, Continue to Escalate While Revenues From Licenses and Fees Are Beginning to Level Off

Operating the state fish hatcheries is a key function of the PFBC, with propagation and stocking of trout being major programs. Trout fishing is a significant recreational pastime in Pennsylvania and constitutes a substantial area of investment by the PFBC. In 2009, nearly 501,000 of the 871,000 total licensees purchased trout-salmon permits, and 92,000 additional licensees purchased the combination trout-salmon/Lake Erie permits. Periodic angler surveys have suggested that the overwhelming majority (80 percent or higher) of these licensees engage in trout fishing.

The Bureau of Fisheries manages both wild and stocked fisheries and consumes the largest share of the Commission's financial resources. In FY 2008-09, the Bureau spent a total of \$18.9 million, or 39 percent, of the Commission's total expenditures. The expenditure by the state fish hatcheries (which produce both trout and other species for stocking) is substantial, and the operation of the hatcheries constituted 57 percent of the Bureau's expenditures with more than 60 percent of the Bureau's authorized personnel assigned to hatchery operations.

The increasing cost of fuel, fish food, and liquid oxygen has directly affected the cost of hatchery operations. In addition, despite the use of Growing Greener II funds for the upgrading and renovation of ten state fish hatcheries (primarily related to effluent treatment), the continuing maintenance costs of the hatcheries will be among the initial areas to cut if the agency's financial condition deteriorates.¹ Although the Bureau of Fisheries has undertaken several tasks in the last three years to address the future direction of the PFBC trout programs,² a definitive review of hatchery needs has not been completed. Given the current reality of limited financial and personnel resources, the Bureau of Fisheries will likely encounter additional financial challenges that may adversely affect hatchery operational efficiency and effectiveness.

Bureau of Fisheries

Pennsylvania's diverse aquatic resources include rivers, warm-water and coldwater streams, Lake Erie, and tributaries, impoundments, watersheds, and wetlands. This diversity results in many different types of fishing and different

¹ See discussion of special projects and programs in Finding III.

² For example, a strategic plan for trout management, a report on the stocked trout program costs, and a state-wide trout angler attitudes and opinions telephone survey.

types of fish. The Bureau of Fisheries directs the management, production, protection, propagation, and distribution of fish, fisheries, habitat, reptiles, amphibians, and certain threatened and endangered/non-game species in the Commonwealth. The Bureau also directs the operation of all state fish hatcheries operated by the PFBC. The Bureau operates through four divisions plus the Three Rivers Ecological Research Center. Exhibit 9 provides descriptive information about the Bureau of Fisheries.

Exhibit 9

Functions and Responsibilities of the Bureau of Fisheries

Bureau of Fisheries directs the research, management, production, protection, propagation, and distribution of fish, fisheries, habitat, reptiles, amphibians, and certain threatened and endangered/non-game species in the Commonwealth. The Bureau also directs the operation of the 14 PFBC-operated fish hatcheries.

Division of Fisheries Management conducts surveys of Pennsylvania waters, documents the status of fisheries, serves as the repository for information collected, and develops comprehensive plans for managing fishery resources that are consistent with the protection, conservation, and enhancement of the quality and diversity of said resources.

Division of Fish Production directs the production and stocking of warmwater/coolwater and cold water (trout) species of fish, in Pennsylvania waters, including Lake Erie; purchases, orders, and delivers all fish food used in the agency; directs all interstate exchanges or trades of warmwater/coolwater fish and eggs; and manages hatchery effluent.

Division of Environmental Services plans and directs the technical guidance and agency response to any activity that has the potential to affect the aquatic environment or aquatic organisms; reviews and comments on permit applications that have the potential to affect fish, fishing, and aquatic environments; directs a program to manage non-game fish and protect amphibians, reptiles, and endangered, threatened and candidate species; and directs the environmental and technical liaison and environmental services functions of the Commission.

Division of Habitat Management provides leadership and resources to advance habitat conservation, restoration, and enhancement of PFBC trust species and their habitats; develops partnerships to protect and provide public access to aquatic resources; coordinates provision for fish passage (e.g., fishway and dam removal projects), and lake and stream habitat enhancement and restoration; and manages aquatic habitat conservation, restoration, and enhancement projects.

Three Rivers Ecological Research Center provides a research collective of the Allegheny, Monongahela, and Ohio rivers and their watersheds to benefit habitat, species, and public resources; develops scientific foundation for conservation strategies to protect the rivers; and shares knowledge to partnerships to educate the public. [Note: The Commissioners voted to disband the Center at an April 2010 quarterly meeting (see Finding VI).]

Source: Developed by LB&FC staff from information provided by the PFBC.

Trout fishing (or angling) generates considerable interest among anglers and represents a major component of the total fishery resource in the Commonwealth. During 2009, the PFBC sold a total of 870,876 licenses. These same licensees purchased an additional 500,752 trout-salmon permits and 91,959 combination trout-salmon/Lake Erie permits. Telephone surveys of trout anglers conducted in 2001 and 2008 indicated that as many as 80 percent of licensed anglers fished for trout at some time during trout season. Also, trout and salmon permit sales do not take into account lifetime license holders who are not required to purchase a permit annually, nor does it take into consideration anglers under 16 years of age who are not required to purchase a license.

Bureau Staffing

The Bureau of Fisheries, the largest bureau of the PFBC, comprises 42 percent of the total authorized salaried complement. As of December 31, 2009, the authorized salaried staff complement of the Bureau of Fisheries was 182 positions, of which nine positions were vacant. An additional 61 wage positions were also authorized, 23 of which were vacant. Table 16 provides a breakdown of the Bureau's 243 salaried and wage staff according to five primary functional areas, as of December 31, 2009.

Table 16

Bureau of Fisheries Staffing			
(As of December 31, 2009)			
	<u>Filled</u>	<u>Vacant</u>	<u>Total</u>
Bureau Administration			
Salary	4	1	5
Wage	<u>0</u>	<u>0</u>	<u>0</u>
Total	4	1	5
Environmental Services			
Salary	13	0	13
Wage	<u>6</u>	<u>3</u>	<u>9</u>
Total	19	3	22
Fish Production			
Salary	120	2	122
Wage	<u>17</u>	<u>10</u>	<u>27</u>
Total	137	12	149
Fisheries Management Areas			
Salary	26	2	28
Wage	<u>10</u>	<u>8</u>	<u>18</u>
Total	36	10	46
Habitat Management			
Salary	10	4	14
Wage	<u>5</u>	<u>2</u>	<u>7</u>
Total	15	6	21
Bureau Total.....	211	32	243

Source: Developed by LB&FC staff based on information provided by PFBC.

Over 60 percent of the Bureau’s staff is located in the Division of Fish Production which involves the operation of the state fish hatcheries. As of December 2009, two salaried staff and 10 wage staff vacancies existed in this division’s staffing.

Bureau Expenditures

The Bureau of Fisheries is also the largest organizational structure of the PFBC in terms of expenditures, as well as the only bureau whose costs are totally funded from the Fish Fund. For FY 2008-09, Bureau of Fisheries’ expenditures were 39 percent of total PFBC expenditures and 53 percent of the Fish Fund expenditures. Table 17 provides an organizational breakdown of Bureau of Fisheries’ expenditures for FY 2008-09.

Table 17

Bureau of Fisheries Expenditures	
FY 2008-09	
Bureau Administration.....	\$ 392,127
Division of Fisheries Management.....	2,245,853
Division of Fish Production	
Division Administration.....	519,136
Northern Hatcheries.....	4,441,334
Southern Hatcheries.....	6,272,124
Fish Production Services.....	<u>1,498,109</u>
Subtotal.....	\$12,730,703
Division of Environmental Services.....	1,822,693
Division of Habitat Management.....	1,344,929
Three River Ecological Research Center.....	<u>350,289</u>
Total.....	\$18,886,594

Source: Developed by LB&FC staff based on information provided by PFBC.

As shown, the Division of Fish Production, which includes operation of the state fish hatcheries, spent \$12.7 million, or 67 percent of total Bureau expenditures. In recent years, the operating costs of maintaining Bureau facilities, especially the state fish hatcheries, have been affected by cost increases in certain commodities and services. The Bureau spent a total of \$1,553,488 on fish food in FY 2007-08, 16 percent (\$210,475) more than was spent the previous year; in FY 2008-09, fish food expenditures increased by 6 percent, to \$1,649,126.

Vehicle fuel costs, \$733,098 in FY 2007-08, were 45 percent higher than the previous year but decreased to \$500,628 in FY 2008-09. Liquid oxygen, another commodity used in the hatcheries and in connection with fish stocking, cost \$275,669 in FY 2007-08 compared to \$353,419 in FY 2008-09, a 28 percent increase.

Also, between FY 2007-08 and FY 2008-09, Fish Fund expenditures for maintenance materials and supplies increased from \$397,441 to \$663,193, a 67 percent increase. PFBC vehicle fuel, maintenance, and fish food account for almost 50 percent of total operational costs.

However, cost containment measures have, to some extent, constrained overall bureau cost increases. Total expenditures of the Bureau of Fisheries were \$17.2 million in FY 2006-07 compared with \$18.9 million in FY 2008-09, an average annual increase of about 3.3 percent. The PFBC reports that it has kept increases in personnel costs to a minimum by reducing rank and file (fish culturist) staff positions by 22 percent since 2000 in the eight trout production hatcheries.

In April 2010, it was reported that the Division of Fish Production continued to be short-staffed due to the hiring freeze. Some preventative maintenance had to be placed on hold to allow staff to concentrate on rearing the fish. Several recent hires should help address the situation, but anticipated retirements will further add to the staffing deficit. According to PFBC staff, overtime may be necessary to catch up on maintenance projects.

Fish Production and Stocking

State Fish Hatcheries

The Fish and Boat Code, at 30 Pa.C.S. §2301(a), charges the PFBC with determining “policy pertaining to the propagation and distribution or planting of the fish produced at the Commonwealth fish hatcheries or otherwise acquired.” A PFBC policy statement, at 58 Pa. Code §57.1(4), further establishes the policy of using hatchery fish to provide recreation in those waters where fish populations are inadequate to sustain the fishery at desired levels.

The Commission operates 14 state fish hatcheries located in nine counties (see Exhibit 10). The PFBC produces both coldwater (trout) and warmwater/coolwater species. The hatcheries are organized into northern and southern divisions, with seven hatcheries in each division. Currently, six of the seven southern hatcheries and two of the northern hatcheries produce adult trout.

Location of Pennsylvania State Fish Hatcheries

<u>Northern Hatcheries</u>		
Corry ^a 13365 Route 6 Corry PA 16407	Fairview 2000 Lohrer Road PO Box 531 Fairview PA 16415	Linesville 13300 Hartstown Road Linesville PA 16424
Oswayo ^a 96 State Route 244 East Coudersport PA 16915	Pleasant Mount 229 Great Bend Turnpike Pleasant Mountain 18453	Tionesta 172 Hatchery Lane Tionesta PA 16353
Union City 9450 Route 6 Union City PA 16438		
<u>Southern Hatcheries</u>		
Bellefonte ^a 1115 Spring Creek Road Bellefonte PA 16823-8458	Benner Spring ^a 1735 Shiloh Road State College PA 16801-8495	Huntsdale ^a 195 Lebo Road Carlisle PA 17013-9362
Pleasant Gap ^a 450 Robinson Lane Bellefonte PA 16823-9620	Reynoldsdale ^a 162 Fish Hatchery Road New Paris PA 15554-8213	Tylersville ^a 43 Hatchery Lane "Loganton PA 17747
Van Dyke Shad Hatchery Thompsontown Juniata County		

^a Indicates hatcheries that produce adult trout.

Source: Developed by LB&FC staff using information obtained from the PFBC.

Warmwater/Coolwater Species. Warmwater/coolwater species include smallmouth bass, striped bass, walleye, muskellunge, and a variety of other fish accustomed to waters of moderate to higher temperatures. The PFBC reports that, for the most part, these species are raised on an annual cycle and stocked at less-than-legal-size in waters where the natural production of young is impaired or adequate spawning conditions are unavailable. Stocking helps to maintain adequate populations for fishing opportunities, although it usually takes stocked warmwater and coolwater fish several years to grow to legal or desirable size. The expense of raising warmwater/coolwater fish is substantially less than the cost of raising trout, most of which are grown to adult size. Table 18 provides information on the number and type of warmwater/coolwater species stocked in 2009.

Table 18

**Summary Information on Warmwater/Coolwater Species Stocking
CY 2009**

<u>Species</u>	<u>Number</u>
American Shad	3,063,478
Black Crappie	303,708
Bluegill	2,100
Brown Trout ^a	43,925
Channel Catfish	6,245
Golden Shiner.....	85,450
Hickory Shad	7,096,753
Lake Trout ^a	112,430
Largemouth Bass	16,010
Muskellunge	159,658
Northern Pike.....	10,860
Paddlefish.....	5,077
Rainbow Trout - Steelhead ^a	1,095,000
Striped Bass	6,203,648
Tiger Muskellunge	184,070
Walleye.....	29,407,735
White/Striped Bass	133,824
Yellow Perch.....	<u>410,000</u>
Total.....	48,339,971

^a In addition to raising adult trout, several PFBC hatcheries produce less-than-legal-size trout for certain species. For example, although steelhead trout is a coldwater species, it has traditionally been categorized under the warmwater/coolwater species production program. Such trout are used to support two management programs: stocking in waters that support year-round growth and the Cooperative Nursery Program.

Source: Developed by LB&FC staff using information obtained from the Pennsylvania Fish and Boat Commission.

Trout. In contrast to warmwater/coolwater species, trout are raised to adult size and on multi-year production schedules. The various species of trout raised in the hatcheries include brook trout, brown trout, rainbow trout, and golden rainbow trout. However, fingerling trout (less than the statewide minimum length limit of 7 inches) are also raised in a number of the state hatcheries and are stocked to provide angling opportunities on waters that have trout fishery potential. In 2009, approximately 1.8 million fingerling trout were raised and most were stocked. However, a portion of these fingerlings were distributed to various local sportsman's organizations that participate in the Cooperative Nursery Program to raise to adult size and eventually stocked in waters open to angling. The receiving waters must meet the general life requirements of trout on a year-round basis.

Trout Production Capability of State Fish Hatcheries

The production capabilities at the fish hatcheries can vary considerably depending on factors such as: (1) the quantity and the quality of water source; (2) the size, age, and condition of the hatchery facilities; and (3) the status of effluent treatment systems. Table 19 provides information on the number of adult trout stocked and the per trout cost for FYs 2006-07 through 2008-09.

As shown, the number of trout produced and the costs may vary among hatcheries. Typically, hatcheries with higher production capacity produce trout more efficiently. However, as noted especially in FY 2008-09, two hatcheries exhibited per trout costs of \$2.00 or more. The Reynoldsdale State Fish Hatchery, for example, will be the last facility renovated under the Growing Greener II infrastructure improvement program. Its facilities are more primitive (e.g., using earthen rather than concrete raceways), its maintenance is more labor intensive, and the trout produced are more subject than other facilities to loss by bird predation. Additionally, during 2009, the Huntsdale Hatchery's production capacity was downgraded due to inability to meet effluent standards. These factors as well as others tend to raise production costs.

Also, Table 19 indicates that, on the whole, adult trout production was stable at about 3.2 to 3.3 million during each year, and the established statewide production goals were met. In our 2008 PFBC performance audit report, we described a number of changes that took place beginning with the 2002 season when PFBC announced that the annual production of adult trout would be reduced from approximately 5.2 million trout to 3.8 million trout (a 27 percent reduction). This action was taken because of water quality and quantity concerns at PFBC hatcheries resulting from more stringent effluent criteria in National Pollutant Discharge Elimination System (NPDES) permits issued for PFBC hatcheries by DEP. Consequently, fish production was discontinued at one hatchery (Big Spring) and reduced at most other hatcheries.

Prior to 2007, the PFBC announced its intention to increase the average size of its adult trout stocked from an average length of 10.25 to 11.0 inches. Due to biomass restrictions, the goal established for the total number of trout was reduced by 20 percent, to a total of 3.4 million adult trout. PFBC officials indicated that the decision to raise "fewer but larger" adult trout was in direct response to angler preferences documented in the 2002 Pennsylvania Trout Summit and through a working group of stakeholders representing trout fishing interests who generally advise the PFBC on trout management issues. Through these forums, Pennsylvania anglers indicated a strong preference for larger but fewer trout, as compared with smaller and more abundant trout.

Table 19

PFBC Trout Production and Cost Per Adult Trout by Hatchery

(FY 2006-07 Through FY 2008-09)

<u>Hatchery</u>	<u>FY 2006-07</u>		<u>FY 2007-08</u>		<u>FY 2008-09</u>	
	<u># of Adult</u>	<u>Cost Per</u>	<u># of Adult</u>	<u>Cost Per</u>	<u># of Adult</u>	<u>Cost Per</u>
	<u>Trout</u>	<u>Adult</u>	<u>Trout</u>	<u>Adult</u>	<u>Trout</u>	<u>Adult</u>
	<u>Stocked</u>	<u>Trout</u>	<u>Stocked</u>	<u>Trout</u>	<u>Stocked</u>	<u>Trout</u>
Bellefonte	591,332	\$1.99	583,430	\$1.36	602,795	\$1.44
Benner Spring ...	563,720	1.53	574,360	1.34	568,425	1.43
Corry.....	313,986	1.31	319,800	1.50	309,900	1.66
Huntsdale	534,100	1.67	512,652	1.56	410,700	2.00
Oswayo	269,300	1.41	279,000	1.75	244,600	1.70
Pleasant Gap	440,698	1.27	429,775	1.45	407,345	1.89
Reynoldsdale	184,284	2.00	203,805	2.21	221,126	2.26
Tylersville	<u>478,786</u>	2.92	<u>456,528</u>	2.15	<u>472,251</u>	1.97
Total/Mean	3,376,206	1.76	3,359,350	1.67	3,237,142	1.79

Source: Developed by LB&FC staff based on information provided by PFBC.

Angler preference appears to have been validated in a 2008 telephone survey (conducted by Responsive Management, Inc.), which included more than 1,500 Pennsylvania trout anglers. This survey documented that 84 percent of the respondents were satisfied with the trout fishing experience in Pennsylvania.

Our prior audit also discussed the PFBC's decision to augment its total adult trout production through the hatchery system using an outside contractor. From March 2004 through February 2009, PFBC contracted with Tellico, Inc. of North Carolina to provide adult rainbow trout. The purpose of this five-year pilot study was to evaluate the feasibility of purchasing adult trout from private hatcheries to augment PFBC production. The PFBC purchased 644,000 adult rainbow trout during this period, with prices ranging from \$1.09 to \$1.23 per fish. Invitations to bid on a similar contract that began in March 2009 were advertised in the spring of 2008. Only one bid was received—at a price of \$3.38 per fish. Due to this significant cost increase, the PFBC discontinued this program.

Also, during our previous PFBC performance audit, we determined that the Bureau of Fisheries did not maintain an adequate management information system that was capable, for example, of regularly identifying and monitoring per fish production costs and individual hatchery performance against targeted production goals. In particular, the PFBC's methodology failed to accurately take into consideration cost differences based on size class. Recognizing the importance of determining actual hatchery direct costs in the efficient operation of a fish production

system, the PFBC revised its cost methodology to more accurately distinguish between adult and fingerling maturity levels in the determination of cost. This cost tracking is performed annually after the budget numbers from the previous fiscal year have been finalized. Significantly, during 2009, the PFBC also produced a report on the cost of the stocked trout program.

Status of Goals and Objectives

Since the release of our prior performance audit of the PFBC, the Bureau of Fisheries has been engaged in a number of initiatives and objectives included in the *PFBC Strategic Plan (April 2005)* and the APOWs. This section assesses the Bureau's efforts in several assigned areas.

PFBC Strategic Plan (April 2005)

As indicated in Finding II, one of the areas addressed in the *PFBC Strategic Plan (April 2005)* was trout fishing. Strategy 2 of the plan states: *PFBC will invest in activities, resources and programs in order to increase boating and fishing participation in the Commonwealth.* In relation to this strategy one of the plan's operational objectives was:

- Re-engineer trout fishing opportunities to improve the attractiveness to anglers.

One of the key steps undertaken to achieve this objective was the creation of a "trout management working group." In the past decade, working groups focusing on PFBC's trout stocking and propagation policies have been employed on a number of occasions. Working groups, for example, were reportedly used effectively during the 2002 Trout Summit. In November 2007, the PFBC convened a 37 member work group consisting of PFBC staff, commissioners, and 19 members of the general public (including anglers affiliated with a variety of sportsmen's organizations) to assist in developing a new statewide trout management plan (see page 60).

Another key step in the operational objective was to produce and stock larger trout. This step was accomplished beginning in 2007. A number of other related adjustments to trout stocking and propagation policies were also made. For example, in 2007 the PFBC established two opening days of trout season (in 18 counties in southeastern and south central Pennsylvania the season began two weeks prior to the traditional opening day which continues to apply to 49 counties). The PFBC also reduced the frequency of in-season stocking (based on a study finding that most trout fishing occurs early in the season), and increased fingerling trout stocking on 17 Commonwealth streams whose conditions were determined to be favorable to the species. Further, with the intent of improving its communication with the angling public, the PFBC has indicated that over 95 percent of the in-season stockings are publically announced.

The PFBC has also undertaken initiatives to optimize angler use of wild trout (a 2004 statewide wild trout survey determined that angler use was typically very low on most wild trout streams), including simplifying regulations and implementing special regulations to increase the size of wild trout.³

Finally, the *Strategic Plan (April 2005)* provided for three output/outcome measures to determine the extent to which improved satisfaction with trout fishing had occurred. These measures included: (1) the number of trout anglers (as measured by purchases of trout permits); (2) satisfaction of trout anglers; and (3) number of days during which trout angling occurred.

- *Number of trout anglers (trout-salmon permit sales)*—Trout permit sales had declined substantially from 2004 through 2008 (661,434 to 484,803—a 26.7 percent decrease), but then rebounded somewhat in 2009 to 500,752, a 3.3 percent increase.
- *Satisfaction of trout anglers*— In 2008, the PFBC measured angler satisfaction with the Commission’s decision and found that 84 percent of anglers interviewed (based on a phone survey conducted by the firm of Responsive Management, Inc.) were at least somewhat satisfied (40 percent very satisfied/44 percent somewhat satisfied) with trout fishing in Pennsylvania.
- *Days trout angling*—PFBC reports that adequate data is currently unavailable. Estimates of angler trips to wild trout streams and to stocked trout streams were conducted in 2004 and 2005, respectively.

In assessing the PFBC’s performance in relation to its operational objective to reengineer trout fishing opportunities to improve attractiveness to anglers, we determined that the PFBC (through its Bureau of Fisheries) has successfully accomplished those aspects of the plan that were most critical. It has formed working groups with broad-based input to assist the PFBC in making policy decisions and in altering its practices where practical; it has successfully implemented its plans (most notably its decision to produce fewer but larger adult trout); and it has measured trout angler satisfaction with the results. Finally, perhaps the most important indicator of success—an increase in purchases by nearly 16,000 of trout-salmon permits occurred in 2009 compared with 2008 trout-salmon permit purchases (a 3.3 percent increase).⁴

It is also important to point out that, although not directly linked to the *Strategic Plan (April 2005)*, the 2005 and 2007 reorganizations would appear to have played a role in tangible outcomes realized under the plan. The intended benefits of

³ Special regulations are used when necessary to protect, conserve, or enhance fisheries or species when circumstances render statewide regulation inappropriate. Special regulations (e.g., concerning trophy trout and the wild brook trout enhancement program) have been implemented that may over a period of time result in the presence of larger trout in those fisheries where the regulations apply.

⁴As with the increase in fishing license sales, this may also be due, in part, to the economic downturn (see Finding IV).

the Bureau of Fisheries' reorganization, as stated by the PFBC, included improved reporting relationships and streamlined workflows enabling the PFBC to strategically maximize its personnel in the delivery of traditional and new services.

Annual Plan of Work Objectives

In addition to the PFBC's *Strategic Plan (April 2005)*, agency initiatives have, since 2006, been established and monitored through a separate planning document known as the "*Annual Plan of Work*" (APOW) (see Finding II). The Bureau of Fisheries has been responsible for a number of areas assigned through these plans.

Develop a New Trout Management Plan. This initiative began in 2007 and required a review of the trout management plan. This assignment paralleled the task in the *Strategic Plan (April 2005)* to create a trout management working group. The annual plan also called for a working group that would work with commissioners, staff, and the public to completely review and revise the PFBC's trout management plan. Throughout 2007, the plan called for the development of work plans, identification of working group members, and the circulation and review of various background documents. This was to be a foundational year in this project with projected completion and action by the Commissioners by 2008.

The previous trout management plan, *Third Edition of the Management of Trout Fisheries in Pennsylvania Waters*, had been in effect since November 1997. In the intervening years, PFBC staff had conducted various studies and evaluations, creating a knowledge base from which future plans and policies could be guided. Substantial documentation acquired during this ten-year period included angler use and harvest assessments, statewide assessments of stocked trout residency in streams prior to opening day of trout season, assessments of opening weekend angler use, and cost-benefit studies of trout stream stocking.

Completed in mid-2009 and adopted by the Commissioners at their October 2009 Commission meeting, the *Strategic Plan for Management of Trout Fisheries in Pennsylvania 2010-2014* is considered by PFBC officials to be a major revision of the 1997 document. It incorporates information obtained from the various evaluations that together shed light on the status of the existing fisheries management program and details areas in need of improvement, identifies new opportunities and goals, and proposes strategies to achieve the goals and address identified needs.

A vision statement guides the plan's development in the context of the agency's "Resource First" policy:

The vision of the PFBC for trout management is to manage Pennsylvania's wild and stocked trout fisheries through the protection, conservation and enhancement of these fisheries and to provide high quality, diverse angling opportunities.

The plan is designed to set the immediate direction of trout management within the agency, identify the priority needs, and provide a means for measuring progress (i.e., annual progress reports will be provided) in regard to trout management. The plan's text is organized according to four resource categories:

- Management of wild trout waters
- Management of streams with trout fisheries maintained by stocking
- Lakes managed for trout
- Trout management in Lake Erie

See Exhibit 11 for specific goals developed for each of the resource categories.

Also, in developing this plan, 24 issues were identified as priorities by the work group. Each chapter presents the issues pertinent to that section and describes strategies related to them. These strategies are specific and measurable and, in many cases, completion dates have been established.

Issue 13, for example, states that PFBC hatchery water quality and quantity will affect future operational capability. The primary strategy to address this issue, the development of a database to track water quantity and quality at each hatchery in order to more effectively comply with environmental regulations and plan future production capacity, is to be completed by 2013.

Issue 15 states "that the cost to operate the stocked trout program is significant and, as such, the PFBC must investigate ways to operate hatchery operations and [improve] efficiency." In this case multiple strategies were developed. One strategy is to limit trout production cost increases to the greatest extent feasible. To address this strategy, the plan lists the following approaches:

- Utilize the computerized trout production program to improve the efficiency of fish feed use.
- By 2014, purchase mechanical egg pickers and fish pumps to reduce labor costs in incubating trout eggs and moving fish between rearing units.
- By 2014, investigate the use of technological advancements as well as part-time employees instead of full-time staff to further limit increases in overall costs.

A number of other strategies and approaches are described in addressing Issue 15. Addressing all 24 issues, according to the plan, will be the focus of PFBC trout management from 2010 through 2014 (a summary of these issues is provided in Appendix H).

Trout Plan Goals for Specific Resource Categories

Goals for:

Management of Pennsylvania's Wild Trout Waters

1. Maintain Class A wild trout populations at Class A densities.
2. Improve wild trout populations where possible.
3. Identify new wild trout populations.
4. Maintain or improve free public access to these waters.
5. Use hatchery reared trout according to approved policy to provide high quality recreational angling opportunities where appropriate.

Management in Streams with No Natural Reproduction of Trout

1. Enhance angling diversity and provide high quality recreational trout angling opportunities through the stocking of adult trout.
2. Maintain or enhance public access to these stocked trout sections.
3. Maintain or enhance the quality of the water and habitat that support these fisheries.

Management in Trout Stocked Lakes

1. Enhance angling diversity and provide recreational trout angling opportunities through the stocking of adult trout.
2. Provide year-round angling opportunities for trout in two-story lakes.^a
3. Provide a trophy trout fishery.

Management in Lake Erie

1. Restore stocks of native lake trout.
2. Provide recreational angling opportunities through the stocking of steelhead and brown trout.

^aTwo-story lakes are lakes capable of sustaining trout populations on a year-round basis.

Source: *Strategic Plan for Management of Trout Fisheries in Pennsylvania: 2010-2014*, PFBC, Bureau of Fisheries, October 2009.

Continue With Growing Greener II Hatchery Upgrades. This assignment has been continuously part of each APOW. In 2002, a report on an independent comprehensive evaluation of the PFBC fish production system provided multiple options to upgrade PFBC's hatcheries to improve effluent water quality and enhance fish production efficiency. Following enactment of the Growing Greener II initiative in 2005 (Act 2005-45), the PFBC received \$27.5 million of which the PFBC allocated \$24.5 million to fund some of the recommended waste water treatment upgrades at the hatcheries suggested by the consultant.

Exhibit 12 presents information on the status of this program as of April 2010.

Exhibit 12

Cost and Status of State Fish Hatchery Improvements and Renovations
(Estimated as of April 2010)

<u>State Fish Hatchery</u>	<u>Total Cost</u>	<u>Status</u>
Bellefonte	\$3.1 million	100 percent complete. Installed state-of-the-art microscreen filtration system that went on line in September 2009. During first five months of operation total suspended solids (TSS) levels in the hatchery effluent were reduced about 60 to 65 percent.
Benner Spring...	\$3.1 million	Effluent treatment and recirculation system similar to the one currently in use at the Bellefonte facility is under construction and is expected to be operational by summer 2010.
Huntsdale.....	\$4.3 million	Effluent treatment system, including microscreen filtration and a new settling pond, are being constructed and will be operational in 2010.
Pleasant Gap	\$1.36 million	Phase 1— Installed state-of-the-art microscreen filtration system with recirculation capability in 2007. TSS levels in the hatchery effluent decreased by 74 percent in the first year of operation. 100 percent complete by private contractor.
Reynoldsdale	\$7.5 million	Plans to replace the earthen pond rearing units with a state-of-the-art circular tank facility are in the final design stage. The new hatchery will be completely enclosed and will utilize both fresh and recirculated water. An effluent microscreen filtration system similar to the ones described above will also be installed. Construction is scheduled to begin in late 2010 or early 2011. ^a
Tylersville	\$1.67 million	Installed state-of-the-art microscreen filtration system in 2006 to treat entire hatchery discharge flow. Since this system became operational, the amount of TSS discharged into Fishing Creek has decreased by 60-70 percent.
Corry	\$959,198	Two new wells have been developed that will provide an additional 1,600 gallons per minute (gpm) of water to optimize production. The design for a pipeline to carry water to the hatchery is complete and start of construction is scheduled for 2010. Provision of this water will reduce the need to recirculate water within the hatchery resulting in better rearing conditions and lower ammonia levels in the hatchery effluent.
Oswayo.....	Not Available	Rehabilitation of a dormant well will provide an additional 400 – 500 gpm fresh water to optimize production. The design of the pipeline to the hatchery is currently under way. Use of this water will minimize the need to recirculate water within the hatchery, resulting in lower ammonia levels in the hatchery effluent.
Linesville	\$2.87 million	Due to limited Growing Greener II funding, this project has been put on hold. The estimated cost of the project is \$2.87 million.
Union City	\$916,370	New hatchery heater system installed. Due to limited Growing Greener II funding, other items have been put on hold. The estimated cost of the project is about \$1 million.

^a This project is currently under review.

Source: Developed by LB&FC staff from information obtained from the PFBC.

Complete a Full Economic Evaluation of Costs and Benefits of the Stocked Trout Program. A trout cost study report, developed by staff of the Bureau of Fisheries' Division of Fish Production, was presented and approved for release by the PFBC Commissioners during the April 2009 PFBC quarterly meeting. The study determined that the PFBC spends \$2.17 to produce an average adult trout (in terms of direct costs). This amount was calculated by averaging the pertinent costs over two fiscal years—FY 2006-07 and FY 2007-08. The study also found the trout program production costs to be competitive with retail prices at commercial hatcheries. The average price to produce a similar sized adult trout from three Pennsylvania commercial trout farms was \$2.57.

The study also determined that the total cost to produce and stock an adult trout is \$2.73. Although the direct hatchery costs to produce trout are the most applicable in determining production costs and comparing hatcheries, other costs are involved in the stocked trout program. These other costs include activities undertaken outside the Division of Fish Production and used to manage the stocked trout fishery and complete infrastructure upgrades to comply with applicable effluent permitting standards. When all related and indirect costs are included in the calculation, the per trout cost increases to \$2.73. The total program cost associated with the stocked trout program was also calculated. Table 20 summarizes the information for each of the major cost categories. Based on this information, the total cost to the PFBC for the stocked trout program is about \$12.4 million per year. The majority of these costs, \$8.2 million or 66 percent, are incurred by the Division of Fish Production. An additional 23 percent of expenditures come from the divisions and bureaus that support the program and indirect costs. Approximately 5 percent of the costs may be assigned to the fixed assets and capital projects undertaken each year at the hatcheries. Growing Greener II projects (non-PFBC budget) account for another 6 percent of the annual expenses for the stocked trout program.

Complete a Full Hatchery Program Review. In 2007, the PFBC undertook a full hatchery program review that was intended to evaluate all fish production needs, current and potential hatchery production as well as potential future modifications in hatchery alignment and staffing. Outputs initially envisioned for this project included:

- work with staff, public, and Commissioners to fully identify fish production needs;
- evaluate hatcheries for potential for expansion and consolidation of production;
- define range of scenarios for production options that optimize facilities, staff, and expenses to create a more efficient and productive program; and
- initiate annual inspections of all hatchery facilities to ensure adherence to operational guidelines and facility maintenance.

Table 20

Annual Costs for the Various Components of the Stocked Trout Program

(Based on Cost Data for FY 2006-07 and FY 2007-08)

	<u>Personnel</u>	<u>Operations</u>	<u>Fixed Assets</u>	<u>Total</u>
Bureau of Fisheries (Administration)	\$ 486,772	\$ 58,921	\$ 0	\$ 545,693
Division of Fish Production	5,389,776	2,827,084	0	8,216,860
Bureau of Engineering and Property Services .	355,497	99,279	0	454,776
Bureau of Law Enforcement	191,255	34,717	0	225,972
Fixed Asset and Capital Expenditure ^a	0	0	571,000	571,000
Growing Greener II Program ^b	0	0	725,200	725,200
Indirect Costs ^c	<u>1,641,153</u>	<u>0</u>	<u>0</u>	<u>1,641,153</u>
Total	\$8,064,453	\$3,020,001	\$1,296,200	\$12,380,654

^a Includes costs of vehicles, major equipment, and certain maintenance costs.

^b Includes the cost of hatchery renovations equalized over 34 years.

^c Cost factor of 25.55 percent of direct personnel costs.

Source: Developed by LB&FC staff using information obtained from the Pennsylvania Fish and Boat Commission.

This project was initially intended to begin in the summer or fall of 2007 and to be completed in mid-2008. The 2008 APOW adjusted the timeline to initiate most of the activities in 2008 with objective completion in 2009. The status report for 2008 indicated significant activity including gathering historical data, determining staffing needs, and developing hatchery inspection forms.

The 2009 APOW described three objectives to be completed during CY 2009:

1. develop a framework and study plan for fully documenting fish production needs in relation to desired fisheries;
2. develop a report/study framework and timeline that will evaluate a full range of scenarios for production options that optimize facilities, staff, and expenses to create a more efficient and productive program; and
3. develop annual inspection guidelines for all hatchery facilities to ensure adherence to operational guidelines and facility maintenance.

The first two objectives were to be completed by the end of the calendar year, and the third objective's target date was July 1. The fourth quarter APOW status report indicated that the Commission's adoption of the trout strategic plan at its October meeting will help to guide trout production needs (walleye and musky management plans were also in process and scheduled to be completed by December 2010). In relation to the second objective, Bureau of Fisheries' staff gathered and

analyzed various data, developed a range of scenarios for optimizing production, and submitted a draft report/study framework plan and timeline to the Bureau director. Draft inspection guidelines were completed during the first half of the year with the expectation that inspections would be initiated by December 2009.

The hatchery program review process is ongoing into 2010. Although it is clear that the recently adopted trout strategic plan has highlighted many of the issues that were to be addressed under the hatchery program review (see Appendix H), attention to these issues and to fulfillment of the trout strategic plan's goals and objectives will continue to unfold over the subsequent four or five years.

In view of the continuing staffing and financial limitations affecting the PFBC, a complete hatchery program review may be even more urgently needed. In particular, certain aspects of the hatchery review's original objectives may not receive the specific attention needed if such issues are to be solely addressed through the trout strategic plan, given its wide scope.

VI. The PFBC Has Formally Adopted a “Resource First” Policy That Supports Its Decision-Making

In 2007, the PFBC revised its mission statement to clarify that its primary mission is to protect the resource and its secondary mission is to provide recreational use of the resource. The change is not a new direction but rather a clarification of the philosophy that has guided the PFBC for nearly 30 years. The revised mission statement emphasizes that agency decisions are based on the long-term conservation of the Commonwealth’s aquatic resources, and that without quality resources recreational opportunities would be greatly diminished. In 2008, the Commissioners formally adopted a document that further explains the ramifications of this philosophy—known as “Resource First”—on PFBC operations.

“Resource First” Policy

Although “Resource First” is not new to the agency, it has been highlighted and reemphasized in the past decade through various Commission documents as the policy of the PFBC. The motto “Resource First” has been used by PFBC Commissioners and staff since 1987 to refer to a Commission-approved statement of policy from 1981.

Origin and History of the “Resource First” Policy

Adopted by the Commission in January 1981, the “Policy for the Conservation and Management of Fishery Resources” (58 Pa. Code §57.1) represented a change in agency focus from recreation first to resource first:

It will be the policy of the Commission to protect, conserve, and enhance the quality and diversity of the fishery resource of this Commonwealth including reptiles and amphibians and to provide continued and varied angling opportunity through scientific inventory, classification, and management of that resource. To achieve the objectives of this policy, the Commission will do all of the following:

- Establish and maintain a current database on the quality and quantity of the aquatic and fishery resources of the Commonwealth for effective environmental protection and resource conservation.
- Develop statewide management programs to assure consistent treatment of all resources within any given class. Similar waters will be managed to meet the same objectives under the same philosophy on a statewide basis.
- Manage self-sustaining fish populations as a renewable natural resource to conserve that resource and the angling it provides.

- Use hatchery fish to provide recreation in those waters where fish populations are inadequate to sustain the fishery at desired levels.
- Develop appropriate regulations and operational strategies to replace policies that are not compatible with management through resource classification.

Prior to 2007, the Commission’s mission statement was:

To provide fishing and boating opportunities through the protection and management of aquatic resources.

In July 2007, the Commission modified the agency’s mission statement to more clearly emphasize resource protection and conservation as follows:

The mission of the Fish & Boat Commission is to protect, conserve and enhance the Commonwealth’s aquatic resources and provide fishing and boating opportunities.

In April 2008, the Commissioners took formal action to adopt the most recent iteration of “Resource First,” clearly reaffirming the Commissioners’ expectations that the agency’s activities, regulations, and methods of work would be evaluated and practiced within the context of this philosophy. Selected sections of the “Resource First” policy include:

- “Resource First” is a philosophy that describes the first priority of the Commission’s mission and that of the Fish and Boat Code as well as the Commission’s fundamental role in fulfilling and supporting the provisions of Article 1, Section 27 (Natural Resources and Public Estate) of the Constitution of the Commonwealth of Pennsylvania.¹
- The “Resource First” philosophy further establishes the ethical principle that the agency’s primary role is that of a conservation organization. Accordingly, its responsibility extends beyond merely providing fishing and boating opportunities to the public. Rather, it establishes a commitment to optimizing those opportunities through the application of good science throughout the Commonwealth.
- A “Resource First” management strategy demands continual assessment of the resource, an ongoing evaluation of the impact of angling pressure on that resource, and a commitment to making changes as conditions dictate. Such changes will be directed toward insuring that the diverse fisheries of

¹Article I, Section 27 states: “The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania’s public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.”

the Commonwealth become and remain the best attainable consistent with the social and environmental stresses placed upon them.

“Resource First” Policy and Organizational Direction

The “Resource First” policy is reflected in changes to PFBC’s organizational structure that occurred in 2005 and 2007. These changes most directly affected the Bureau of Fisheries including:

- Creation of a Division of Habitat Management within the Bureau of Fisheries.
- Relocation of the Environmental Services Division from the Executive Office to the Bureau of Fisheries.
- Creation of the Three Rivers Ecological Research Center as a multi-agency, collaborative facility to support research and natural resources management of the major rivers of western Pennsylvania.²

Threats to Pennsylvania’s Aquatic Resources

The condition of Pennsylvania’s water resources are of concern to many Pennsylvanians. In response to LB&FC’s administered surveys to PFBC Commissioners and to stakeholders, the issues of water quality and threats to aquatic resources were mentioned by a number of respondents. Other threats include climate change, energy extraction and transmission, and associated water and land development.

Pennsylvania has about 85,000 miles of streams and rivers. There are also some 4,000 lakes and impoundments providing 160,000 acres of recreation. These waters are home to 170 species of fish, nearly 1,000 different aquatic insects, roughly 38 species of freshwater mussels, and 78 species of amphibians and reptiles.

Threats From Pollution

Waters that are unable to support the fish and other aquatic life that they once did are considered to be impaired or degraded. Even though some of these waters still hold fish, many no longer sustain aquatic communities that should be present due to pollution. In Pennsylvania, two major kinds of pollution impair our waters: agricultural runoff and abandoned mine drainage (AMD). These pollution sources put excess nutrients, siltation, and metals into our waters.

² At the April 2010 quarterly Commissioner’s meeting, the PFBC voted to terminate the Three Rivers Ecological Research Center in Pittsburgh.

Agricultural runoff occurs when runoff from rain or melting snow carries soil, pesticides, and fertilizers from fields into nearby waters. When soil is carried into a stream or river, it can suspend in the water to make it cloudy, or it settles to the bottom as silt. Silt in the water can damage some fish's gills and make breathing difficult. Cloudy water also absorbs more sunlight than clear water, which can raise the water temperature. A temperature that is too high can stress or kill aquatic organisms.

AMD occurs when water enters abandoned coal mines or is transported as runoff from mine lands and refuse piles, reacting with the coal and surrounding rocks to form acids. As these acids enter our waters, the pH level is lowered, killing algae and other aquatic plants, thus reducing the food supply.

Threats From Invasive Species

Aquatic invasive species (AIS, also referred to as aquatic nuisance species or ANS) are aquatic animals and plants that have been introduced into waterways in which they do not live naturally. They have harmful effects on the natural resources in these ecosystems and the human uses of these resources. A recent example is the Asian carp. Asian carp are a threat because of their large size, reproductive success, and ability to consume large amounts of food year round, damaging the habitat and disrupting the food chain. They can also be hazardous to boaters and water sport enthusiasts. When startled, Asian carp are capable of jumping six to ten feet out of the water and into moving boats causing property damage and injuring boaters. Although Asian carp are not yet breeding in Pennsylvania waters, there is great concern that they could become a dominant fish in the Commonwealth's lakes and rivers.

Examples of Threats to Commonwealth Waters

Recent specific issues and events affecting Commonwealth waters include:

- The Susquehanna River — In 2005, PFBC biologists began finding unusually high numbers of dead or distressed smallmouth bass in the middle reaches of the Susquehanna River. Upon examination, the fish were determined to be suffering from infections related to a common soil and water bacteria (*Flavobacterium columnare*), considered a secondary infection brought on by environmental or nutritional factors that stress fish, weakening their ability to cope with the bacterial agent. At its January 2010 regular meeting, the Commission passed a resolution strongly recommending that the PA Department of Environmental Protection (DEP) and the U.S. Environmental Protection Agency expand efforts to determine

the sources and causes of pollution that are contributing to the demise of the river's smallmouth bass fishery.³

- Stream in Southwestern Pennsylvania — First detected in September 2009, more than 30 stream miles in Pennsylvania and West Virginia were impacted by a discharge originating from West Virginia that contains high levels of total dissolved solids (TDS). At least 16 species of freshwater mussels and at least 18 species of fish were killed by this pollution event in Dunkard Creek.
- Freight Train Derailment — On June 30, 2006, a Norfolk Southern Freight train derailed near the village of Gardeau, McKean County. Three tank cars carrying 50 percent sodium hydroxide ruptured, spilling approximately 42,000 gallons of caustic chemical onto the ground, into Big Fill Run, and then into Sinnemahoning Portage Creek, where it then travelled more than 30 miles downstream. The release of the liquid contaminated soils, sediments, surface water, groundwater, and wetlands, and killed or injured fish and other aquatic life and terrestrial plant and animal life. See Appendix F for further information.
- Round Gobies (an Aquatic Invasive Species) — Anglers in Erie County were recently urged by the PFBC to help prevent the spread of these aquatic invasive species known as the round goby. Round gobies are known for their voracious eating habits and officials are concerned that they could severely harm bottom-dwelling fish, including rare darter and minnow species populations.
- Viral Hemorrhagic Septicemia — VHS is a highly contagious disease that is easily transmissible to fishes of all ages and many different species. Survivors of the infection can become lifelong carriers of the disease. Recent outbreaks in the Great Lakes appear to be a new, mutated strain of the marine virus that has become pathogenic for freshwater fish.

PFBC's Role in Addressing Threats to Aquatic Resources

The PFBC plays an important role in protecting and improving aquatic resources. The following organizational activities comprise some very important ongoing functions and activities of the Bureau of Fisheries. The Bureau directs the management and protection of all fish, reptiles, amphibians, aquatic invertebrates, threatened and endangered non-game species, and those habitats in the Commonwealth that fall under the PFBC's jurisdiction.

³ At its April 2010 meeting, the Commission authorized the PFBC Executive Director to approve grants of \$100,000 or less per year in support of PFBC approved studies relating to the Susquehanna River. In addition, the Commissioners approved \$200,000 for this effort in January 2009.

Division of Habitat Management

Habitat management is an important aspect of fisheries management due to the impact of habitat on fish and other aquatic organisms. The characteristics of habitat play a large role in determining the numbers, sizes, and species that can be sustained. Although the PFBC has been involved in habitat improvement for decades, the creation of the Division of Habitat Management and expansion of the number of personnel working on habitat has placed an emphasis on this issue.

The Division provides technical assistance to identify, coordinate, finance, implement, and monitor habitat projects. The Technical Assistance Program (TAP) was created to increase the Division's ability to provide assistance for habitat improvement on private lands. The Cooperative Habitat Improvement Program (CHIP) has completed over 700 habitat enhancement projects in relation to wild trout waters, and enhancing and restoring waters so they host healthier ecosystems. The Division also carries out the functions of improving fish passage and removing unnecessary dams. Pennsylvania reportedly leads the nation in dam removal for stream restoration.

The Division has successfully employed investment strategies that leverage public and private funds to help make conservation dollars go further. The Division works to build partnerships to solve problems in fisheries. Habitat biologists conduct or participate in monitoring studies to evaluate project impacts on physical habitat, water quality, and flora and fauna.

Division of Environmental Services

The Pennsylvania Department of Environmental Protection regulates what industries release into the air or water and has regulations in place protecting banks and channels in rivers, lakes, and streams. Before any substances can be discharged into a stream or lake, a permit must be obtained. The PFBC (through its Division of Environmental Services) reviews these permit applications and monitors compliance with the permit. The PFBC utilizes its technical expertise to ensure that fish communities are not harmed by the proposed activities.

Commission staff reviews as many as 3,000 permit applications each year. This involves activities such as stream and wetland encroachments; dam construction; surface water applications of aquatic herbicides; municipal, residual, and hazardous waste management; blasting in Commonwealth waters; acid deposition; surface water withdrawals; oil and gas development; and erosion and sedimentation controls. These reviews are coordinated with other affected PFBC program areas including engineering and development, fisheries management, habitat management, boating and education, and law enforcement. Comments on permits are coordinated with other natural resource agencies such as the Pennsylvania Game Commission, the Department of Conservation and Natural Resources, and the U.S. Fish and Wildlife Service.

Staff assists both state and federal law enforcement agencies with authority for water pollution control. Damages to fish and aquatic life communities and associated recreational use (fishing and boating) losses are estimated and recovered to compensate the Commonwealth for aquatic life damages resulting from water pollution. Staff provides expert witness opinions and testimony about the toxicity of various substances to aquatic life. Large penalties are often placed in restricted accounts, which are then used to fund projects to restore affected waterways or watersheds. See Appendix F for additional information on recent pollution case and natural resource damages settlements.

Three Rivers Ecological Research Center

Pennsylvania's Ohio River Basin contains 80 percent of the Commonwealth's state-listed threatened and endangered fish species, highlighting the area's importance for conservation. Initiated in 2005, the Center was involved in coordination, planning, and monitoring projects in Pennsylvania's Ohio River Basin. When fully functional, it was expected that the Three Rivers Center would improve the PFBC's capacity to protect, conserve, and enhance aquatic resources, including species of greatest conservation need, by focusing on critical issues. The Center was to provide oversight of major research initiatives, and serve as a clearinghouse for aquatic information necessary for management of the rivers.

At the quarterly Commissioner's meeting in April 2010, the PFBC voted to terminate the Three Rivers Ecological Research Center in Pittsburgh due to anticipated funding streams failing to materialize after four years in operation. Since its inception, financial support for the Center had been provided through a \$420,000 State Wildlife Act Grant (SWG) from the U.S. Fish and Wildlife Service. This grant money had been exhausted, and the PFBC decided to allocate future SWG funding to other projects, including those that will benefit the Three Rivers region. The PFBC will continue its work on the Three Rivers through the southwest fisheries management area.

Activities Related to Resource Protection, Maintenance, or Enhancement

Dam Removal. Approximately 3,000 jurisdictional dams exist in Pennsylvania, and thousands more are non-jurisdictional or un-regulated. Most (75 percent) are small—less than 25 feet high—and three-quarters are privately owned. Hundreds are at least 75 years old, with many 100 to 150 years old. Many dams no longer serve the function for which they were constructed and present safety hazards and liability risks to communities. Removal of such dams enables stream flow, restores habitat, and fosters sustainable fish populations, especially migratory species such as salmon, shad, and striped bass. Removal also eliminates owner liability and long-term maintenance costs. Pennsylvania reportedly leads the nation in dam removal projects with more than 120 completed in the past 10 years and an additional 100 projects ongoing. These projects have also resulted in the expansion

of partnerships working with PFBC and more than \$5 million of private and public funding obtained for the projects.

Class A Wild Trout Streams. The PFBC has identified roughly 45,000 flowing waters within the Commonwealth that have yet to be surveyed and have the potential to support populations of wild trout. Pursuant to 58 Pa. Code §57.8a (relating to Class A wild trout streams), it is the Commission's policy to recognize self-sustaining Class A wild trout populations as a renewable natural resource meriting special consideration in development of fisheries management plans and water quality/habitat protection. The PFBC policy statement provides that "Class A wild trout populations represent the best of this Commonwealth's naturally reproducing trout fisheries. These stream sections are managed solely for the perpetuation of the wild trout fishery with no stocking."

At its April 2010 Commissioner's meeting, the PFBC approved adding nine stream sections to the list of Class A wild trout streams, adding 61 new waters to the list of wild trout streams, and adjusting the limits of 20 wild trout waters. The changes were primarily the result of recent surveys conducted on these waters. The Commissioners also voted to authorize the executive director to provide grants of \$100,000 or less per year to qualified universities, organizations, agencies, and other entities to conduct surveys on unassessed streams that are likely to contain wild trout. Surveying unassessed waters and documenting wild trout populations are consistent with the Commission's recently adopted *Strategic Plan for Management of Trout Fisheries in Pennsylvania 2010-2014* and the agency's "Resource First" philosophy. A list of Class A wild trout waters is available on the PFBC's website at: <http://www.fishandboat.com/classa.pdf>.

Inspections and Complaint Investigations. Staff of the Division of Environmental Services (DES) assist the Bureau of Law Enforcement in its enforcement activities. For example, the DES tested water samples taken by WCOs during their inspections of Marcellus Shale drilling sites. See Finding VII for further discussion.

Great Lakes Restoration Initiative Aquatic Invasive Species Funding. In March 2010, the U.S. Fish and Wildlife Service invited the PFBC to submit a proposal for funding consideration under the Great Lakes Restoration Initiative, which provides reimbursable, cost-share grants for implementation of federally approved Aquatic Invasive Species Management Plans.⁴ Pennsylvania has such a plan and is eligible for funding. At the April 2010 Commissioner's meeting, the PFBC authorized the executive director to approve individual grants utilizing \$100,000 or less of Great Lakes Restoration Initiative pass-through monies per grantee per year for projects that implement elements of Pennsylvania's Aquatic Invasive Species Management Plan.

⁴ In April 2010, the PFBC received \$792,000 for their efforts to minimize the spread of aquatic invasive species.

VII. The PFBC Is Preparing for the Potential Impact of Marcellus Shale Drilling

The PFBC has recently adopted an administrative policy to address oil and gas explorations, extraction, access, and transmission on PFBC-owned properties and water withdrawals from PFBC-owned waters and PFBC-owned access areas. This policy is applicable to Marcellus Shale drilling. The Commission owns relatively little land; approximately 33,500 acres (compared to, for example, the Pennsylvania Game Commission's 1.4 million acres). However, in addition to having property in the areas of the state with Marcellus Shale resources, the PFBC also has water near drilling sites that may be sought by gas companies to facilitate drilling efforts. Although the PFBC has not leased land or granted access to water for drilling as of early 2010, it has been contacted by several companies seeking drilling sites, water resources, or access rights.

The lack of drilling sites on PFBC property, however, does not mean Marcellus Shale drilling activities have not affected the PFBC. Since drilling sites on lands near a water resource may affect the water resource, the PFBC voluntarily used its waterways conservation officers (WCOs) and staff biologists in 2009 and 2010 to conduct inspections of these sites due to limited Department of Environmental Protection (DEP) inspection staff. Due to that potential damage, the PFBC executive director directed its WCOs to conduct inspections of Marcellus Shale drilling sites within 1/8 mile of a water resource in order to focus its efforts on proactively protecting the resource from damage. This effort, however, did not receive specific funding and follow-up of problems identified by PFBC inspections is continuing as allowed by available staff time. Coordination with DEP staff is occurring when possible.

Description of Marcellus Shale

The Marcellus Shale is a rock formation that underlies much of Pennsylvania and portions of New York and West Virginia at a depth of 5,000 to 8,000 feet and is believed to hold trillions of cubic feet of natural gas. See Exhibit 13 for a map of the Marcellus Shale formation. This formation has long been considered prohibitively expensive to access but recent advances in drilling technology and rising natural gas prices have attracted new interest in this previously untapped formation. In Pennsylvania, it is primarily located from the southwestern corner through to the northeastern corner of the state. The geology of the Marcellus formation suggests that areas in the northcentral and northeastern regions of Pennsylvania that have not traditionally seen much gas well drilling might be especially productive.

Marcellus Shale Formation



Source: American Association of Petroleum Geologists.

Extracting natural gas from the Marcellus Shale formation requires horizontal drilling and a process known as ‘hydraulic fracturing’ that uses far greater amounts of water than traditional natural gas exploration. Drillers pump several millions of gallons of water mixed with sand and other components into the shale formation under high pressure to fracture the shale around the well, which allows the natural gas to flow freely. Once the hydraulic fracturing process is completed, the used water, often referred to as “frac fluid,” must be treated to remove chemicals and minerals.

Oil and gas exploration and drilling is regulated under all or part of the state oil and gas laws, the Clean Streams Law, the Dam Safety and Encroachments Act, the Solid Waste Management Act, the Water Resources Planning Act, and the Worker and Community Right to Know Act. The DEP is responsible for reviewing

and issuing drilling permits, inspecting drilling operations, and responding to complaints about water quality problems. Other agencies directly responsible for monitoring the effects of drilling on water quality and aquatic life include the Pennsylvania Fish and Boat Commission, the Susquehanna and Delaware River Basin Commissions, and the U.S. Fish and Wildlife Service.¹

Leases for the extraction of gas from the Marcellus Shale represent the potential for significant revenue for the owner of the gas rights on the property. In addition, companies need access to water resources to extract the gas. Access to a drilling or water resource site, or the need for a pipeline to transport the gas, may also require leasing a right-of-way across property. Revenues may include gas royalties as well as leases for the right-of-ways. As the technology to extract the gas was demonstrated to work efficiently, signing bonuses reportedly increased from several hundred dollars an acre in 2007 to over \$2,000 an acre in 2008 for the most desirable properties. A recent study reported that in 2009, Fortuna, a Canadian company, paid \$5,500 an acre plus royalties of 20 percent over five years if gas is produced at the site, for rights to drill on 30,000 acres in Bradford County.²

PFBC Property Ownership and Resource Management

The PFBC controls approximately 33,500 acres of land through direct ownership, lease, or easement, on which there are four dozen lakes and nearly 250 boating access or shoreline fishing areas. The potential value of the PFBC properties for gas and oil extraction, however, is hampered by the lack of knowledge of whether the Commission owns the subsurface rights to its land. The PFBC, like the Pennsylvania Game Commission (PGC), has received tracts of land over the years that have been pieced together to create larger sites. A single site, therefore, may have numerous types of ownership associated with it. In the past, when acquiring a property, the PFBC has been focused primarily on the surface rights.

The PFBC has an electronic data base of its properties, but the database does not include the subsurface ownership rights in all cases. As Table 21 shows, the PFBC rights to the majority of its land holdings are undetermined. As shown on Table 21, those parcels where the rights are not known represent over 17,000 acres (81 percent) and are comprised of 582 individual tracts of land (excluding identified sensitive areas). Although over the last 10 years, the PFBC has been identifying the subsurface rights of property it acquires, the Commission does not currently

¹ The Environmental Protection Agency recently announced a study of the potential human health and water quality threats from an oil and natural gas technique that injects massive amounts of water, sand, and chemicals underground. This process is known as “fracking” and is used to access the natural gas in Marcellus Shale. A report is expected to be completed by 2012.

² M. Jacobson, B. Lord, M. McDill, A. Kleit, T. Engelder, and A. Broucek, *Examination of Current and Future Costs and Revenues From Forest Products and Oil, Gas, and Mineral Extraction on Pennsylvania Game Commission Lands*, a report prepared for the Legislative Budget and Finance Committee pursuant to House Resolution 2007-193, January 2010.

have the staff resources to determine these rights for all properties since it would require searching title to each individual tract of land to determine the rights applicable. Since cataloguing all properties at this time appears to be unlikely, the Commission plans to target their larger properties to determine the subsurface rights in order to issue them for competitive bid to the drilling companies. A Commission official has identified about 10 sites that could be of interest for drilling.

Table 21

PFBC Oil/Gas/Mineral Ownership*

<u>PFBC Oil/Gas/Mineral Ownership</u>	<u>Number of Properties</u>	<u>Total Fee Acres</u>	<u>Number of Individual Tracts</u>	<u>Lake Surface Acres</u>
0 Percent.....	10	867.03	22	96.30
Various Percentages	3	1,500.70	11	60.05
100 Percent	23	1,842.76	38	519.70
Undetermined	<u>173</u>	<u>17,568.79</u>	<u>582</u>	<u>4,676.09</u>
Total.....	209	21,779.28	653	22,641.28

*Known PFBC sensitive areas are excluded from this table. See Exhibit 14 for a listing of these properties.

Source: Pennsylvania Fish and Boat Commission.

Due to staffing needs as well as the need for industry expertise, activities related to Marcellus Shale on PFBC properties are being carried out by the Director of the Office of Administration, Boating and Engineering. His goal is to hire an individual who can manage and market all timber, oil, gas, and mineral resources for the Commission. He noted that ideally this individual would have industry experience with these types of negotiations, which would put the Commission in a more informed bargaining position. The PFBC, however, also plans to use the experience of other Commonwealth agencies to assist in these efforts.

As of March 2010, several companies have contacted the PFBC regarding Marcellus Shale activities. Of those, seven are seeking gas exploration, three are seeking water resources for their drilling activities, and one is seeking to use PFBC property to access a site with other Commonwealth-owned waters. Reportedly, the companies involved in drilling tend to concentrate in a specific area of the state, which would allow the PFBC to identify the company drilling in a particular area and offer access to its water resources. The PFBC does not have an estimate of the potential for revenue from these companies at this time.

Other Agencies' Management of Resources

The PGC manages 1.4 million acres of state game lands and the Department of Conservation and Natural Resources (DCNR) manages 2.1 million acres of state forest lands. As discussed in a recent report,³ since the PGC does not know its ownership rights on all of its properties, the Commission does not on its own volition designate tracts for drilling. Rather, tracts are “nominated” by drilling companies, and the PGC determines which ones to set out for lease after determining its subsurface ownership rights. As reported in its 2008-09 Annual Report, the PGC has begun to identify ownership of the subsurface rights on its properties.⁴

DCNR owns approximately 80-85 percent of the mineral rights on state forest lands and maintains an informal nomination process for lands to be leased.⁵ Proposed oil and gas leases are advertised on the Bureau's website, in the Pennsylvania Bulletin, the Oil and Gas Journal, and letters are sent to a list of potential bidders before such a lease is offered for competitive bidding. The Bureau of Forestry uses a bid bond procedure where the price per acre is the variable and the royalty rate is set. DCNR recently leased 31,967 acres, at approximately \$4,000 an acre, generating \$128.4 million in bid revenue. To date, approximately 700,000 acres of DCNR state forest lands are leased for Marcellus Shale drilling.⁶

PFBC Oil and Natural Gas Policy

In February 2010, the PFBC implemented a policy to address oil and natural gas exploration, extraction, access, and transmission on PFBC-owned properties and water withdrawals from PFBC-owned waters and PFBC-owned access areas.⁷ The stated purpose of the policy is “to provide the approved procedures for evaluating opportunities and approving oil, natural gas, and water withdrawal-related projects which provide economic benefits to the PFBC.” The policy notes, however, that any action related to these efforts needs to be consistent with the PFBC's mission to “protect, conserve, and enhance aquatic resources and provide fishing and boating opportunities.” The executive director has also indicated that no drilling rights will be leased if there is any concern about interference with the water resource.

³ Jacobson, 114.

⁴ The PGC reports that oil, gas, and mineral research was conducted on 214 parcels representing over 121,740 acres of game lands.

⁵ DCNR does not own the mineral rights under 75 percent of the state parks.

⁶ This includes 410,000 acres of state forest lands where the DCNR owns the mineral rights and 290,000 acres of state forest lands where these rights are owned by private parties.

⁷ The PFBC has a policy titled *Real Property Acquisition, Use, Management, and Disposition*, which is to be incorporated into efforts conducted under the new policy. In some cases, PFBC conditions for its own properties may be more restrictive than state law. PFBC has proposed amendments to the Oil and Gas Act to improve protection of water resources.

The policy prohibits projects in areas classified as sensitive areas by the PFBC. These include areas:

- within 125 feet of any body of water (standing or flowing),
- containing a wetland greater than one acre in size,
- with and within 50 feet of any existing improvements for access or use, or
- within a 400-foot radius immediately surrounding a well, spring, or infiltration gallery.

Exhibit 14 shows the sensitive areas that have been specifically identified in the policy. About half of the sites deemed “sensitive areas” are in counties that are in the Marcellus Shale region. The addition or removal of natural gas lines, laterals, and other oil and gas-related infrastructure through sensitive areas is, however, to be considered on a case-by-case basis.

Exhibit 14

PFBC Identified Sensitive Areas

Acres	Sensitive Area	County
130.3	Reynoldsdale State Fish Hatchery	Bedford
21.58	Five Locks Access	Berks
187.8	Kaerchers Creek Lake	Berks
12.4	Schuylkill Canal	Berks
0.4	Upper Black Eddy	Bucks
195.0	Bellefonte State Fish Hatchery	Centre
37.7	Pleasant Gap State Fish Hatchery	Centre
135.3	Spring Creek (Levin Property)	Centre
39.5	Tylersville State Fish Hatchery	Clinton
244.0	Big Spring	Cumberland
164.4	Huntsdale State Fish Hatchery	Cumberland
315.9	Corry State Fish Hatchery	Erie
88.7	Fairview State Fish Hatchery	Erie
87.5	Union City State Fish Hatchery	Erie
380.3	Tionesta State Fish Hatchery	Forest
20.3	Chillisquaque Access	Northumberland
17.5	Frankford Arsenal Access	Philadelphia
3.7	Tacony Access	Philadelphia
28.6	Little Sandy Creek	Venango
122.8	Hankins Pond	Wayne
104.4	Miller Pond	Wayne
116.8	Pleasant Mount State Fish Hatchery	Wayne

Source: PFBC Administrative Policy 2010-003 (February 25, 2010).

The policy directs staff to conduct a preliminary evaluation of all projects. The evaluation includes, for example, a determination of the effect on the environmental quality of the property and a title search to ensure that the PFBC is the owner of the oil and/or natural gas rights on the property. Once the preliminary evaluation is completed and approved by the Deputy Director of Administration, Boating and Engineering, a formal evaluation occurs. Formal evaluation confirms property lines and property rights and, through a field examination, determines the impact on public access and use of the property. It also identifies the need for any special contract provisions. Once the formal evaluation is conducted and the project is approved, the PFBC will bid and contract for the exploration, management, and extraction of oil and/or natural gas from PFBC property. In certain cases, Commissioner approval may be required. The policy also calls for a monitoring plan to be developed for the impacted area.

PFBC Inspections of Marcellus Shale Drilling Sites

The PFBC Commissioners have been briefed by staff on several occasions since 2007 on Marcellus Shale and its potential impacts as well as that of oil and gas drilling in general. In reaction to concerns, the Commissioners directed letters to be sent to DEP regarding permit reviews (of all types) for projects located on exceptional value wetlands and watersheds and to DCNR to request that the agency restrict oil and gas drilling within a certain distance of streams.⁸ These letters, however, were not sent reportedly due to concerns about interfering with the other agencies' authorized activities. In November 2009, however, the PFBC announced that it would begin conducting field inspections of active drilling sites for Marcellus Shale gas wells beginning in December since DEP did not have the inspection staff necessary to inspect these sites due to increased drilling activity related to Marcellus Shale. The former PFBC executive director noted at that time that the Commission was seeking to have a proactive rather than solely a reactive approach to identify problems with the drilling. Prior to that, the PFBC had only responded to complaints regarding problems at the sites resulting in material from the drilling site entering the waterways and wetlands.

The PFBC chose to focus on the drilling sites in close proximity to waterways and wetlands. To identify those sites, the PFBC reviewed the Spud (the term used for the beginning of the drilling of a well) report from DEP that lists those wells that have been given permits to drill to determine which of those wells were within 1/8 mile of a water resource. That information was forwarded to the appropriate WCO. As Table 22 shows, in 2008 DEP issued 476 permits and 195 wells were drilled, and in 2009 DEP issued 1,984 permits and 763 wells were drilled, a 391 percent increase in the number of wells drilled.

⁸ The PFBC is currently working with DEP to address this concern through a possible amendment to the Oil and Gas Act.

Table 22

**Marcellus Shale
Permits Issued and Wells Drilled**

<u>County</u>	<u>CY 2008</u>		<u>CY 2009</u>	
	<u>Permits Issued</u>	<u>Wells Drilled</u>	<u>Permits Issued</u>	<u>Wells Drilled</u>
Adams.....	0	0	0	0
Allegheny.....	1	1	5	2
Armstrong.....	5	2	42	17
Beaver.....	0	0	6	0
Bedford.....	0	0	0	0
Berks.....	0	0	0	0
Blair.....	0	0	2	0
Bradford.....	52	14	430	113
Bucks.....	0	0	0	0
Butler.....	10	10	42	8
Cambria.....	0	0	6	2
Cameron.....	3	0	5	1
Carbon.....	0	0	0	0
Centre.....	8	5	42	7
Chester.....	0	0	0	0
Clarion.....	3	0	8	4
Clearfield.....	8	4	72	27
Clinton.....	8	3	41	12
Columbia.....	0	0	2	0
Crawford.....	0	0	0	0
Cumberland.....	0	0	0	0
Dauphin.....	0	0	0	0
Delaware.....	0	0	0	0
Elk.....	18	6	22	4
Erie.....	0	0	0	0
Fayette.....	35	18	88	55
Forest.....	1	0	4	5
Franklin.....	0	0	0	0
Fulton.....	0	0	0	0
Greene.....	39	18	182	91
Huntingdon.....	0	0	0	0
Indiana.....	10	3	19	8
Jefferson.....	0	0	6	2
Juniata.....	0	0	0	0
Lackawanna.....	0	0	28	1

Table 22 (Continued)

<u>County</u>	<u>CY 2008</u>		<u>CY 2009</u>	
	<u>Permits Issued</u>	<u>Wells Drilled</u>	<u>Permits Issued</u>	<u>Wells Drilled</u>
Lancaster.....	0	0	0	0
Lawrence.....	0	0	0	0
Lebanon.....	0	0	0	0
Lehigh.....	0	0	0	0
Luzerne.....	0	0	1	0
Lycoming.....	48	14	107	24
McKean.....	10	3	10	10
Mercer.....	0	0	0	0
Mifflin.....	0	0	0	0
Monroe.....	0	0	0	0
Montgomery.....	0	0	0	0
Montour.....	0	0	0	0
Northampton.....	0	0	0	0
Northumberland.....	0	0	0	0
Perry.....	0	0	0	0
Philadelphia.....	0	0	0	0
Pike.....	0	0	0	0
Potter.....	10	3	31	8
Schuylkill.....	0	0	0	0
Snyder.....	0	0	0	0
Somerset.....	2	0	18	3
Sullivan.....	0	0	1	0
Susquehanna.....	62	32	155	60
Tioga.....	27	8	300	114
Union.....	0	0	0	0
Venango.....	0	0	0	0
Warren.....	0	0	0	0
Washington.....	86	31	209	138
Wayne.....	2	1	1	0
Westmoreland.....	28	19	88	46
Wyoming.....	0	0	11	1
York.....	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total.....	476	195	1,984	763

Source: Department of Environmental Protection.

Prior to conducting inspections, the WCOs received training in January 2009 that included Marcellus Shale gas drilling issues and a review of the DEP regulations. In addition to the WCOs, PFBC biologists assisted with the inspections to determine whether the water resource was subject to damage by the drilling. The WCOs checked whether:

- an erosion and sedimentation (E&S) plan is needed and, if so, whether it is being followed;
- the driller is complying with best practices if an E&S plan is not required;
- ponds used for drilling waste are lined; and
- proper containment is being used for fuel and no fuel spills are present.

These inspections required from one-half to a full day on each site. Once an inspection was completed, inspection forms with field water chemistry results were sent to the PFBC's Division of Environmental Services (DES) to determine whether the water resource had been negatively affected.

Reactions to Environmental Concerns

Other entities with resources potentially affected by drilling have also taken actions to address their concerns regarding the potential for environmental damage. For example, New York City hired a team of geologists to assess fracking's impact on water resources due to its concerns over the spreading of hydro-fracturing into its watershed. The study found that, "intensive natural gas development in the watershed brings an increased level of risk to the water supply: risk of degrading source water quality, risk to long-term watershed health . . . risk of damaging critical infrastructure, and the risk of exposing watershed residents and potentially NYC residents to chronic low levels of toxic chemicals." Although the report noted that a single well may be environmentally benign, it cited concerns with the risk becoming unacceptable "when evaluated in the context of hundreds or thousands of other wells."⁹ Recently, New York State environmental officials announced that they would impose stricter regulations on certain natural gas drilling in the upstate area that supplies most of New York City's drinking water and has recently issued an Environmental Impact Statement for Marcellus Shale. In May 2010, the Delaware River Basin Commission issued a moratorium on natural gas drilling development until new regulations were adopted.

A bill has been introduced in Pennsylvania that would place a three-year moratorium on leasing state forest lands for natural gas exploration, drilling, or production. The bill, House Bill 2010-2235, requires DCNR to monitor and assess the impact of the leases granted for these activities on state forest lands prior to the moratorium and report on its findings. This includes information on water and soil

⁹ B. Stutz, *A Controversial Drilling Practice Hits Roadblock in New York City*, March 25, 2010.

quality, plants, wildlife, habitats, and invasive species, as well as the staffing needs of DCNR to monitor, assess, and regulate gas exploration, drilling, or production on state forest lands. At the federal level, twin bills have been introduced in Congress to amend the Safe Drinking Water Act and give the Environmental Protection Agency authority over hydraulic fracturing.¹⁰

Violations Related to Marcellus Shale

Both DEP and PFBC have inspected Marcellus Shale drilling sites. DEP regulates drilling operations through their permitting process as well as enforces provisions of its laws and regulations related to gas drilling and natural resources. As shown on Table 23, inspections and violations have been increasing since calendar year 2007 as additional sites have begun drilling operations. About one half of the violations are administrative, with the other half concerning environmental health and safety. Unlike the PFBC, DEP has the authority to issue a cessation order and, as shown on Table 23, has done so.

Table 23

	<u>CY 2007</u>	<u>CY 2008</u>	<u>CY 2009</u>	<u>CY 2010^a</u>
Number of Inspections ^b	11	118	200	74
Violation Type^c				
Administrative.....	10	67	147	52
Environmental Health and Safety .	<u>8</u>	<u>71</u>	<u>107</u>	<u>45</u>
Total	18	138	254	97
Enforcement Actions^c				
Notice of Violations	11	113	155	67
Consent Order and Agreement.....	0	3	1	0
Cessation Order	0	0	1	0
Consent Assess. of Civil Penalty ..	<u>0</u>	<u>5</u>	<u>21</u>	<u>0</u>
Total	11	121	178	67

^a As of February 2010.

^b Represents one company's well site inspection identified by DEP inspection identification number. Multiple inspections of the same drilling site could occur on the same day.

^c Each well site inspection may have produced multiple violations.

Source: Department of Environmental Protection.

¹⁰ The two bills, both entitled *Fracturing Responsibility and Awareness of Chemicals Act of 2009*, are H.R. 2677 and S. 1215. Currently, hydraulic fracturing is exempt from EPA regulation.

PFBC has conducted inspections of drilling sites, as discussed above, and has also responded to complaints about sites. As shown on Table 24, 148 inspections of drilling sites have been conducted (including several as the result of complaints received by the PFBC), with 126 of those inspections conducted due to the location of the site within 1/8 mile of a water resource. In some cases, the inspection was conducted with both PFBC and DEP staff. Table 24 also shows that in 65 cases, problems were found at the site. No citations or criminal actions were filed by the WCOs, however, potential violations were forwarded to DEP and may be reflected on Table 23. In other cases, the WCOs referred their findings to DES for follow-up testing of the water quality.

Table 24

PFBC Marcellus Shale Drilling Site Inspections and Problems Found

	<u>CY 2009</u>	<u>CY 2010^a</u>
Number of Inspections ^b	92	56
Problem Type^c		
Water Quality	26	4
Wetland/Site.....	10	2
Stream/Site	9	3
Erosion and Sedimentation	3	4
Spill	<u>4</u>	<u>0</u>
Total	52	13

^a As of March 5, 2010.

^b Represents one company's well site inspection on a single day.

^c Each well site inspection on a single day may have produced multiple violations.

Source: PA Fish and Boat Commission, Division of Environmental Services.

The WCOs are continuing to investigate complaints received concerning drilling sites and pipelines used to transport the natural gas. These include all gas and pipeline cases (not solely Marcellus Shale cases) and involve “frac” water spilling into Commonwealth waters, wetland encroachments, and erosion and sedimentation violations. Approximately 15 investigations related to well-drilling and pipelines are completed or ongoing as of the end of April 2010.

The revenue from fines and penalties assessed by DEP for oil and gas violations is deposited into the Well Plugging Fund. Those revenues have increased significantly since FY 2007-08:

- FY 2007-08 \$ 408,026
- FY 2008-09 \$ 507,028
- FY 2009-10 (March 31, 2010) \$1,027,915

These totals include all oil and gas violations, not just those related to Marcellus Shale. Currently, DEP does not maintain that information separately but is considering doing so in the future.

The DEP is also hiring 68 new personnel to inspect and enforce requirements for oil and gas operations.¹¹ A PFBC official indicated that although the PFBC will no longer be conducting the Marcellus Shale drilling site inspections as noted above, the PFBC is seeking to coordinate with DEP's permitting and inspection activities to ensure that the resource is protected. PFBC officials have also indicated plans to develop training for the industry in conjunction with DEP concerning best management practices.

Lack of Funding Related to Marcellus Shale

The PFBC has not received additional funding to offset the associated costs that may involve the following activities: site inspections, threatened and endangered species impact reviews, pollution complaint follow-up, encroachment permit application reviews, training, and representing PFBC at public meetings. Due to the sheer volume of Marcellus Shale permits and the clustered locations of the sites, it was difficult for the WCOs to keep up with inspections and complete their regular duties. In order to conduct these inspections, work time on other activities usually carried out by the WCOs during the November through February time period, e.g., issuing arrest warrants for offenders who have failed to pay fines, was used for the inspections. Also, since this affects only certain districts, WCOs from the unaffected districts also assisted with the inspections.¹² Due to the cyclical nature of the WCOs' work, limited time is available after February for inspections since they will be needed to assist with stocking streams. The PFBC inspected 126 Marcellus Shale gas well sites (unrelated to complaints) between January 2009 and February 10, 2010. The cost to the Commission was over \$28,000.¹³

Although funding was not received for the inspections, the PFBC receives funding for permit assistance it provides to other agencies. The PFBC has a Memorandum of Understanding (MOU) with PennDOT that funds two positions with the PFBC to expedite the environmental reviews of federal-aid surface transportation projects. In FY 2009-10 the maximum payment under the MOU was \$180,250. The PFBC also has an MOU with DEP regarding the review of coal mining permits to advise DEP on the protection of aquatic resources and endangered or threatened

¹¹ These new personnel will reportedly be funded from higher permit fees that were instituted in 2009.

¹² The PFBC has a complement of 78 WCOs with six of those positions vacant. These vacancies are expected to be filled by the current class of trainees scheduled to graduate in the summer.

¹³ This includes \$17,100 in direct personnel costs, \$2,700 in indirect personnel costs, \$3,700 in vehicle use costs, and \$5,000 for monitoring equipment.

species, which is funded for FFY 2009-10 at \$101,000. A similar arrangement for future inspections is under consideration.¹⁴

Other states impose specific taxes on natural gas drilling that may be used to support inspections and other regulatory activities. Of the 32 states with natural gas drilling, Pennsylvania is one of four without a tax on the natural gas. Pending bills would impose a severance tax on all producers of natural gas in the Commonwealth.¹⁵ House Bill 2009-1489 estimates total revenue of approximately \$180 million from the severance tax in FY 2010-11. One of those bills (Senate Bill 997) provides for the PFBC to receive 3 percent of the funds collected for habitat conservation and public access projects, another (House Bill 1489) provides for the PFBC to receive 2 percent of the funds collected for the Commission's operational, administrative, and enforcement costs, and a third (House Bill 2443) provides for the Commission to receive 4 percent of the tax monies collected.¹⁶ A fourth bill (House Bill 2438) provides that 100 percent of the funds collected are to be deposited into the General Fund and provides for disbursements to the counties and municipalities where the wells are located. Another bill (Senate Bill 905) provides that monies collected from the tax imposed are to be used for payments of refunds, administrative costs, and enforcement purposes.

¹⁴ Reportedly, the PFBC is working to develop an MOU similar to the one for coal mining to address Marcellus Shale activities.

¹⁵ HB 1489, HB 2438, SB 905, and SB 997 impose a severance tax rate of 5 percent of the gross value of units severed at the well head plus 4.7 cents per 1,000 cubic feet severed. HB 1489 and HB 2438 except those wells producing less than 60,000 cubic feet per day from the tax. HB 2443 imposes a base tax rate of 25 cents (to be adjusted annually) per unit severed and is not imposed on wells producing less than 60,000 cubic feet of natural gas per day.

¹⁶ Although the majority of the funds collected under these bills are distributed to the General Fund, funds are also distributed to the Environmental Stewardship Fund (Growing Greener), the PA Game Commission, and other programs.

VIII. The PFBC Plans to Target Waterway Access Projects to Improve Access Statewide

Pennsylvania has 85,000 miles of rivers and streams and over 200,000 acres of lakes as well as 735 square miles of Lake Erie waters within its borders. The PFBC controls about 33,500 acres of land on which there are four dozen public lakes and nearly 250 boating access/shoreline fishing areas. In addition, other state agencies, counties, and local municipalities control land and facilities available for public fishing and boating. Access to many prime fishing destinations, however, is controlled by private landowners necessitating activities by the PFBC to maintain access to these waters.

The PFBC's *Strategic Plan (April 2005)* directs the agency to "invest in activities and programs in order to increase boating and fishing participation in the Commonwealth." To address this, PFBC staff has made preserving and improving public access points a priority. Two prioritized objectives from the plan specifically relate to waterways access: (1) to develop and implement a "Boating Access Improvement Program" and (2) to develop a systematic approach to improve stream-side and shoreline angling opportunities. PFBC attended to these objectives by implementing the Erie Access Improvement and Boating Facilities Grant Programs and by developing a statewide fishing and boating access strategy.

Although the PFBC has administered several programs directed at providing access to waters for fishing and boating activities, it has only recently developed a plan to direct those efforts based on the specific need of an area for access. Prior to this, certain grants were made available and awarded based on application versus a directed solicitation due to identified need, although access points to pursue through land acquisitions, leases, and easements are often identified by the Commission staff. Overall, however, the PFBC has been successful in continuing to add to and improve existing access points throughout the Commonwealth. For example, between July 2007 and January 2010, the Commissioners approved 26 individual fishing access projects.

Access

If the stream is a "public" waterway, the public has a right to fish there. However, boaters and anglers are increasingly experiencing difficulties in gaining access to areas where they can launch boats and/or fish. The establishment of private fishing clubs and private leases has restricted public fishing at locations that have previously been open to the public, as has landowners posting properties in response to poor behavior by the public. The Recreational Use of Land and Water Act (RULWA), 68 P.S. §477-1 *et seq.*, was enacted in 1966 to encourage land owners to make land and water areas available for public recreational purposes and limits a

property owner's liability toward persons entering their property, but its application related to certain fishing and boating improvements is unclear.

To increase access for fishing, the PFBC is increasing its control over land from which desirable fishing waterways can be accessed, either by purchasing fee simple title to the land, leasing it, or paying for an easement across it. In 2008, the PFBC partnered with the Department of Conservation and Natural Resources (DCNR) to develop a statewide fishing and boating access strategy, "to provide the PFBC, DCNR, and their partners the tools necessary to make better decisions relating to fishing and boating access planning, development, and funding."

Access to Waters¹

Common law generally grants to persons who own real property either underlying or bordering rivers, streams, and other waterways, the non-exclusive right to use the water that is available upon and that flows through their land. The public may also have rights to access and use the water (for fishing or boating, for example) depending on the legal status of that waterway. If the stream is a "public" waterway, then title to the bed of that stream does not belong to the riparian owner but is deemed held in trust by the Commonwealth for the benefit of the public.² Therefore, as a public waterway, the public has a right to fish there.

"Public" waterways in Pennsylvania include the principal rivers of the Commonwealth—the Ohio, Monongahela, Youghiogheny, Allegheny, Susquehanna (including its north and west branches), Juniata, Schuylkill, Lehigh, and the Delaware. Public waters also include all other "legally navigable" rivers, streams, and lakes. The test of "navigability" is whether the waters are used, or are susceptible to being used, in their ordinary condition, as highways for commerce. This is an historical test—if the water met the navigability test at any point in its history, it remains a legally navigable waterway.

Pennsylvania has a long history of private landowners allowing the public access to stream-side lands for fishing. In fact, 83 percent of stocked trout waters are on private lands, as are 70 percent of wild trout waters, and 59 percent of Class A trout waters. Many prime fishing destinations in the Commonwealth, however, have become difficult or impossible to access due to landowners posting no trespassing signs on their properties.

Boaters and anglers are, therefore, increasingly experiencing difficulties in gaining access to areas where they can launch boats and/or fish. The establishment

¹ A more detailed explanation can be found in the 2008 LB&FC report *A Performance Audit of the Pennsylvania Fish and Boat Commission* available at <http://lbfc.legis.state.pa.us/H>.

² Article I, Section 27 of Pennsylvania's Constitution states that "Pennsylvania's public natural resources are the common property of all the people, including generations yet to come."

of private fishing clubs and private leases has restricted public fishing at locations that have previously been open to the public. According to the PFBC, 47 percent of anglers responding to the 2008 Pennsylvania Trout Fishing Survey indicated that private land posting is a problem. The PFBC also notes that, according to the websites of some private fishing clubs, at least twenty miles of prime fishing streams in Pennsylvania are leased to private interests.

Another factor is land development for both commercial and residential purposes either adjacent to waterways or infringing on property used as waterways access areas. One example of this was the termination of the lease on PFBC leased property along the Harvey's Creek Stream Corridor in Erie County that resulted in the loss of these properties from the lease and the loss of the access they provided. The populations in thirty-one of the fifty-two watersheds identified in the fishing and boating access plan are projected to increase by 2020 and, as a result, additional development is expected to occur in these areas. The subdivision of large land areas into residential developments often results in the loss of access to streams and rivers.

Access to Adjacent Private Lands

A person who has properly entered a public waterway through a public access point is permitted to wade, boat, float, or otherwise be in the waterway even where it passes through private property. But the right to access public waters does not give the public leave to cross private lands to get to the water. If the waterway is not "public" then title to the bed of that waterway is held by the adjacent riparian landowner(s) and the public does not have a right to access it.³ Gaining the right of entry to waterways across private lands is a central focus of PFBC access efforts. As such, the PFBC regularly meets with private landowners to negotiate easements across the landowner's property allowing fishing access. The major concentration of PFBC activity in this area has been in the Lake Erie region through the Erie Access Improvement Program, discussed later in this section.

The Recreational Use of Land and Water Act (RULWA), 68 P.S. §477-1 *et seq.*, was enacted in 1966 to encourage land owners to make land and water areas available for public recreational purposes and limits a property owner's liability toward persons entering their property, providing the landowner opens his property free of charge to the public for recreational use, and makes no requirement that the landowner keep his property safe for recreational purposes or warn the public of any dangerous property conditions.⁴ While the definition of "land" under the RULWA specifically includes "buildings, structures and machinery or equipment when

³ The law, however, recognizes a "navigation servitude" that gives the public the right to find the way by boat across the non-public waters. No fishing is allowed under this "navigation servitude."

⁴ A landowner can still be liable where he either charges a fee for the use of the land or acts willfully or maliciously in failing to guard or warn against a dangerous condition.

attached to the realty,” Pennsylvania courts have held that RULWA coverage does not extend to certain situations concerning property that has been improved.

As noted in our 2008 report, the PFBC believes the protection afforded by the RULWA is a major factor leading many public and private landowners to permit free public hunting, fishing, boating, and other recreational uses of lands and waters. However, the PFBC still considers it unclear as to whether the legal protections of the RULWA apply to fishing and boating related improvements to realty such as access ramps and paths (including ramps for persons with disabilities), fishing and boating piers, boat launch ramps, docks, stream improvement projects, dams and impoundments, and parking lots, for example. The lack of legal clarity as to what fishing and boating related improvements to land are covered under the RULWA has reportedly discouraged some landowners, clubs, and organizations from going forward with proposed projects.

The Commission worked with the Pennsylvania Farm Bureau, Pennsylvania Forest Products Association, Pennsylvania Snowmobile Association, and other partners during the 2007-2008 legislative session to support and advocate for House Bill 1908. House Bill 1908, among other proposed changes to RULWA, expanded the definition of land to include a number of additional specific improvements to the property, including bridges, boat docks, ramps, fishing piers, and paved and unpaved trails. The bill was referred to the House Tourism and Recreational Development Committee. It has not been re-introduced in the 2009-2010 session.

Land Acquisitions, Leases, and Easements

To increase access for fishing, the PFBC needs to increase its control over land from which desirable fishing waterways can be accessed, either by purchasing fee simple title to the land, or purchasing an easement across it. Fee simple title to land entitles PFBC to the full use of the entire property purchased forever, while leasing the property would allow for the exclusive use of the land for a determinate period. An easement, however, is a more limited and targeted acquisition of access and is generally less costly than acquiring a full lease or ownership of the property. An easement allows the public the right to use the land for a specific purpose, such as fishing access, in perpetuity.

According to the PFBC, the easements they typically acquire provide a corridor along a stream that allows the public to wade in and walk along the stream bank for the purpose of fishing. The size and shape of the easement varies but generally it encompasses at least 35 feet of land from the stream bank on either side of the stream. Easements allow fishing access; the landowner continues to own and otherwise control the land and may still post the land against other uses, such as hunting, trapping, camping, or hiking. Once purchased, the PFBC marks the boundaries of the easement with signs asking anglers to respect the landowner’s rights

and not to trespass outside of the easement boundaries. WCOs conduct periodic patrols through the easement areas.

Currently, properties and easements selected for acquisition are based on PFBC staff recommendations, stakeholder suggestions, and property owner initiatives. The Commission does not, at this time, have a grant program to provide partners with funds to improve fishing access other than the dedicated funding sources in Erie County, the Sinnemahoning Creek Watershed, and the Upper Juniata Watershed.⁵ As a result, acquisitions are more opportunistic than systematic.

Pennsylvania's Fishing and Boating Access Strategy

PFBC partnered with the Pennsylvania Environmental Council (PEC) to obtain an \$85,000 DCNR grant to develop a statewide fishing and boating access strategy, "to provide the PFBC, DCNR, and their partners the tools necessary to make better decisions relating to fishing and boating access planning, development, and funding." The plan evaluates 52 sub-watersheds using GIS data and creates a comprehensive statewide approach to improving fishing and boating access in coordination with the PFBC and partner programs and resources. Specific access plans for a minimum of five of these watersheds will be created each year by the Commission.

The draft plan was reviewed by the PFBC, the Pennsylvania Environmental Council (PEC), and DCNR. The plan was presented to the Commissioners at the April 2010 meeting. It is being shared with the public at a series of informational meetings.

Methodology. PFBC, DCNR, and PEC began to formulate the statewide access strategy by examining DCNR's *Statewide Comprehensive Outdoor Recreation Plan (SCORP)*, the PFBC *Strategic Plan (April 2005)*, and angler surveys to determine recreational user preferences and needs. WCOs and DCNR state park managers were also mailed input forms and asked to identify waterways that they believed needed improved access.

PFBC and PEC conducted six regional stakeholder meetings in 2008 to determine if the stakeholders believed access was adequate in their region and to identify where additional access was needed. GIS-based maps were the focal point of these meetings where criteria for access improvement and user inputs on actual locations for access improvement were collected. Stakeholders at the regional meetings identified over 600 sites and stretches of waterways needing access improvement.

⁵ Settlement funding dedicated to developing and implementing projects that benefit recreational fishing and boating and aquatic resources along the Sinnemahoning Creek and Little Juniata River is discussed in Appendix F.

As a result of suggestions at the regional meetings, non-profit land trusts, conservancies, and watershed organizations were permitted to directly apply for funding under the Boating Facility Grant Program, creating opportunities for boating access on the more than 50,000 acres owned statewide by these entities.

A wide variety of data at the state and the Hydrologic Unit Code 8 (HUC-8) watershed level⁶ was mapped using GIS. Fifty-two HUC-8 watersheds greater than fifty square miles were evaluated against nineteen criteria. This first tier evaluation resulted in a prioritized list of the watersheds to guide the Commission's annual work plan for the development of watershed access plans.

Included among the nineteen criteria used to prioritize the watersheds were the following:

- the availability of funding (the highest weighted criterion);
- the number of existing accesses and Boating Facility Grant Program grants;
- need identified by stakeholders, Commission staff, and other state agencies;
- the number of stocked lakes and linear miles of trout stocked waters;
- the number of warmwater/coolwater stocked lakes and linear miles of warmwater/coolwater stocked streams;
- the existence of water trails/river conservation plans;
- access per 10 miles of Stream Order 3 and Stream Order 5 and higher;⁷
- the percentage of watershed population that purchased fishing licenses; and
- the percentage of watershed population that registered boats.

Using the criteria, a score was created for each watershed and all 52 watersheds were ranked in priority order. The five watersheds that ranked the highest were the Chautauqua-Conneaut, Upper Juniata, Sinnemahoning, the Lower Susquehanna-Swatara, and Schuylkill. The draft plan provides for access plans for a minimum of five HUC-8 watersheds to be created each year by the Commission. These plans will be developed from an evaluation of the waterways within each of the identified watersheds.

⁶ A watershed is a geographic area of land, water, and biota within the confines of a drainage divide. Watersheds are delineated by the U.S. Geological Survey using a national standard hierarchical system based on surface hydrologic features. HUC-8 watersheds are the lowest level of classification.

⁷ Stream Order classifies streams by size: first order is the smallest and Stream Order 12 the largest.

Grant Programs

Three grant programs administered by the PFBC provide funding for fishing and boating access projects. The Erie Access Improvement Program provides funds to governments and non-profit organizations for acquisition and development projects that will improve fishing access to the Lake Erie Watershed. The funds for this program are generated through the sale of the Lake Erie fishing permits and a portion of the fees from the combination trout-salmon/Lake Erie permit. The Boating Facilities Grant (BFG) program provides funds to governments and non-profit organizations to allow them to improve their boating access sites. BFG funds come from boat registration fees, state fuel taxes collected on fuel used in motor boats, and taxes on fishing equipment and motorboat fuel from the federal Sport Fish Restoration Act Program. The Boating Infrastructure Grant (BIG) program is a federal grant program for the development and maintenance of facilities for transient non-trailerable boats (greater than 26 feet in length). The BIG grants are authorized through the Sportfishing and Boating Partnership Act of 1998 and are funded by excise taxes on motorboat fuel.

Erie Access Improvement Program

Act 2004-159 requires a permit for persons fishing in Lake Erie and its tributaries, and provides a dedicated funding source that allowed the PFBC to create the Erie Access Improvement Program that provides resources, including grants and technical assistance, to county and municipal governments and qualifying 501(c)(3) organizations for acquisition and development projects intended to improve fishing access to the Lake Erie Watershed. The goal of the program is to ensure quality public fishing access in the Lake Erie Watershed. The program is administered by the boating facilities program coordinator in the Bureau of Boating and Access with the assistance of staff from the Bureau of Engineering and Property Services and the Bureau of Law Enforcement.

Program Overview. The Fish and Boat Code, 30 Pa.C.S. §2907.2, provides that the proceeds from the sale of the special Lake Erie fishing permits and \$6 of the fees for the combination trout-salmon/Lake Erie permits are to be deposited into a restricted account within the Fish Fund through December 31, 2014, and that this restricted account “shall be used to provide public fishing access or to protect or to improve fish habitat on or at Lake Erie, Presque Isle Bay and their tributaries, including waters that flow into those tributaries.”

The Commission’s program has two core elements: (1) acquisition of property rights (fee simple title or easement) and (2) property development and enhancement. The Commissioners have authorized the PFBC executive director to approve individual grants of \$100,000 or less, using monies in the Lake Erie restricted account to implement public access development and enhancement projects that do

not involve the acquisition of property rights. For grants in excess of \$100,000, and for all acquisitions of property rights (by the Commission or other parties with the Commission's monetary consideration), staff must seek the Commission's approval. We found on our review of the Commission meeting minutes for the past three years that the Commission and its staff have complied with this policy.

By Commission policy, Erie Access Improvement Grant funds are available to reimburse recipients for up to 50 percent of the costs for:

- site acquisition (including property purchases, easements, or other property rights);
- development of new access facilities;
- expansion or rehabilitation of existing access sites (including but not limited to access roads, parking areas, and ADA facilities); and
- habitat improvement activities.

Eligible development projects must occur on public lands owned by the project sponsor or where the sponsor has a long-term lease or agreement on the site. All construction activities must benefit and directly support recreational angler access and fishing.

Current Status of the Erie Access Improvement Program. As presented on Table 25, a total lake or stream frontage in excess of 82,000 linear feet has been or will be acquired through this program. A total of 28 Erie Access Improvement projects have been approved by the PFBC, at a cost of about \$1.4 million from the Lake Erie restricted account. The frontage acquired includes access to Lake Erie and four creeks in the Erie watershed (Crooked, Elk, Twenty Mile, and Walnut).

Funds available in the Lake Erie restricted account appear to be sufficient for current needs. As of the end of January 2010, the balance available in the restricted account was \$2.2 million. In addition to the 28 approved projects, the PFBC is in discussions with three property owners, but as of April 2010, they have not accepted the Commission's offers.

Boating Facility Grant Program

In January 2005, the PFBC created the Boating Facility Grant Program to help county and local governments improve their boating access sites. The goal of the Boating Facility Grant Program is to ensure that Pennsylvania's recreational boaters are provided with the highest quality boating facilities. The program is administered by the boating facilities program coordinator in the Bureau of Boating and Access, however, staff members from the Bureau of Engineering and Property Services are also involved in providing technical assistance to grant applicants, reviewing project plans, and inspecting completed projects.

Table 25

**Erie Access Improvement Program
Projects Approved as of 4/20/2010**

	<u>Total Project Cost</u>	<u>PFBC Cost</u>	<u>Access Acquisitions</u>	<u>Body of Water</u>	<u>Frontage in Linear Feet</u>
Brugger.....	\$ 950,000	\$ 220,000	PFBC acquires easement on property purchased by Fairview Township.	Lake Erie	560
Semelka Acquisition.....	155,000	100,000	Northeast Township purchases property.	Twenty Mile Creek	1,900
Miller Property.....	146,000	73,000	PFBC acquires easement on property purchased by Girard Township.	Elk Creek	350
Rathman Property.....	55,000	55,000	PFBC purchases property.	Elk Creek	1,350
Blake Holiday Property.....	54,000	54,000	PFBC acquires easement on landowner's property.	Crooked Creek	6,000
Holiday Farm Properties.....	52,000	52,000	PFBC purchases property and easement.	Crooked Creek	2,660
Cassidy Campground.....	320,000	50,000	PFBC acquires easement on property purchased by Millcreek Township	Walnut Creek	5,200
Froehlich-Sitter Property.....	36,000	36,000	PFBC purchases three properties that were owned by a partnership.	Walnut Creek	2,760
Asbury Woods Properties.....	27,000	27,000	PFBC acquires easement on property owned by Millcreek Township School District.	Walnut Creek	2,885
Klimek Property.....	24,000	24,000	PFBC acquires easement on landowner's property.	Elk Creek	2,300
PALTA Grant.....	42,000	21,000	N/A	N/A	N/A
Old Lake Road Property	11,200	11,200	PFBC acquires easement on landowner's property.	Walnut Creek	1,120
Mercyhurst College.....	1	1	College donates easement to PFBC.	Elk Creek	2,800
Anderson Property.....	15,000	15,000	PFBC acquires easement on landowner's property.	Elk Creek	1,800
Dibble Property.....	18,000	18,000	PFBC acquires easement on landowner's property.	Elk Creek	1,700
Erie County Historical Society.....	15,000	15,000	PFBC acquires easement on landowner's property.	Elk Creek	1,250

Table 25 (Continued)

	Total Project Cost	PFBC Cost	Access Acquisitions	Body of Water	Frontage in Linear Feet
Lake Erie Regional Conservancy ...	257,731	128,865	PFBC acquires property in partnership with LERC and DCNR – Rand Property	Elk Creek	5,900
Lake Erie Regional Conservancy ...	348,800	174,400	Acquisition in partnership with LERC and DCNR – Harf Property	Elk Creek	1,703
McInchak Property	27,000	27,000	PFBC acquires easement on landowner's property.	Elk Creek	2,105
Lawrence Park Golf Course.....	1	1	PFBC leasing property for fish passages until easement acquired (\$41,000)	Fourmile Creek	5,447
Smelka Property	43,000	43,000	PFBC acquires easement on landowner's property.	Twenty Mile Creek	4,350
Pifer Property	5,000	5,000	PFBC acquires easement on landowner's property.	Walnut Creek	1,120
Howard Property	10,000	10,000	Landowner offers easement to PFBC	Crooked Creek	1,900
Miller Property	30,000	30,000	Landowner offers easement to PFBC	Crooked Creek	2,725
Thrasher Property	16,250	16,250	Landowner offers easement to PFBC	Crooked Creek	1,300
Weaver Property	25,000	25,000	Landowner offers easement to PFBC	Crooked Creek	2,725
Girard American Legion	70,000	70,000	Landowner offers easement to PFBC	Elk Creek	6,700
Huya Property	<u>68,000</u>	<u>68,000</u>	PFBC offered fee title and easement	Elk Creek	<u>800</u>
Totals.....	\$2,861,983	\$1,409,717			82,304

Source: Developed by LB&FC staff from information provided by the PFBC.

Funds for the program are derived from boat registration and titling fees, state fuel taxes collected on fuel used in motorboats, and taxes on fishing equipment and motorboat fuel from the federal Sport Fish Restoration Act Program. The PFBC has budgeted \$2 million annually for the program.

Program Overview. Boating Facility Grant Funds are available to public entities, including townships, boroughs, municipal and county governments, and non-profit groups (501(c)(3)) that have or will have the capability to provide boat access facilities that are open and available for general public use. The grant reimburses recipients up to 75 percent of the costs for land acquisition, project design and engineering, development, expansion, and rehabilitation of public recreational boat access facilities. Grant funds are disbursed to the applicant/recipient only after completion of the project occurs and agency staff has verified that the work has been completed.

Construction activities must benefit and directly support recreational boating. Eligible projects must occur on public lands owned by the project sponsor, or where the sponsor has a long term lease or agreement on the site. Eligible activities include the rehabilitation, expansion, or construction of new boat ramps, bulkheads, courtesy floats, and access roads, parking areas, restrooms, signs, and localized landscaping. Grant funds are used for major site improvements and not for routine maintenance or operation activities.

Grant recipients are responsible for at least 25 percent of the project cost. This match can be cash, the fair market value of any labor or materials, a combination thereof, or grants from other federal, state, or local sources. Recipients must be willing to enter into a 25-year agreement to keep the facility open to public use and all work must be completed within a two-year period. The PFBC has given priority funding consideration to applicants that provide more than the required 25 percent match, thereby reducing the total amount of grant funds required to complete the project. The grant procedures guide recognizes that in some instances the cash match is not easily obtainable by the applicant. In select instances, the PFBC has approved up to 100 percent of the construction costs. The Commission does not fund costs for in-kind grant administration, project management, or contract management.

Program grant funds are available in each annual state fiscal period as authorized and allocated by the PFBC. The Commission may adjust the amount of funds available, application, and consideration dates to meet existing needs or opportunities that may occur. Large projects may be phased in over several fiscal years to maximize leverage, distribution, and availability of funds.

The PFBC gives highest priority to the rehabilitation of existing facilities, followed by expansion of existing facilities, then acquisition and development of new

boating facilities. Since funding for the grant program is derived principally from registered motorboats, funding priorities are for those projects that serve or provide direct benefits to this user group, however, the PFBC recognizes that many access sites are multiple-use (motorized and non-motorized). Priority consideration is also given to projects based on local, regional, and statewide needs such as boat use and number of boaters served, relationship to adjacent or nearby public and private boating facilities (ramps and/or marinas), and needs based on the statewide access plan or regional/local strategic plans.

Current Status of the Boating Facility Grant Program. A total of 62 separate projects have been approved by the PFBC to receive funding under the Boating Facility Grant Program, as of January 2010. Table 26 provides information on the projects, 46 of which had been completed as of January 2010, and 16 of which were still underway.

As shown on Table 26, the PFBC grant awards total \$5,307,500, representing approximately 37 percent of the total estimated project costs of \$14,262,738. The projects are located in 31 of the state's counties with Allegheny, Dauphin, and Luzerne counties having five projects each and Cumberland and Lancaster counties having three projects each. The grant amounts range from \$3,000 (Chester and Lancaster County projects) to \$300,000 (Erie County). Typical projects that have been funded by the Boating Facility Grant Program include construction, repair, and rehabilitation of launch ramps, docks, access roads, parking lots, and other safety and public convenience amenities that are likely to attract greater public use of these facilities.

The Commission awarded more than \$1.1 million in 2009 to 14 projects with recipients matching the Commission's funds with over \$2 million. At the January 2010 Commission meeting, staff advised the Commissioners that 27 new grant applications totaling approximately \$3 million had been received and were currently undergoing review and prioritization.

Boating Infrastructure Grant Program

The federally-funded Boating Infrastructure Grant (BIG) program is a grant program for the development and maintenance of facilities for transient⁸ non-trailerable boats. The grants are authorized through the Sportfishing and Boating Partnership Act of 1998 and are funded by excise taxes on motorboat fuel. PFBC's Bureau of Boating and Access and Bureau of Administration oversee the program in cooperation with the U.S. Department of Interior's U.S. Fish and Wildlife Service (USFWS).

⁸ Transient is defined as passing through or by a place, staying 10 days or less.

Table 26

Summary of Boating Facility Grant Projects and Costs
(As of March 2010)

<u>County</u>	<u>Completed Projects Applicant</u>	<u>Total Cost</u>	<u>PFBC Grant</u>
Allegheny.....	Borough of Sewickley	\$ 163,434	\$ 150,000
Allegheny.....	Borough of Sharpsburg	283,682	150,000
Allegheny.....	Borough of Sharpsburg	587,060	185,000
Allegheny.....	City of Pittsburgh	89,200	50,000
Beaver	Bridgewater Borough	150,512	113,000
Beaver	Ohioville Borough	246,455	190,000
Berks	Union Township	75,000	75,000
Bucks.....	Middletown Township	24,300	15,000
Cambria	Cambria Somerset Authority	39,580	25,000
Cambria	Ebensburg Borough	56,270	40,000
Carbon.....	Carbon County Parks	52,737	55,000
Carbon.....	East Penn Township	199,000	160,000
Chester	East Coventry Township	10,895	25,000
Chester	North Coventry Township	7,094	3,000
Clearfield	Borough of Clearfield	44,750	25,000
Clinton	Woodward Township	171,500	118,000
Cumberland.....	East Pennsboro Township	131,200	99,000
Cumberland.....	Lower Allen Township	46,905	25,000
Cumberland.....	Silver Spring Township	58,429	23,000
Dauphin	City of Harrisburg	161,162	111,000
Dauphin	Dauphin County	200,000	75,000
Dauphin	Halifax Borough	105,632	65,000
Dauphin	Halifax Borough	74,000	55,000
Dauphin	Steelton Borough	402,253	150,000
Erie	Harborcreek Township	2,202,611	300,000
Lackawanna	Lackawanna County	53,376	40,000
Lancaster.....	East Donegal Township	411,203	240,000
Lancaster.....	Manor Township	4,912	3,000
Lehigh.....	City of Bethlehem	729,000	125,000
Lehigh.....	County of Lehigh	132,950	80,000
Luzerne	County of Luzerne	250,000	75,000
Luzerne	Hunlock Township	68,013	40,000
Luzerne	Luzerne County	721,000	200,000
Lycoming	Loyalsock Township	62,606	27,000
Montgomery	Lower Merion Township	149,100	95,000
Montgomery	Lower Providence Township	52,935	40,000
Northumberland.....	Northumberland Borough	44,140	35,000
Philadelphia	Schuylkill River Development Corp.	21,000	15,000
Philadelphia	Philadelphia Recreation Dept.	434,743	125,000
Schuylkill	Owl Creek Reservoir Commission (Tamaqua)	32,580	15,000
Schuylkill	Schuylkill County	137,749	50,000
Tioga	Borough of Wellsboro	220,554	107,000
Venango	Allegheny Valley Conservancy	225,143	90,000
Warren.....	Tidioute Borough	27,500	36,000
Washington	Washington County Planning Commission	126,661	90,000
Westmoreland	City of Monessen	<u>206,100</u>	<u>125,000</u>
Subtotal – Completed Projects.....		\$ 9,694,926	\$3,935,000

Table 26 (Continued)

<u>County</u>	<u>Approved Projects</u> <u>Applicant</u>	<u>Total Cost</u>	<u>PFBC Grant</u>
Allegheny	County of Allegheny	\$ 85,000	\$ 65,000
Armstrong	Roaring Run Watershed Assoc.	41,500	12,000
Beaver	Borough of Ohioville	243,713	142,000
Bedford	City of Cumberland (MD)	98,000	46,500
Berks.....	City of Reading	81,600	41,000
Cambria	Cambria Somerset Authority	48,020	24,000
Clinton.....	Chapman Township	110,488	47,000
Delaware.....	Borough of Norwood	46,240	33,000
Lancaster	Borough of Columbia	2,100,000	250,000
Lebanon.....	Swatara Creek Watershed Assoc.	321,100	90,000
Lehigh	Lehigh County Parks & Rec.	75,000	42,000
Luzerne	Borough of Shickshinny	440,400	97,000
Luzerne	North Branch Land Trust	428,100	150,000
Snyder	Monroe Township	306,851	230,000
Snyder	Selinsgrove Borough	111,800	88,000
Venango	Borough of Emlenton	<u>30,000</u>	<u>15,000</u>
Subtotal - Approved Projects		\$ 4,567,812	\$1,372,500
Total - All Projects.....		\$14,262,738	\$5,307,500

Source: Developed by LB&FC staff from information provided by the PA Fish and Boat Commission.

PFBC's stated program goal is to provide funds to develop and maintain transient moorage (tie-ups) serving recreational motorboats 26 feet and longer. The grants are available to public and private operators of open-to-the-public boating facilities, municipal agencies, state agencies, and other government entities.

Eligible project activities include the construction, renovation, and maintenance of transient tie-up facilities. Boating infrastructure refers to features that provide stopover places for transient non-trailerable recreational vessels to tie up. These features include transient slips, day docks, floating docks and fixed piers, navigational aids, and dockside utilities including electric, water and pumpout stations.

The BIG program includes two funding tiers. Tier 1 (non-competitive) and Tier 2 (nationally competitive). Under Tier 1, each state may receive funding for small-scale projects up to \$100,000 annually. The PFBC participates in the Tier 1 program each year. Tier 2 is for projects that require more than \$100,000. Tier 2 projects proposals are reviewed, evaluated, and ranked by a national panel with the final decision for funding made by the Director of the USFWS.

Project sponsors in both funding tiers must provide at least 25 percent of the resources needed to complete the project. Resources used for the match may include appropriations, bond issues, agency labor, and donations (cash, labor, materials, equipment). Grant funds are used to reimburse sponsors for expenditures they have certified. Property or facilities funded must be designed and built to be useable for at least 20 years. Facilities should be on navigable public waters deep enough for non-trailerable vessels. Navigational aids must be installed to allow safe passage for transient vessels between the tie-up facility and the channels or open water.

Commission staff worked with the Sports and Exhibition Authority of Pittsburgh and Allegheny County (SEA), the Urban Redevelopment Authority of Pittsburgh (URA), and the Erie Western Pennsylvania Port Authority to obtain \$2,435,991 in federal funding for projects on the Allegheny River, Monongahela River, and Lake Erie in 2009 under this program. URA will use \$1.35 million to design and construct a transient tie-up facility at the South Shore Riverfront Park as part of a \$400 million redevelopment effort. SEA will construct day-stop dockage at the Convention Center Riverfront Park with its grant of \$986,000 and the Erie Western Pennsylvania Port Authority will construct a floating boat dock and access gangway at the West Canal Basin in Erie. As of April 2010, PFBC officials were not aware of any candidates expressing an interest in applying for future Tier 2 funds.

IX. Background Information on the Pennsylvania Fish and Boat Commission (PFBC)

Agency Mandate and Mission

The Pennsylvania Fish and Boat Commission (PFBC) is an independent administrative agency with authority to administer and enforce the Fish and Boat Code and other Commonwealth laws relating to: (1) the encouragement, promotion, and development of the fishery interests; (2) the protection, propagation, and distribution of fish; (3) the management of boating and the operation of boats; and (4) the encouragement, promotion, and development of recreational boating. The Commission's mission is "to protect, conserve, and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities."

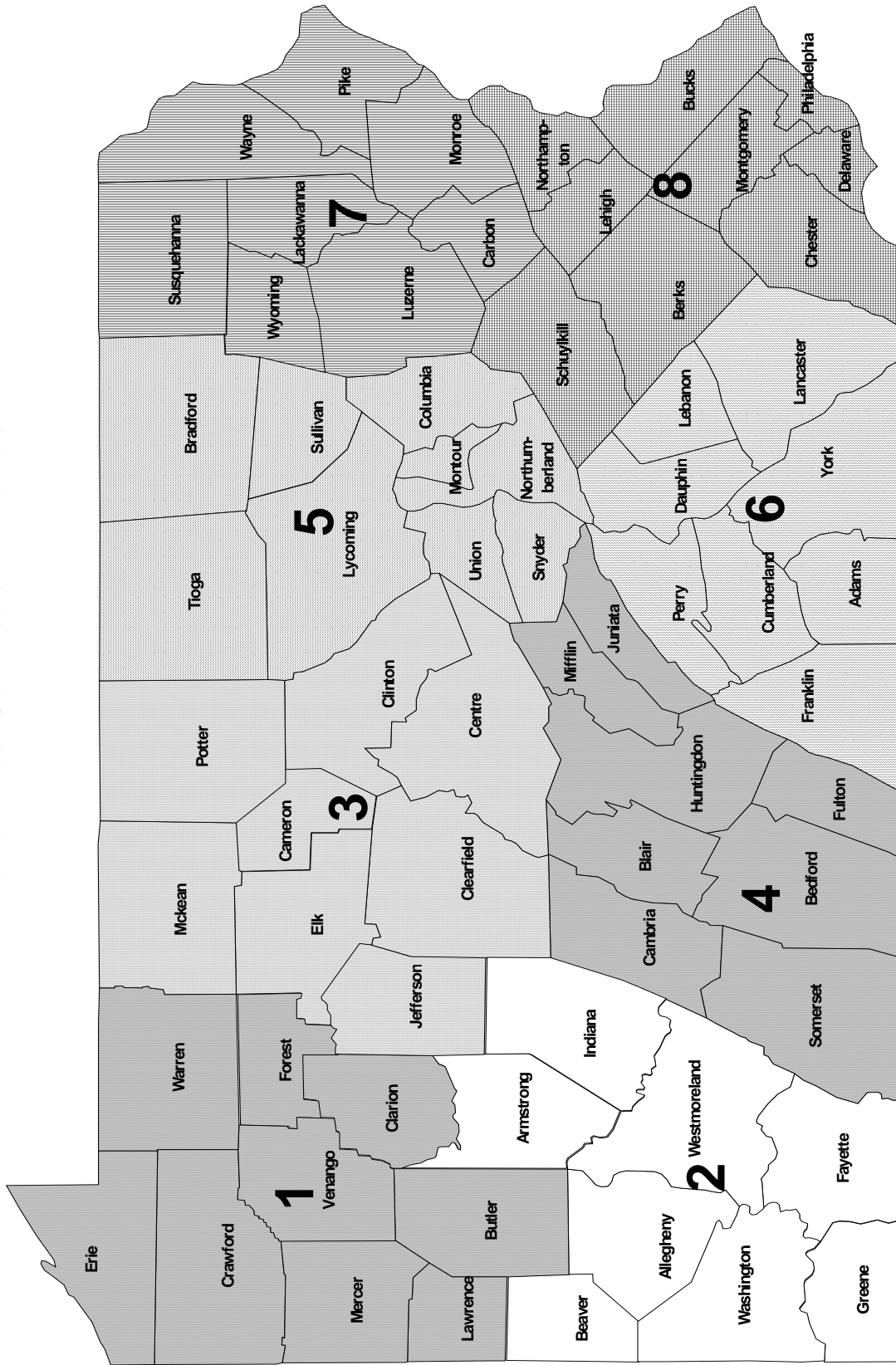
The Board of Commissioners

The Pennsylvania Fish and Boat Commission develops rules, regulations, and broad policies that establish the framework for agency operations and activities. The Commission is comprised of ten Pennsylvania citizens appointed by the Governor with the advice and consent of a majority of the Senate. Two PFBC members serve at-large and are required to be experienced in boating and water safety education and be registered boat owners in Pennsylvania. The remaining eight members are required, by law, to be a resident of a specific geographic district and are to be well-informed on conservation, restoration, fish and fishing, and boats and boating. Exhibit 15 shows these geographic regions. Commission members serve eight-year terms and may continue to hold office for up to six months thereafter or until a successor is appointed and qualified. Exhibit 16 shows the terms of the Commission members and the geographic regions they serve. Members receive no compensation for their service on the Commission but do receive reimbursement for travel expenses.

The Commission is required to have an office in the Harrisburg area and hold meetings in January and July and at such other times and places as the Commission may designate. In actual practice, the Commission ordinarily meets four times a year. In addition to full Commission meetings, committees may conduct public meetings throughout the year. At the July meeting each year, the Commission elects from its members a president and vice-president.

A statutorily created eight-member Boating Advisory Board advises the Commission on all matters relating to boating and makes recommendations regarding any proposed rules or regulations affecting the equipment or operation of boats. The Board consists of three ex-officio members including the Secretary of the Department of Conservation and Natural Resources, the PFBC Executive Director,

PA Fish and Boat Commissioner Districts



Source: Pennsylvania Fish and Boat Commission.

**Pennsylvania Fish & Boat Commission
Commission Districts and Terms (as of March 4, 2010)**

	COUNTIES	INCUMBENT	CONFIRMED	TERM EXPIRES	ELIGIBLE FOR REAPPOINTMENT^a	LAST DAY IN OFFICE
One	Erie, Crawford, Mercer, Lawrence, Venango, Butler, Warren, Forest and Clarion	Vacant				
Two	Beaver, Allegheny, Washington, Greene, Armstrong, Indiana, Westmoreland and Fayette	Thomas C. Shetterly N. Charleroi (Washington County)	6/14/06 (Gov. Rendell)	July 2011	NO	January 2012
Three	McKean, Elk, Jefferson, Potter, Cameron, Clearfield, Clinton and Centre	William J. Sabatose Brookport (Elk County)	12/9/87 (Gov. Casey) 5/3/95 (Gov. Ridge) 7/28/2003 (Gov. Rendell)	January 1994 January 2003 July 2011	NO	January 2012
Four	Cambria, Somerset, Blair, Bedford, Huntingdon, Fulton, Mifflin and Juniata	Leonard L. Lichvar Stoytown (Somerset County)	4/25/06 (Gov. Rendell) 12/16/09 (Gov. Rendell)	December 2017	NO	June 2018
Five	Tioga, Lycoming, Union, Snyder, Bradford, Sullivan, Columbia, Montour and Northumberland	William R. Worobec Williamsport (Lycoming County)	6/14/06 (Gov. Rendell)	June 2014	NO	December 2014
Six	Franklin, Perry, Cumberland, Adams, Dauphin, York, Lebanon and Lancaster	Robert A. Bachman Denver (Lancaster County)	4/24/07 (Gov. Rendell)	April 2015	NO	October 2015
Seven	Susquehanna, Wyoming, Luzerne, Lackawanna, Carbon, Wayne, Pike and Monroe	Vacant				
Eight	Schuylkill, Berks, Chester, Northampton, Lehigh, Bucks, Montgomery, Philadelphia and Delaware	Richard W. Czop Collegeville (Montgomery County)	6/28/02 (Gov. Schweiker)	June 2010	NO	December 2010
Boating	At-Large	G. Warren Elliott Chambersburg (Franklin County)	6/30/09 (Gov. Rendell)	June 2017	NO	December 2017
Boating	At-Large	Steven M. Ketterer Harrisburg (Dauphin County)	4/24/07 (Gov. Rendell)	April 2015	NO	October 2015

^aThe Fish and Boat Code was amended by Act 1996-185 to restrict members from serving more than one consecutive term of eight years. (A member appointed to fill a vacancy for a period of four years or less may be eligible for appointment to a full eight-year term.) This provision did not apply to members serving at the time of the amendment. The members receive no compensation for their services but may be reimbursed for travel expenses.

Source: Pennsylvania Fish and Boat Commission.

and the Assistant Executive Director in charge of watercraft safety, and five volunteer members who are required to be experienced boaters and members of boating volunteer organizations. Members are appointed by the Governor for five-year terms.

The Fish Fund

All fees, royalties, fines, penalties, and other monies paid, received, recovered, and collected under the Fish and Boat Code, except those monies relating to boats and boating, are to be deposited into the Fish Fund. As stated in the Fish and Boat Code (30 Pa.C.S. §521), monies in the Fish Fund may be used for the following purposes:

- The payment of expenses incurred in processing, issuing, or supervising the issuance of fishing licenses, special licenses, and permits.
- Salaries and/or wages of the executive director and other employees.
- Travel expenses of Commission members, officers, and employees.
- Purchase of furniture, supplies, materials, equipment, fuel, and motor vehicles.
- Insurance.
- Postage and telephone expenses.
- Office rental expenses.
- Propagation, protection, management, and distribution of fish and fish stocking.
- Necessary repairs and improvements to fish cultural stations and other buildings, offices, or quarters used by the Commission.
- Maintenance and operation of Commission boats.
- Other contingent, incidental, and other expenses reasonably necessary in carrying on the work of the Commission, including the costs of activities for the promotion of public interest in recreational fishing in Pennsylvania.
- Direct purchase of fish and fish food.
- Purchase of lands, waters, and the impounding of waters in Pennsylvania for fishing, boating, and other recreational purposes.
- Purchase and acquisition of additional land and waters for fish cultural stations, the purchase and construction of buildings, ponds, and other extensions incidental to fish cultural stations, the propagation and protection of fish cultural stations, and the distribution and stocking of fish from fish cultural stations.
- The refund of fees, royalties, fines, or other moneys erroneously or unjustly paid into the Fish Fund.
- The lease of land, interests in land, or licenses for the use of the Commission.

The Fish and Boat Code (30 Pa.C.S. §521(b)) also authorizes the Commission to enter into cooperative agreements with Pennsylvania, federal, and other state and local government agencies and interstate compact agencies for the purpose of impounding, managing, using, maintaining, and operating waters for public fishing. Fish Fund monies may be expended for agreed upon pro rata shares of the cost of the acquisition, construction, operation, and maintenance of these waters. In addition, the Commission may enter into agreements and expend monies from the Fish Fund pursuant to private or commercial interests for these purposes.

The Boat Fund

All fees, royalties, fines, penalties, and other monies received, recovered, and collected pursuant to the Fish and Boat Code (30 Pa.C.S. §747, relating to proceeds from sales and grants), and Part III of the Fish and Boat Code (30 Pa.C.S. §5101 et seq., relating to boats and boating), as well as all funds received pursuant to the Liquid Fuels Tax Act (75 Pa.C.S. §9017) are to be deposited into the Boat Fund.

The Fish and Boat Code (30 Pa.C.S. §531) authorizes monies to be expended from the Boat Fund to carry out the functions of the Commission that relate to boats and boating. Subject to this general limitation, Fund monies may be used for the following purposes:

- The payment of all expenses incurred in processing, issuing, or supervising the issuance of boat registrations, special licenses, and permits.
- The payment of the salaries, wages, or other compensation of the executive director, other employees, and other persons as may be required for the work of the Commission.
- The payment of the travel and other expenses of the Boating Advisory Board, officers, employees, and other persons as may be required for the work of the Commission.
- The purchase of such furniture, furnishings, stationery, supplies, materials, equipment, fuel, motor vehicles, boats, and printing and binding as may be necessary to the conduct of the work of the Commission, and the payment of premiums on surety bonds for such officers or employees of the Commission as may be required to obtain policies of workmen's compensation insurance and policies of liability insurance covering the motor vehicles and persons operating them.
- The payment of postage, telegrams, telephone rentals, telephone toll charges, and rentals for patented leased office devices or machines.
- Rentals for any offices outside of the Capitol buildings or any other grounds, buildings, or quarters necessary for the work of the Commission.
- Necessary repairs and improvements to boating access areas and buildings, offices, or quarters used in the work of the Commission.

- The maintenance and operation of such boats as may be required for the business of the Commission.
- Any contingent, incidental, or other expenses of any kind or description reasonably necessary in carrying on the work of the Commission relating to boats and boating including the costs of activities for the promotion of recreational boating in this Commonwealth.
- The purchase of lands and waters and the impounding of waters and to make them available for use by the citizens of this Commonwealth for boating and other related recreational purposes.
- The refund of fees, royalties, fines, or other moneys heretofore or hereafter erroneously or unjustly paid into the Boat Fund.
- The development and implementation of a boating safety education program.
- The lease of land, interests in land, or licenses for the use thereof by the Commission.

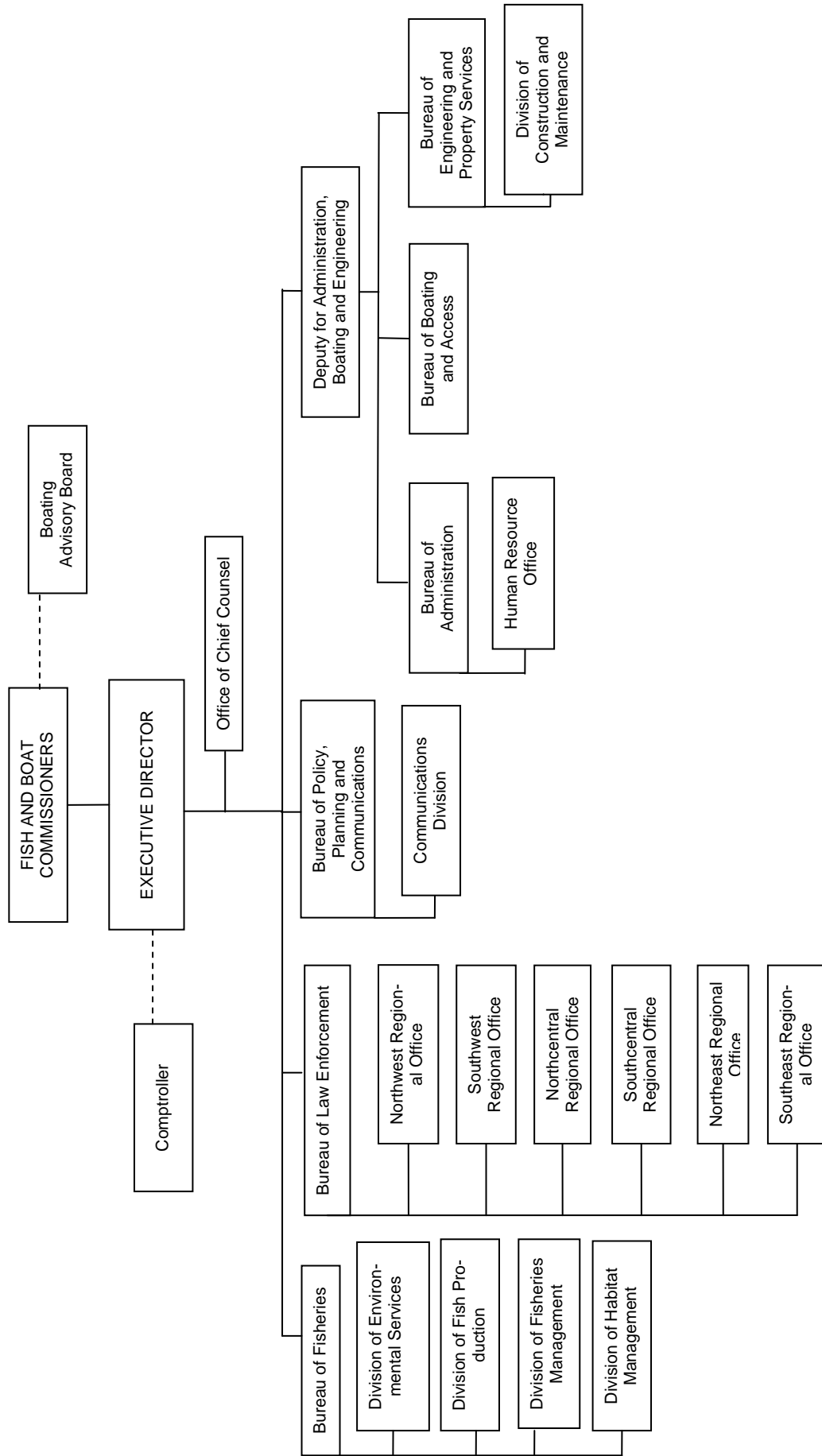
The Commission may enter into cooperative agreements with federal, Commonwealth, and other state and local government agencies and with interstate compact agencies, singly or in concert, for impounding, managing, using, maintaining, and operating waters for public boating and may expend moneys from the Boat Fund for agreed upon pro rata share of the cost of their acquisition, construction, operation, and maintenance. The Commission may enter into similar agreements and undertake similar expenditures in conjunction with private or commercial interests for the same purposes.

Agency Structure, Staffing, and Functions

The Pennsylvania Fish and Boat Commission is organized into the following six bureaus: the Bureau of Fisheries; the Bureau of Law Enforcement; the Bureau of Policy, Planning and Communications; the Bureau of Administration; the Bureau of Boating and Access; and the Bureau of Engineering and Property Services. The latter three bureaus report to a Deputy Director for Administration, Boating and Engineering. The following section briefly describes the responsibilities of each bureau. See Exhibit 17 for the PFBC organization chart.

As of December 31, 2009, the PFBC's staff complement totaled 432 salaried positions and 146 wage positions (see Table 27). The number of filled salaried positions on the complement totaled 398; vacancies numbered 34. More than 69 percent of the complement is employed in fisheries production management and law enforcement activities.

Pennsylvania Fish and Boat Commission



Source: Pennsylvania Fish and Boat Commission.

Table 27

PFBC Salaried Staff Complement, by Organizational Unit

(As of December 31, 2009)

	<u>Filled</u>	<u>Vacant</u>	<u>Total</u>
Executive Office	6	3	9
Bureau of Administration.....	45	4	49
Bureau of Boating and Access.....	4	2	6
Bureau of Engineering and Property Services.....	54	2	56
Bureau of Law Enforcement.....	105	10	115
Bureau of Fisheries	173	9	182
Bureau of Policy, Planning and Communications	<u>11</u>	<u>4</u>	<u>15</u>
Total	398	34	432

Source: PFBC Personnel Complement Report, December 31, 2009.

Executive Office

The Executive Office administers the operations and activities of the entire PFBC. The executive director serves as the Commission’s chief waterways conservation officer and as an ex officio member of the Atlantic States Marine Fisheries Commission, the Environmental Quality Board, the Mid-Atlantic Fisheries Management Council, and the Boating Advisory Board.

Bureau of Fisheries

The Bureau of Fisheries directs the research, management, production, protection, propagation, and distribution of fish, fisheries, habitat, reptiles, amphibians, and certain threatened and endangered/non-game species in the Commonwealth. The bureau also directs the operation of all state fish hatcheries operated by the PFBC.

The bureau operates through four divisions: Fish Production, which has a Cooperative Nursery Unit that assists the stocking of fingerling trout in non-profit nurseries operated by sportsmen’s groups and other outdoor organizations; Fisheries Management (divided geographically into eight fisheries management areas); Habitat Management; and Environmental Services (which oversees major permitting and permit review for pollution/effluent discharge from Commission hatcheries). The bureau also contains an independent Lake Erie Research Unit that provides technical guidance to other agencies and the public concerning issues affecting Lake Erie; conducts large scale fisheries management, research, and restoration activities; and participates in several technical task groups concerning Lake Erie. The bureau coordinates with the Bureau of Engineering and Property Services on infrastructure and renovations of the facilities under its management.

The bureau also contains the Three Rivers Ecological Research Center (3RERC),¹ which provides a research collective of the Allegheny, Monongahela, and Ohio Rivers and their watersheds to benefit habitat, species, and public resources. The Center also works on strategies to manage, conserve, and protect the rivers, and engages in educational partnerships on the three rivers and their watersheds.²

The Division of Fish Production has organizational responsibility for the 14 state fish hatcheries operated by the Commission, divided into seven northern and seven southern hatcheries. The Division of Fish Production directs the production and stocking of trout and warmwater/coolwater species of fish in Pennsylvania's waterways (including Lake Erie). Pursuant to this charge, the division purchases, orders, and delivers all fish food used in the agency, and directs all interstate exchanges or trades of warmwater/coolwater fish and eggs.

Bureau of Administration

The Bureau of Administration provides administrative support services for all PFBC programs and operation, including issuance of and accounting for fishing licenses and permits (including operation of the Pennsylvania Automated Licensing Service, or PALS); purchasing and procurement of supplies, equipment, and services; fixed asset accounting services; issuance of boat registrations and titles; fiscal planning, budget preparation and expenditure, and revenue review; vehicle fleet management; insurance; warehousing and inventory; surplus property management; issuance of special permits; mail and messenger services; federal grants administration; purchasing and travel card management; sale of surplus property; development and management of information systems; and forms and records retention. The bureau does not have formal divisions within it, but it is split among six sections: Budget and Fiscal Management; Purchasing; Federal Assistance; Office Services; Information Systems; and Licensing and Registration.

Bureau of Law Enforcement

The Bureau of Law Enforcement directs the enforcement of Commonwealth fishing and boating laws and regulations and certain water pollution/disturbance laws, as well as enforcement of Title 18, the Crimes Code. Its corps of waterways conservation officers (WCOs) also provides education programs for boating, fishing, and conservation; reviews permits for mine drainage and stream encroachments; administers the PFBC's special activities permits; and participates in fish stocking operations. WCOs are also called upon to engage in rescue and recovery operations associated with infrastructure failures or natural disasters (such as floods).

¹ The 2007 reorganization formally created the Three Rivers Ecological Research Center and renamed all of the PFBC's fish culture stations as "state fish hatcheries."

² The PFBC voted at its April 2010 quarterly Commission meeting to terminate the 3RERC.

The bureau administers the agency's aids-to-navigation activities, the certification of passenger-for-hire boat operations, and the operation of the North East and Walnut Creek marinas. The bureau also operates the PFBC's largest volunteer program, using a force of more than 170 deputy waterways conservation officers. The bureau operates out of headquarters in Harrisburg as well as six regional offices located in Meadville, Somerset, Pleasant Gap, Newville, Sweet Valley, and Elm.

Bureau of Engineering and Property Services

The Bureau of Engineering and Property Services directs the planning, engineering, surveying, designing, constructing, and maintaining of fishing and boating facilities and property. The bureau oversees tasks, duties, and functions related to the planning, engineering, surveying, design, construction, and maintenance of Commission buildings, structures, equipment, utilities, and property. The bureau completes these functions both in-house and through the use of contractors. The bureau develops emergency action plans to be used in cases of catastrophic failures at dams.

To carry out these responsibilities, the bureau is organized into the single Division of Construction and Maintenance and two sections: Property Services and Engineering. Specific examples of bureau duties include the maintenance of dams and public access areas, construction of new access areas, and renovations and maintenance of fish hatcheries and Commission administrative buildings. For maintenance purposes, the Commonwealth is divided into five maintenance regions.

The bureau uses Growing Greener II bond proceeds for Commission infrastructure construction and improvements. The bureau also uses monies from federal grant programs for infrastructure construction and improvements, including through the federal Sport Fish Restoration Act Program.

Bureau of Policy, Planning and Communications

The Bureau of Policy, Planning and Communications conducts research, gathers data and identifies trends in order to develop policy recommendations consistent with the Commission's goals and is responsive to the needs of the fishing and boating public. This bureau develops short-range goals and objectives and long-range strategic plans for the Commission and manages the development and implementation of the agency's legislative agenda. This bureau serves as the liaison between the legislature and the agency and monitors and analyzes legislation affecting the Commission, natural resources, and the angling and boating public. The Division of Communications is responsible for education and outreach and media publications. In support of these activities, it develops diverse educational media and designs and produces brochures, booklets, maps, and pamphlets; and publishes the PFBC's bimonthly magazine, *Pennsylvania Angler & Boater*. The bureau also assists in youth, family, and urban fishing initiatives to encourage participation in

fishing and boating in the Commonwealth. Additionally, staff was involved with a variety of education and outreach efforts including: Trout in the Classroom, family fishing programs, the Youth Bass Angler's Conservation School, education training workshops, and fulfilling a variety of product requests for patches, hats, books, wall charts, and publications.³

Bureau of Boating and Access

The Bureau of Boating and Access has the primary functions of setting policy for boating education (including the mandatory boating safety education program for certain motorboat operators), overseeing boating safety in the Commonwealth, and administering grants related to various aspects of boats and boating. Bureau staff is also involved with administration of the Commission-led water rescue training program.

The bureau oversees the water trails programs, and the planning and development of a comprehensive boating access and facilities program. The bureau monitors the reports and statistics on boating accidents and safety-related incidents. The director serves as the Commonwealth's boating-law administrator and Secretary of the Boating Advisory Board.

One way the PFBC measures boating safety is through the use of the number of recreational boating fatalities per 100,000 registered boats and reports that this ratio has steadily declined over the last forty years. It now appears, however, that this ratio is flattening out to about 3 fatalities per 100,000 registered boats. The 12 boating fatalities recorded in 2009, while an increase from the 8 reported in 2008 and from the 10 in 2007, remained below Pennsylvania's current 10-year average number of fatalities.

<u>Year</u>	<u>Fatalities</u>	<u>10-Year Average</u>
2007	10	12.5
2008	8	12.5
2009	12	12.2

The PFBC attributes the relatively low fatality rate to effective law enforcement and boating safety education programs, which include the certification of between 11,000 and 15,000 individuals annually as having completed a formal boating safety course. The number of boaters completing the courses is actually greater because not all request a certificate.

According to PFBC accident investigations, over half (52 percent) of the fatalities for the past ten years have involved either operators or passengers of

³ PFBC staff was asked by the Commissioners at the January 2010 meeting to create a work group to examine the continuing need, format, subject matter, and publication schedule of *The Angler and Boater* magazine and to present recommendations at the July meeting.

un-powered boats. For the last three years, 77 percent of the individuals who died in recreational boating accidents were not wearing personal floatation devices (PFDs), 93 percent had not been issued a boating safety certificate by the Commission, and hypothermia and cold water shock and/or alcohol are common factors in these boating fatalities.

Commission Revenues and Expenditures

The PFBC operates on funds from the following major sources: the sale of fishing licenses and permits; boat registration fees, fines, and penalties; transfers from other funds; and federal reimbursement through the Sport Fish Restoration Act Program. The Commission also receives an annual General Fund appropriation of \$16,000 to pay the state's annual dues in the Atlantic States Marine Fisheries Commission.

In FY 2008-09, combined revenues to the Fish Fund and Boat Fund totaled \$49.8 million. Licenses and fees accounted for about 67 percent of total revenues. Federal funds and other augmentations, at \$12.6 million, accounted for about 25.3 percent of the total. See Finding III for further information on and analysis of PFBC revenues as well as other sections of this report.

In FY 2008-09, PFBC expenditures amounted to \$48.4 million, with \$35.7 million being expended from the Fish Fund and \$12.7 million expended from the Boat Fund.⁴ About two-thirds of all Commission spending is for personnel services. Operating costs accounted for \$12.7 million, or about 26 percent of total spending in FY 2008-09. Further detail and analysis of Commission expenditures are provided in Finding III and subsequent sections of this report.

⁴Expenditure totals are final.

X. Appendices

APPENDIX A

Pending Bills Relating to the Fish and Boat Commission

(As of April 21, 2010)

House Bill 95: Decreases the required days deployed for special license fees for Pennsylvania National Guard members and certain other military personnel.

House Bill 96: Provides for guiding principles in fisheries and aquatic resource management decisions.

House Bill 259: Provides for voter registration application forms to be available at all PFBC offices.

House Bill 320: Repeals provisions relating to acknowledgement of guilt and receipts for payment as it relates to the powers of waterways patrolmen.

House Bill 419: Proposes an amendment to the Pennsylvania Constitution to preserve the right of the people to hunt, fish, and harvest game.

House Bill 477: Grants to waterways conservation officers the power to enforce the Vehicle Code while in the performance of their duties.

House Bill 717: Provides for exemptions from license requirements for persons who are paraplegic or who are similarly disabled.

House Bill 898: Authorizes waterways conservation officers to enforce trespass laws.

House Bill 1158: Provides for a land transfer to the PFBC.

House Bill 1181: Extends benefits of the Workers' Compensation Act for waterways conservation officers who contract Hepatitis C.

House Bill 1332: Provides for confidential communications to a critical incident stress management team member by law enforcement officers, public safety responders and corrections officers and for confidential communications to a peer support member by law enforcement officers; includes waterways conservation officers.

House Bill 1398: Provides that waterways patrolmen shall be considered police officers for purposes of Act 1968-111.

House Bill 1489: Authorizes an appropriation of 2 percent from the Natural Gas Severance Tax Fund.

House Bill 1513: Extends the benefits of the "Heart and Lung Act" to waterways conservation officers.

House Bill 1548: Provides for employment preference for deputy waterways conservation officers.

House Bill 1785: Provides for a land transfer to the PFBC.

House Bill 1832: Authorizes Pennsylvania to join the Interstate Wildlife Violator Compact.

House Bill 2193: Provides that issuing agents are authorized to issue one-day resident fishing licenses to certain armed forces members.

House Bill 2233: Provides for educational and institutional licenses.

Appendix A (Continued)

House Bill 2433: Provides that the Commission may not require licenses to be displayed on a hat or other outer garment while fishing.

Senate Bill 90: Extends the scope of the Regulatory Review Act to include the Fish and Boat Commission.

Senate Bill 91: Amends provisions relating to the procedure for promulgating regulations; amends definition relating to threatened or endangered species.

Senate Bill 301: Decreases the required days deployed for special license fees for Pennsylvania National Guard members and certain other military personnel.

Senate Bill 490: Provides for an appropriation of \$500,000 from the Oil and Gas Lease Fund to the Commission for the administration of environmental reviews received under the Pennsylvania Natural Diversity Inventory.

Senate Bill 996: Amends provisions relating to Commissioners' terms of office.

Senate Bill 997: Appropriates 3 percent of monies in the Natural Gas Conservation and Community Investment Fund to the PFBC.

Senate Bill 1200: Authorizes Pennsylvania to join the Interstate Wildlife Violator Compact.

APPENDIX B

Status of LB&FC 2008 Report Recommendations

1. **The Pennsylvania Fish and Boat Commission (PFBC) should take steps to update and strengthen its strategic planning process. Specifically, we recommend that the PFBC:**
 - a. Follow through with recently stated plans to restore a full-time strategic planner position to the agency complement.
 - b. With Commissioner participation, convene a planning session(s) to establish and define the strategic planning process (in policy statement and procedural form) and the role of the Strategic Plan in day-to-day PFBC operations.
 - c. Define and clarify the interface/relationship between the Strategic Plan and the Executive Director's Annual Plan of Work.
 - d. Update the current Strategic Plan taking into consideration and drawing upon the list of "strategic actions/operational objectives" the Commissioners and PFBC senior staff and leadership identified for strategic planning purposes in 2004.
 - e. Establish a specific time frame for the updated Strategic Plan and a formal method of internal quantification of output and outcome measures.
 - f. More consistently monitor and track Strategic Plan implementation progress and submit Strategic Plan status reports to the Commissioners at the regularly scheduled Commission meetings.
 - g. Further link the Strategic Plan to the agency budget.
 - h. Undertake a concerted effort to communicate and generate "buy-in" of the updated Strategic Plan from employees at all levels throughout the agency. Also, make the Plan readily available to key stakeholder groups.

Status: See Finding II for a discussion of the implementation of this recommendation.

2. **The General Assembly should consider amending the Recreational Use of Land and Water Act (RULWA) to clarify and broaden the scope of legal protection afforded to landowners who wish to make their property (i.e., land and water areas) available for public recreational purposes such as fishing and boating.**

Status: The RULWA has not been amended. See Finding VIII for further discussion.

3. **The PFBC should provide a special assessment report to the House and Senate Game and Fisheries Committees on the Commission's experience to date in supplementing its annual hatchery production of trout with trout purchased under contract from a private hatchery.**

Appendix B (Continued)

Status: A report entitled “Commercial Procurement of Adult Trout Pilot Study, Status Report and Continuation Plan” dated January 2, 2008, was provided to the Game and Fisheries Committees to inform them of the status of the program prior to requesting bids for trout deliveries starting in February 2009. The final paragraph of that report states “Due to the success of this program and the fact that these fish are very economical, PFBC Division of Fish Production plans to continue purchasing commercially produced adult trout beyond the end of the current contract.” Bids were later accepted in anticipation of continuing the program but the lowest bid was almost triple the previous contract cost. Due to the dramatic price increase and the fact that PFBC state fish hatchery trout were produced at substantially lower costs, the contract was rejected. Please see Finding V for further discussion.

4. As part of a “hatchery program review” planned for mid-2008,¹ the PFBC’s Division of Fish Production should:

- a. Further develop and finalize a “state hatchery production and cost tracking system” that was undertaken during the course of this audit to identify and monitor per fish production costs and individual hatchery performance against targeted production goals.
- b. Consider the potential cost-benefits of expanding the practice of purchasing a portion of the total number of adult trout needed annually for stocking purposes.

Status: See Finding V for discussion of the implementation of this recommendation.

5. The PFBC and the Pennsylvania Emergency Management Agency (PEMA) should form a working group from both agencies to determine the best approach to provide and enhance water and ice rescue training to the Commonwealth’s emergency rescue providers.

Status: The Commission has not formed a working group with PEMA to assist with providing water rescue curricula or instruction to emergency response team members. No meetings that suggested alternatives to the Commission carrying this responsibility have been scheduled. The Commission continues to bear this responsibility to protect Commonwealth citizens by providing these services with no funding from any other source. However, the Commission did accomplish part of the recommendation on its own. The PFBC employs a water rescue training coordinator on a part-time basis. They continue to provide instructor-training seminars for all phases of water rescue training and to purchase and maintain water and ice rescue equipment to support training efforts.

In addition, the PFBC worked closely with PEMA, the State Fire Commissioner, and the Fire Academy to devise a systematic approach to identify and accredit water rescue emergency response teams. This effort, although very important, does not address funding for the Commission’s water rescue training efforts.

¹This review is intended to examine fish production needs, current and potential production, and hatchery staffing and expenses.

Appendix B (Continued)

The Pennsylvania Department of Health, Pennsylvania Emergency Health Services Council led the effort to establish an accreditation program for water rescue teams. After slightly more than two years the statewide project for water rescue has established a program that will credential agencies that wish to provide water rescue services in the Commonwealth of PA. To date, one fire department has completed the training and national certification requirements. Their information will be placed on a database at PEMA in case there is a need to deploy water rescue services. This type of accreditation is pending for several other organizations based on their participation in training, certification and equipment requirements. Once the requirements are met these organizations will apply to be recognized as well. The program is recognized as a joint program between the Office of the State Fire Commissioner (PEMA) and the Pennsylvania Department of Health's Bureau of EMS with a partnership with the Pennsylvania Fish & Boat Commission. Once an organization meets all the requirements for a specific level they complete and submit their application to the State Fire Academy for review, inspection and approval. If they are successful, the service receives a decal to place on their apparatus signifying that they are a credentialed/recognized service in the Commonwealth. The Commission played a key role in the development of this program.

The Commission continues to communicate with PEMA in response to flooding emergencies. Bucks County Community College and Butler County Community College have established water rescue training programs for emergency response team personnel and students. They use the Commission curricula for these courses.

6. Consistent with the PFBC's recent implementation of the Pennsylvania Automated Licensing Service (PALS), the General Assembly should consider amending the Fish and Boat Code to:

- a. authorize the PFBC to make license vouchers available for purchase and redemption through its issuing agents; and
- b. better describe and allow for the maintenance of records by issuing agents in a manner prescribed by the PFBC, including pursuant to an electronic system.

Status: *The Pennsylvania Fish and Boat Commission was authorized by Act 2008-26 to make fishing license vouchers available for purchase and redemption. Act 2008-2, signed into law on February 4, 2008, provided for the use of an electronic system.*

APPENDIX C

Fish Fund Revenue, FY 2006-07 Through FY 2008-09

	FY 2006-07		FY 2007-08		Change From FY 2006-07 to FY 2007-08		FY 2008-09		Change From FY 2007-08 to FY 2008-09	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
<u>Licenses and Fees</u>										
Lake Erie Licenses.....	\$ 870		\$ 395	(54.6)%	\$ (475)		\$ 740	\$ 345	87.3%	
Fee-Fishing Lake Licenses	21,275		14,500	(31.8)	(6,775)		15,130	630	4.3	
Miscellaneous Permits and Fees	130,283		159,754	22.6	29,471		178,975	19,221	12.0	
Resident Fishing Licenses - Regular.....	15,424,691		16,214,576	5.1	789,885		16,191,552	(23,024)	(0.1)	
Non-Resident Fishing Licenses.....	2,021,176		2,207,700	9.2	186,524		2,115,969	(91,732)	(4.2)	
Resident Fishing Licenses - Senior.....	176,332		198,852	12.8	22,520		189,929	(8,923)	(4.5)	
Scientific Collectors' Permits	11,130		26,695	139.9	15,565		31,740	5,045	18.9	
Trout-Salmon Permit.....	4,722,290		4,918,939	4.2	196,649		4,786,193	(132,746)	(2.7)	
Lifetime Fishing Licenses - Senior Residents	569,521		735,248	29.1	165,727		745,682	10,434	1.4	
H.R. Stackhouse Facilities User Fees.....	1,300		21	(98.3)	(1,279)		0	(21)	(100.0)	
1-Day Fishing Licenses	63,162		81,382	28.9	18,220		95,609	14,227	17.5	
Tourist Fishing Licenses - 3 Days	612,103		673,477	10.0	61,374		648,849	(24,628)	(3.7)	
Tourist Fishing Licenses - 7 Days	220,671		251,137	13.8	30,466		244,882	(6,255)	(2.5)	
1-Day Tourist Fishing Licenses	148,567		165,027	11.1	16,460		153,806	(11,221)	(6.8)	
Resident Charter Boat/Fishing Guide Permit	29,810		31,135	4.4	1,325		31,505	370	1.2	
Non-Resident Charter Boat/Fishing Guide Permit.....	18,800		16,400	(12.8)	(2,400)		17,100	700	4.3	
PA National Guard Fishing License	915		596	(34.9)	(319)		642	46	7.7	
POW Resident Fishing License.....	0		2	100.0	2		2	0	0.0	
Senior Lifetime Upgrade	23,747		41,108	73.0	17,361		51,233	10,126	24.6	
PALS Transaction Fee	0		707,117	100.0	707,117		981,456	274,339	38.8	
Total - Licenses and Fees.....	\$24,196,643		\$26,444,060	9.3%	\$2,247,417		\$26,480,992	\$ 36,933	0.1%	
Fines and Penalties.....	\$ 447,931		\$ 470,140	5.0%	\$ 22,210		\$ 460,333	(\$ 9,808)	(2.1)%	

Appendix C (Continued)

	Change From FY 2006-07 to FY 2007-08			Change From FY 2007-08 to FY 2008-09		
	FY 2006-07	FY 2007-08	Percent	FY 2008-09	Dollars	Percent
Miscellaneous Revenue						
Interest on Securities and Deposits.....	\$ 1,912,670	\$ 1,479,165	(22.7)%	\$ 129,091	(\$1,608,256)	(108.7)%
Sale of Unserviceable Property (Thru DGS)	9,859	50	(99.5)	0	(50)	(100.0)
Pollution/Stream Disturbance Settlements	277,735	295,262	6.3	275,416	(19,846)	(6.7)
Sale of Publications.....	32,392	24,934	(23.0)	29,486	4,552	18.3
Rental of Fish & Boat Commission Property	38,499	51,553	34.0	42,881	(8,671)	(16.8)
Income From Sand and Gravel Dredging.....	904,601	916,432	1.3	721,503	(194,928)	(21.2)
Sale of Pennsylvania Angler/Boater Magazine	238,880	138,311	(42.1)	138,215	(96)	(0.1)
Miscellaneous Revenue	33,235	23,201	(30.2)	14,410	(8,791)	(37.9)
Refunds of Expend. Not Credited to Approp.	185,644	491,826	164.9	7,539	(484,286)	(98.5)
Sale of Patches.....	29,800	17,501	(41.3)	9,478	(8,022)	(45.8)
Sale of Recreational Fishing Promotional Items.....	8,599	5,004	(41.8)	5,491	487	9.7
Royalty Payments	8,314	5,480	(34.1)	5,176	(304)	(5.6)
Sales Tax Collected	11	(11)	(204.7)	0	11	100.0
Sales of Timber.....	0	0	0.0	0	0	0.0
Donations.....	4,041	21,586	434.2	11,121	(10,465)	(48.5)
Total - Miscellaneous Revenue	\$ 3,684,279	\$ 3,470,292	(5.8)%	\$ 1,131,627	(\$2,338,665)	(67.4)%
Revenue Subject to Executive Authorization	\$28,328,853	\$30,384,492	7.3%	\$28,072,951	(\$2,311,541)	(7.6)%
Augmentations						
Sale of Automobiles and Other Used Vehicles.....	\$ 21,900	\$ 36,740	67.8%	\$ 13,375	(\$ 23,365)	(63.6)%
Dept. of Transportation--Permit Review	106,752	139,679	30.8	136,808	(2,871)	(2.1)
DEP/EPA Projects.....	0	2,014	100.0	90,122	88,108	4,374.8
State Reimbursement for Services.....	0	0	0	40,000	40,000	100.0
Purchasing Card Rebate	5,791	0	(100.0)	0	0	0.0
Revenues Augmenting Prior Fiscal Year	0	64,157	100.0	0	(64,157)	(100.0)
Reimbursement - Non-Government Organization.....	0	0	0	25,263	25,263	100.0
DEP/Three Rivers	40,000	40,000	0.0	40,000	0	0.0
Wildlife Conservation & Restoration-Non-Game	264,390	239,782	(9.3)	98,514	(141,268)	(58.9)
Sport Fish Restoration Act Program.....	6,286,996	7,607,449	21.0	6,592,683	(1,014,766)	(13.3)

Appendix C (Continued)

	Change From			Change From		
	FY 2006-07	FY 2007-08	FY 2008-09	FY 2006-07 to FY 2007-08	FY 2007-08 to FY 2008-09	Percent
Augmentations (Continued)						
Department of Commerce (NOAA)	\$ 274,338	\$ 318,615	\$ 233,874	\$ 44,277	\$ 84,741	(26.6)%
Reimbursement--Endangered Species	0	0	14,705	0	14,705	100.0
Dept. of Trans. Habitat Assessments	0	500,000	25,658	500,000	(474,342)	(94.87)
Surface Mine Regulatory Program	52,214	51,091	51,947	(1,123)	856	1.7
Natural Disaster Costs Recovered	124,414	0	0	(124,414)	0	0.0
Land & Water Conservation Fund	9,513	0	0	(9,513)	0	0.0
State Wildlife Act Grant Program	151,893	1,797,814	1,225,723	1,645,921	(572,091)	(31.8)
Federal Reimbursement for Services	2,504	0	0	(2,504)	0	0.0
Total - Augmentations	\$ 7,340,704	\$10,797,341	\$ 8,588,673	\$3,456,636	(\$2,208,667)	(20.5)%
Total Revenue	\$35,669,557	\$41,181,832	\$36,661,624	\$5,697,919	(\$4,520,208)	(11.0)%
Restricted Revenue:						
Lake Erie Special Fishing Permits	\$ 614,256	\$ 674,717	\$ 661,382	\$ 60,462	\$ 13,335	(2.0)%
Natural Resources - Damage Recoveries	65,683	79,946	125,744	\$14,263	45,798	57.3
Conservation Partnership Account	760	1,435	1,500	\$675	65	4.5
Vol. Waterways/Watersheds Conservation Program	176	0	12	(176)	12	100.0
Recreational Fishing & Boating Enhancements	33,000	11,000	0	(22,000)	(11,000)	(100.0)
Norfolk Southern Corporation Settlement	0	3,582,000	126,884	3,582,000	(3,455,116)	(96.5)
Total	\$ 713,875	\$ 4,349,099	\$ 915,522	\$3,635,224	(\$3,433,577)	(79.0)%

APPENDIX D

Boat Fund Revenue, FY 2006-07 Through FY 2008-09

	Change From			Change From		
	FY 2006-07			FY 2007-08		
	FY 2006-07	FY 2007-08	Percent	FY 2008-09	Dollars	Percent
Licenses and Fees						
Boat Mooring - Walnut Creek Access.....	\$ 45,437	\$ 46,755	2.9%	\$ 50,284	\$ 3,529	7.5%
Motorboat Registration Fees	6,056,955	5,913,998	(2.4)	6,188,890	274,892	4.6
Boat Capacity Plate Fees.....	3,955	8,613	117.8	7,390	(1,223)	(14.2)
Boating Safety Curriculum Fees.....	163,060	165,365	1.4	203,462	38,097	23.0
Boat Titling Fees	454,833	458,356	0.8	448,226	(10,131)	(2.2)
Boat and Marine Forfeiture.....	<u>0</u>	<u>0</u>	0.0	<u>65</u>	<u>65</u>	100.0
Total Licenses and Fees	\$ 6,724,240	\$6,593,087	(2.0)%	\$6,898,316	\$305,228	4.6%
Fines and Penalties Total	\$ 212,887	\$ 240,640	13.0%	\$ 235,788	(\$ 4,852)	(2.0)%
Miscellaneous Revenue						
Reimbursement from Motor License & Liquid Fuels Tax Funds	\$ 2,218,050	\$1,714,397	(22.7)%	\$1,687,540	(\$ 26,857)	(1.6)%
Interest on Securities and Deposits.....	1,466,655	1,045,000	(28.7)	176,479	(868,521)	(83.1)
Sale of Unserviceable, Property (Thru DGS)	0	\$1,523	100.0	0	(1,523)	(100.0)
Miscellaneous Revenue - Fish & Boat Commission	70,621	79,436	12.5	78,642	(793)	(1.0)
Sales Tax Agent Fees.....	55,312	42,882	(22.5)	34,260	(8,622)	(20.1)
North East Marina	10,660	10,660	0.0	10,660	0	0.0
Donations	<u>1,960</u>	<u>1,954</u>	(0.3)	<u>2,420</u>	<u>467</u>	24.0
Total - Miscellaneous Revenue	\$ 3,823,258	\$2,895,851	(24.3)%	\$1,990,002	(\$905,849)	(31.3)%
Revenue Subject to Executive Authorization	\$10,760,384	\$9,729,578	(9.6)%	\$9,124,106	(\$605,472)	(6.2)%

Appendix D (Continued)

Augmentations	FY 2006-07		FY 2007-08		Change From FY 2006-07 to FY 2007-08		Change From FY 2007-08 to FY 2008-09	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Sale of Automobiles and Other Used Vehicles.....	\$ 650	10.400	\$ 10,400	1,500.0%	\$ 9,750	1,500.0%	(\$ 10,400)	(100.0)%
Dept. of Transportation - BUJ Enforcement	0	0	0	0.0	\$0	0.0	0	0.0
U.S. Coast Guard Grant for Recreational Boating Safety	1,976,674	2,291,327	314,653	16.0	2,845,312	24.2	553,985	24.2
Boating Infrastructure Grant (BIG) Program.....	96,475	0	(96,475)	(100.0)	0	0.0	0	0.0
Sport Fish Restoration Act Program.....	1,008,817	1,412,823	404,007	40.0	1,138,569	(19.4)	(274,254)	(19.4)
Clean Vessel Act.....	11,534	3,708	(7,826)	(68).0	17,501	372.0	13,793	372.0
Fed. Reimbursement - Coastal Zone Mgmt.	0	0	0	0.0	1,534	100.0	1,534	100.0
National Marine Fisheries - Investigations.....	0	0	0	0.0	0	0.0	0	0.0
Land & Water Conservation Fund	9,513	0	(9,513)	(100.0)	0	0.0	0	0.0
State Wildlife Act Grant Program (Wildlife Cons & Rest. Non-Game)	0	0	0	0.0	0	0.0	0	0.0
Federal Reimbursement for Services	1,670	0	(1,670)	(100.0)	0	0.0	0	0.0
Total - Augmentations.....	\$ 3,105,332	\$ 3,718,258	\$612,927	20.0%	\$ 4,002,916	7.7%	\$284,658	7.7%
Total Revenue - Boat Fund.....	\$13,865,716	\$13,447,836	(\$417,880)	(3.0)%	\$13,127,022	(2.4)%	(\$320,814)	(2.4)%

APPENDIX E

Resident and Nonresident Fishing License Fees Charged in Other States* (As of November 2009)

<u>Resident</u>		<u>Nonresident</u>	
<u>State</u>	<u>Fee</u>	<u>State</u>	<u>Fee</u>
California	\$41.20 ^a	Alaska	\$145.00
Connecticut.....	40.00	California.....	110.80 ^a
New Hampshire	35.00	Idaho	98.25
Texas	30.00	Wyoming.....	92.00
Nevada	29.00	Connecticut.....	80.00
Tennessee.....	28.00 ^b	Arizona.....	70.25
Massachusetts.....	27.50	Utah	70.00
Utah	26.00	Montana.....	70.00
Montana.....	26.00	Nevada.....	69.00
Colorado	26.00	Oregon.....	61.50 ^c
Idaho.....	25.75	South Dakota	60.00
South Dakota	25.00	Louisiana.....	60.00 ^d
New Mexico	25.00	Texas	58.00
Oklahoma	25.00	Nebraska.....	57.00
Nebraska	25.00	New Mexico	56.00
Oregon.....	24.75 ^e	Colorado	56.00
Alaska.....	24.00	New Hampshire	53.00
Wyoming.....	24.00	Maine	52.00
Washington.....	24.00	Pennsylvania.....	51.00
Arizona	23.50	Wisconsin.....	50.00
New Jersey.....	22.50	Mississippi.....	50.00
Pennsylvania.....	21.00	Kentucky	50.00
Maine.....	21.00	Washington.....	48.00
Maryland.....	20.50	Florida	47.00 ^f
Kansas.....	20.50	Alabama.....	46.00 ^g
Wisconsin	20.00	Georgia	45.00
Vermont	20.00	Kansas.....	42.50
Kentucky	20.00	Oklahoma.....	42.00
Ohio	19.00	Missouri.....	42.00
New York.....	19.00 ^d	Vermont	41.00
West Virginia	18.00 ^h	Tennessee	41.00 ^b

Appendix E (Continued)

<u>Resident</u>		<u>Nonresident</u>	
<u>State</u>	<u>Fee</u>	<u>State</u>	<u>Fee</u>
Virginia.....	\$18.00 ⁱ	Arkansas	\$ 40.00
Rhode Island	18.00	Ohio	40.00
Iowa	17.50	New York	40.00 ^d
Minnesota	17.00	Iowa	39.50
Indiana.....	17.00	Minnesota	39.50
Florida.....	17.00 ^f	Massachusetts	37.50
North Carolina.....	15.00	North Dakota.....	37.00
Michigan	15.00	Virginia.....	36.00 ⁱ
Illinois.....	13.00	West Virginia.....	35.00 ^h
Alabama	12.00 ^g	South Carolina	35.00
Missouri	12.00	Rhode Island.....	35.00
North Dakota	11.00	Indiana	35.00
Arkansas.....	10.50	New Jersey	34.00
South Carolina.....	10.00	Michigan.....	34.00
Louisiana	9.50 ^d	Maryland	30.50 ^j
Georgia.....	9.00	North Carolina.....	30.00
Delaware	8.50	Hawaii	25.00
Mississippi	8.00	Illinois	24.50
Hawaii.....	5.00	Delaware.....	20.00

*Important Note: Many states also require license holders to obtain separate licenses, permits, or stamps for fishing in certain waterways or for certain species.

^aRequired in statute to review fees every 5 years, increases are tied to the change in the implicit Price Deflator for State and Local Government Purchases of Goods and Services.

^bAdjustments based on the CPI.

^cEffective January 1, 2010, the fee will increase to \$106.25.

^dRequired in statute to review fees every 2 years.

^eEffective January 1, 2010, the fee will increase to \$33.

^fRequired in statute to review fees every 5 years. Fees are to be adjusted based on the percentage change in the Consumer Price Index.

^gAnnual review of fees based on CPI beginning in license year October 1, 2010.

^hIncreases based on CPI. No increases may be made after January 1, 2011.

ⁱRequired in statute to review fees every 3 years.

^jMaryland's non-resident license fee is equal to a \$30.50 minimum or the fee charged a Maryland resident in non-resident's home state. Required in statute to review fees every 2 years.

Source: Developed by LB&FC staff using information obtained from state fish, game, and wildlife agencies' websites.

APPENDIX F

PFBC Pollution/Natural Resource Damages Settlements – CY 2007-2009*

Party Name	Description	Use of Settlement Funds
<p>Norfolk Southern Corporation & Norfolk Southern Railway Company</p>	<p>In March 2008, the Commission received a check from Norfolk Southern Corporation in the amount of \$3,582,000 in settlement of the Commission's natural resource damages stemming from a June 30, 2006, train derailment in rural Norwich Township, McKean County. The derailment resulted in the discharge of more than 40,000 gallons of sodium hydroxide into Big Fill Run and then into Sinnemahoning-Portage Creek and the Driftwood Branch of Sinnemahoning Creek.</p>	<p>Funds placed in a restricted, interest-bearing account, to be used for the development and implementation of projects that benefit recreational fishing and boating and the aquatic resources of Cameron, McKean, Elk and Potter counties. Monies may be used for, among other things, grants to Commission partners. The Office of Chief Counsel worked with Commission staff to develop and finalize program guidelines and the application package for the Sinnemahoning Creek Watershed Restoration Grant Program. The Commission began soliciting applications for this program in the fall of 2008.</p>
<p>Merck & Co., Inc.</p>	<p>The Office of Chief Counsel, along with the Bureau of Law Enforcement, reached a settlement agreement with Merck & Co., Inc., for a pollution event on the Wisahickon Creek that resulted in a fish kill. The settlement, which was part of a larger settlement involving DEP and the U.S. Environmental Protection Agency, was approved by the United States District Court for the Eastern District of Pennsylvania in March 2008. Under the settlement agreement, Merck made a payment to the Commission in the amount of \$75,000.</p>	<p>No restriction on use.</p>
<p>Palmerton Zinc Pile Superfund</p>	<p>Under a settlement agreement with the U.S. Justice Department and the Commonwealth of Pennsylvania, five companies have agreed to pay approximately \$21.4 million in cash and property to compensate for natural resource damages resulting from decades of zinc smelting operations at the Palmerton Zinc Pile Superfund site, located about 25 miles north of Allentown. CBS Operations Inc., TCI Pacific Communications Inc., CBS/Westinghouse of Pa. Inc., HH Liquidating Corp. and HRD Liquidating Corp., agreed to make a cash payment of \$9.875 million and to transfer 1,200 acres of valuable property, known as the Kings Manor property and valued at approximately \$8.72 million, to the Pennsylvania Game Commission. The companies' cash payment will be deposited into the U.S. Department of the Interior's Natural Resource Damage Assessment and Restoration Trust Fund. State and federal agencies will use the funds to restore, replace, or acquire the equivalent of natural resources impacted by the site. A restoration plan will be developed for public comment by the trustees. In addition, the companies agreed to pay \$2.5 million for damage assessment costs and to discharge a mortgage worth \$300,000 on the Wildlife Information Center (Lehigh Gap Nature Center), a non-profit conservation and environmental education organization, located at the Lehigh Gap. The PFBC portion will be determined as part of the restoration projects approved by the trustees.</p>	<p>Trustees will develop a restoration plan and present for public review and comment prior to implementing any restoration projects to be funded with the settlement.</p>

*Date of Settlement of the Case.

Source: PA Fish and Boat Commission.

APPENDIX G

All States' Funding Sources for Fish and Wildlife Activities

	User Fees	Federal Aid	General Revenue	Non-License Fee Sales Revenues	Transportation-Related Revenues	Grants and Donations	Revenues From Fines, Damages, and Mitigation Requirements	Other Sources
Alabama	✓	✓		✓	✓	✓	✓	✓
Alaska	✓	✓	✓	✓		✓		
Arizona	✓	✓		✓	✓	✓		✓
Arkansas	✓	✓	✓	✓	✓	✓	✓	✓
California	✓	✓	✓	✓		✓	✓	
Colorado	✓	✓		✓		✓		✓
Connecticut	✓	✓		✓	✓	✓	✓	
Delaware	✓	✓	✓	✓	✓	✓	✓	✓
Florida	✓	✓	✓	✓	✓	✓	✓	✓
Georgia	✓	✓	✓	✓	✓			✓
Hawaii	✓	✓	✓	✓		✓	✓	✓
Idaho	✓	✓			✓	✓	✓	
Illinois	✓	✓		✓	✓		✓	✓
Indiana	✓	✓	✓		✓			✓
Iowa	✓	✓		✓	✓	✓	✓	✓
Kansas	✓	✓		✓	✓	✓	✓	✓
Kentucky	✓	✓		✓	✓	✓	✓	✓
Louisiana	✓	✓			✓		✓	
Maine	✓	✓	✓	✓	✓	✓	✓	
Maryland	✓	✓	✓	✓	✓	✓		
Massachusetts	✓	✓		✓	✓	✓	✓	✓
Michigan	✓	✓	✓				✓	
Minnesota	✓	✓	✓	✓	✓	✓	✓	✓
Mississippi	✓	✓	✓	✓	✓		✓	
Missouri	✓	✓	✓	✓		✓	✓	✓
Montana	✓	✓		✓	✓	✓	✓	✓
Nebraska	✓	✓	✓	✓	✓	✓	✓	✓
Nevada	✓	✓	✓	✓	✓	✓	✓	✓
New Hampshire	✓	✓		✓	✓			
New Jersey	✓	✓			✓	✓	✓	
New Mexico	✓	✓	✓	✓	✓		✓	✓
New York	✓	✓	✓			✓	✓	✓
North Carolina	✓	✓	✓	✓	✓		✓	✓
North Dakota	✓	✓			✓	✓		
Ohio	✓	✓			✓		✓	✓

Appendix G (Continued)

	User Fees	Federal Aid	General Revenue	Non-License Fee Sales Revenues	Transportation-Related Revenues	Grants and Donations	Revenues From Fines, Damages, and Mitigation Requirements	Other Sources
Oklahoma	✓	✓		✓	✓	✓	✓	✓
Oregon	✓	✓	✓			✓	✓	✓
Pennsylvania	✓	✓		✓	✓	✓	✓	✓
Rhode Island	✓	✓	✓	✓		✓		
South Carolina	✓	✓	✓	✓	✓	✓	✓	
South Dakota	✓	✓		✓	✓		✓	✓
Tennessee	✓	✓		✓	✓	✓	✓	✓
Texas	✓	✓		✓	✓	✓	✓	✓
Utah	✓	✓	✓		✓	✓		
Vermont	✓	✓	✓	✓	✓	✓	✓	✓
Virginia	✓	✓	✓	✓	✓	✓		
Washington	✓	✓	✓	✓	✓	✓	✓	✓
West Virginia	✓	✓	✓	✓	✓		✓	✓
Wisconsin	✓	✓	✓	✓		✓	✓	✓
Wyoming	✓	✓		✓	✓	✓		✓

Source: Wisconsin Joint Legislative Audit Committee, *An Evaluation: Fish and Wildlife Funding-Department of Natural Resources*, June 2006.

APPENDIX H

Issues Identified in PFBC Trout Management Plan, 2010-2014

1. The PFBC has not assessed all of the streams throughout the Commonwealth. As a result, the total number of streams that support wild trout populations in Pennsylvania is unknown, which leads to inadequate protection for these streams. The PFBC does not currently have the ability to assess these most at-risk streams at a rate that outpaces the rate of degradation.
2. There are a number of streams that may hold Class A biomass trout populations that have not been officially designated as Class A streams by the PFBC. This leads to inadequate water quality protection for these waters and inconsistent application of fisheries management strategies.
3. Currently, the PFBC stocks adult trout in a total of 80 stream sections that support at least a minimum Class B wild trout biomass. There may be the potential to improve the wild trout biomass on some of these waters through the cessation of stocking.
4. Anglers, as well as the general public, do not have an adequate understanding of the classification system used to define wild trout populations throughout the Commonwealth.
5. The cumulative effects of human development have been inadequately addressed in permitting actions.
6. Invasive species and disease pathogens such as, didymo, round goby, zebra mussels, and VHS threaten our trout fisheries.
7. Maintaining free public access to Pennsylvania's wild trout fisheries is important to provide trout angling opportunities.
8. The expansion of wild trout populations is impeded in streams where habitat has been identified as the primary limiting factor. Furthermore better knowledge of the effects of habitat manipulations on wild trout populations is needed.
9. Through their ability to impede movement, trap sediment and increased water temperatures barriers remain a deterrent to fully functional wild trout streams.
10. Impairment of the natural flow regime through water withdrawals and reservoir operations threatens the quality of wild trout waters.
11. Criteria for the inclusion of waters into special regulation programs for trout fisheries are lacking and the degree to which special regulation programs are meeting management objectives needs to be fully evaluated.
12. New and innovative technology is needed to ensure protection of aquatic resources downstream of PFBC trout hatcheries.
13. PFBC hatchery water quality and quantity will affect future operational capability.
14. Cooperative nurseries provide considerable support to the PFBC's ATW program. Additional PFBC support of this program is warranted.
15. The cost to operate the stocked trout program is significant and as such, the PFBC must investigate ways to optimize hatchery operations and program efficiency.

Appendix H (Continued)

16. Maintaining free public access to Pennsylvania's stocked trout fisheries is important to maintain Pennsylvania's angling heritage.
17. Success of the stocked trout program requires that a significant proportion of the trout that are stocked into a water are available to anglers to catch when the season is opened. There have been problems identified with the residency of stocked trout in some waters.
18. Recent generations are increasingly disconnected from the Commonwealth's aquatic resources.
19. Fingerling trout stocking may provide an opportunity to provide fisheries of high quality at lower costs than stocking with adult trout in some circumstances. Our knowledge of the success of fingerling trout stocking programs in streams to meet management objectives is inadequate.
20. Maintaining free public access to Pennsylvania's lakes is important to maintain Pennsylvania's angling heritage.
21. The cost to operate the stocked trout program on lakes is significant and as such the benefits of providing recreational angling opportunities with stocked trout should, at a minimum, equal the costs.
22. The Early Season Trout Stocked Waters program is the biggest obstacle to stocking more streams closer to opening day and thus minimizing trout residency problems. Nevertheless, the program is very popular among trout anglers and among anglers who fish for other species such as perch and crappie.
23. The PFBC does not have a long term source of disease free brown trout eggs or an isolated facility to raise fingerling brown trout for stocking Lake Erie. Addressing these issues is critical to the development of an expanded Lake Erie brown trout fishery within the guidelines of the Great Lake Fish Health Advisory Committee.
24. Maintaining free public access to Pennsylvania's portion of Lake Erie is important to maintain Pennsylvania's angling heritage.

APPENDIX I

Response to This Report



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Pennsylvania Fish & Boat Commission

EXECUTIVE DIRECTOR
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June 2, 1010

Mr. Philip R. Durgin
Executive Director
Legislative Budget and Finance Committee
Room 400A Finance Building
Harrisburg, PA 17105-8737

Dear Mr. Durgin:

Thank you for the thorough review of the Commission's performance over the past three years as presented in the report titled "A Performance Audit of the Pennsylvania Fish and Boat Commission." The issuance of your report is especially timely for me since I transitioned into the role of Executive Director earlier this year. Your findings and recommendations are helpful in addressing the opportunities that lie before me and the Commission. Staff have carefully considered your recommendations and prepared responses which you'll find as an attachment.

We look forward to working with members of the Legislature and our many partners to advance these recommendations in support of the mission of the Pennsylvania Fish and Boat Commission. Please feel free to call upon us if you require any additional information to complete this performance audit.

Sincerely,

John A. Arway
Executive Director

Attachment

Our Mission:

www.fishandboat.com

To protect, conserve and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities.

Pennsylvania Fish and Boat Commission
Response to LBFC Confidential Draft Report Recommendations
A Performance Audit of the Pennsylvania Fish and Boat Commission

Recommendation #1

The Commission concurs with the recommendation that it should proceed with efforts to secure sustainable revenue streams and has made it a priority in our new strategic plan.

The Commission relies almost entirely on fishing license sales, boat registrations, and federal funding tied to fishing and boating to support our full range of activities, and we are being asked to play more and more roles for the benefit of all Pennsylvanians and the game and non-game species we are entrusted to protect. At the same time, the costs of delivering traditional services continue to rise while the national trend of declining numbers of license buyers and boat registrants plays out in Pennsylvania.

Quite simply, we are being asked to do more with less, and we do not currently have the ability to add new sources of revenue. Compounding the challenge, if history holds true to form, the next relatively large increase in the cost of a fishing license will likely speed up the pace at which we lose our traditional license buying customers.

Just like a family or business diversifies its investment portfolio to achieve financial stability and further its goals, we must diversify our funding streams if we are going to meet the growing expectations being placed on the Commission as we implement our mission on behalf of all Pennsylvanians, visiting anglers and boaters, and our fragile natural resources. We will need the cooperation and support of the General Assembly and Governor, since most of the potential sources of revenue (e.g., portion of severance tax revenue; dedicated portion of a renewed Growing Greener program; ability to create, charge, and increase specific fees) are beyond our control to enact on our own.

Recommendation #2

The Commission supports the recommendation that the General Assembly should consider providing additional resources to the PFBC so we can continue to make efforts to protect water resources from potential degradation by Marcellus Shale drilling efforts. While not described in this report, it should be noted that the Commission's role with respect to Marcellus Shale is much broader than issues related to our own properties and enforcement activities. With limited staff and resources, we have been able to take some initiative on issues such as working with the Pennsylvania Department of Environmental Protection (DEP) to ensure water quality protection, preventing the spread of aquatic invasive species, advising the Susquehanna and Delaware River Basin Commissions on water withdrawals to protect in-stream flows and the animals that depend on water to live, and, as mentioned in this report, having our waterways conservation officers proactively conduct inspections.

We are also stepping up our efforts and looking to outside partners to help us survey and document the presence of wild trout waters in thousands of miles of previously unassessed streams – many of which flow through regions underlain by Marcellus Shale. Once properly assessed and designated by the Commission, DEP would then protect these waters consistent with Commonwealth laws and regulations.

We want to help the industry protect our waters and habitats and comply with environmental laws. Industry representatives have told us that they would welcome the chance to work more proactively with us in areas such as avoiding sensitive rattlesnake habitats, insuring water quality protection for sensitive aquatic life uses, and avoiding Exceptional Value wetlands. Unfortunately, we simply do not have the resources (staff and funding) to adequately and proactively assist the industry, DEP, and the River Basin Commissions with controlling the impacts of Marcellus development.

Finally, while the potential for natural gas development and associated water access and use from PFBC properties was described in this report, the Commission believes it is also important to distinguish between our own property management (and associated revenue generating potential) and our statewide role in making sure the Marcellus play is developed with as little impact as possible to aquatic resources, fishing, and boating. We think these issues (PFBC properties vs. statewide conservation role) deserve distinction and we plan to devote separate staff time and resources to them consistent with the goals and objectives outlined in our new *Strategic Plan July 2010-June 2015* (currently in draft).

Recommendation #3

The PFBC supports the recommendation to complete the review of the fish hatchery program. As noted in the report, a complete hatchery review is ongoing. A number of cost containment steps have been taken over the past three years including a complete Full-Time Equivalent evaluation of our hatcheries, which led to a replacement of six full-time staff with wage staff, changes in feed management and feed purchasing procedures, an ongoing cost study on fish distribution, and efforts to reduce numbers of surplus fish in the system. We have added this recommendation as an element to our draft *Strategic Plan July 2010-June 2015*. Our plans are to convene a workgroup by August 2010 and complete the fish hatchery review by September 2011.

Recommendation #4

The PFBC agrees with this recommendation to analyze the results of the last three years of the Commission's lapsed angler marketing campaign. A cost/benefit analysis has been performed on the first two years of data and will be performed following the third year. Any decision to seek a hiring freeze exemption and recreate the marketing position will depend, in part, on the evaluation of the third year of this data and other marketing research results. It is important to note that the Commission's decision to pursue a full-time Press Secretary in lieu of the marketing position is intended to help the Commission achieve, among other things, funding goals in our draft *Strategic Plan July 2010-June 2015*. One of the main roles of the Press Secretary will be to help the Executive Director advance and advocate for alternative sources of revenue and capital funding needs. The PFBC agrees with the recommendation to utilize the PALS data to survey our licensees and, in fact, this issue is also identified as a goal in our draft *Strategic Plan 2010-2015*.

Recommendation #5

The PFBC supports the Committee's recommendation that the General Assembly should consider amending the Recreation Use of Land and Water Act (RULWA) to clarify and broaden the scope of legal protection afforded to landowners who wish to make their property (i.e., land and water areas) available for public recreational purposes such as fishing and boating.

Pennsylvania's Fishing and Boating Access Strategy, released in April 2010, points to the posting of private land as one of the major impediments to fishing and boating access. The strategy recommends expanding the Commission's fishing access conservation easement program to counter this issue. The PFBC's fishing access conservation easement provides private landowners the opportunity to provide public access in perpetuity, and RULWA is very important to landowners granting an easement to the PFBC.

One way to address the matter is to amend RULWA's definition of "land," as the Committee suggests, to include boating access and launch ramps, fishing piers, boat docks, and access to and parking for these areas and trails. As noted in the report, the PFBC, along with several of our partners, previously supported efforts to amend the definition in that regard. The PFBC would appreciate the Committee's support in advancing future efforts to amend RULWA.