

Pennsylvania Fish & Boat Commission  
**STRATEGIC PLAN**

*July 1, 2020 - June 30, 2023*

[www.fishandboat.com](http://www.fishandboat.com)



The Pennsylvania Fish & Boat Commission (PFBC) is pleased to share the new strategic plan which will guide the agency's activities from July 1, 2020, through June 30, 2023. This plan represents a year's worth of hard work and deliberation by PFBC Commissioners and staff. It highlights the wide variety of roles PFBC employees play in protecting, conserving, and enhancing aquatic resources and providing fishing and boating opportunities on behalf of all Pennsylvanians.

The strategic plan is ambitious, broad, and detailed. It is ambitious in that we seek to deliver – and improve upon – existing products and services, while making a substantial commitment to exploring new opportunities. The plan is broad in scope and includes both new initiatives and core agency functions. The intent to include more routine activities was deliberate and acknowledges these activities as essential to fulfilling the PFBC's mission. Finally, the plan is detailed, particularly with respect to the goals and sub-goals that are found in the plan. Some of this detail is the direct result of using a SMART goal format, which means that goals meet the following five criteria:

- S – Specific
- M – Measurable
- A – Action-oriented
- R – Realistic
- T – Time-bound and include deadlines

The true success of the plan will come down to adherence to our mission, guiding principles, and values. As we move into a new chapter of our agency's 150-year history, we are confident that our Commissioners, staff, and volunteers will rise to the occasion and do everything within their power to deliver for Pennsylvania's anglers, boaters, and aquatic resources.

Thank you for your interest and support,



Timothy D. Schaeffer  
Executive Director



Eric C. Hussar  
President, Board of Commissioners



## Background

- History – First created in 1866 to address declining shad and other fish populations, the PFBC is among the oldest state fisheries agencies in the nation. Over the course of the following 154 years, the organizational structure and legal responsibilities have evolved and expanded to what the agency is today, an independent administrative commission with the power to develop and enforce regulations pertaining to fishing, the management of fisheries, and the safe operation of boats. The PFBC’s statutory authority is found in the Fish and Boat Code of 1980 (Title 30, *Pa. Consolidated Statutes*), while fishing and boating regulations are set forth in Title 58 of the *Pennsylvania Code*.
- Current Organizational Structure – The PFBC is governed by a Board of Commissioners whose 10 members are appointed by the Governor with the advice and consent of the majority of the Pennsylvania Senate. Commissioners serve terms of four years. Eight Commissioners are selected based upon districts, and two Commissioners, representing boating interests, have an at-large, statewide appointment. The PFBC receives advice and recommendations from the Boating Advisory Board (BAB) regarding matters relating to boating, including boating rules and regulations. The PFBC is staffed by a complement of approximately 400 full-time employees, who are led by an Executive Director, who serves as the Chief Executive Officer.
- Funding – The PFBC receives no state General Fund tax revenues to support its operations. The agency is primarily funded through user fees, including fishing licenses and permits, boat registrations, boat launch permits, and reimbursement of federal excise taxes assessed on fishing equipment and motorboat fuels. The Commission is also eligible to receive state capital project funding to help defray the costs of major infrastructure projects. For example, earlier in 2020, Governor Wolf released \$23.8 million in state funds for the repair of hazardous dams managed by the PFBC. This was matched with \$19.7 million in PFBC funds.

## **Vision**

To establish Pennsylvania as a premier destination for fishing and boating and be the national leader in aquatic resource management.

*We have something for everyone!*

## **Mission**

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

## **Values**

- **Collaboration**
- **Community**
- **Excellence**
- **Respect**
- **Responsiveness**

## **GUIDING PRINCIPLES**

*The Pennsylvania Fish and Boat Commission will...*

### **Commission Culture**

Create a positive, diverse, and cooperative work environment where staff and volunteers provide exceptional service, develop their expertise, and are supported in their efforts.

### **Safety**

Maximize the safety of our staff, anglers and boaters, agency partners, and the public.

### **Asset Stewardship**

Prudently manage the agency's finances, equipment, infrastructure, and property.

### **Resource First**

Keep the health of the Commonwealth's aquatic resources, along with the individuals and organizations who benefit from them, at the forefront of agency decisions and actions.

### **A Word About Guiding Principles**

As the components of this strategic plan began to take shape, certain themes kept recurring in nearly all discussions. These themes form the basis of the eight Guiding Principles presented in this plan. The PFBC will consider these principles during all decisions and activities related to the Commission's mission.

**Access**

Provide and support public access to Pennsylvania waters.

**R3**

Consider the impacts our decisions and actions have on the recruitment, retention, and reactivation of anglers and boaters of all ages, abilities, cultures, and interests.

**Resilience**

Evaluate and proactively adapt to and mitigate the effects of climate change, invasive species, and other environmental pressures on fishing, boating, and aquatic resources.

**Relevance**

Explain, promote, and strengthen the relevance of our work.

## STRATEGIC PRIORITIES AND AGENCY GOALS

### **Sport Fish Management**

Optimize Pennsylvania’s aquatic habitats and fishery resources to provide the best recreational fishing opportunities possible to enhance anglers’ experiences.

#### **Fishing Access**

1. By June 30, 2023, achieve no net loss of public fishing access.
  - a. By June 30, 2022, update *Pennsylvania’s Fishing and Boating Access Strategy*.
  - b. By June 30, 2022, work with partners to develop a fishing access program that opens access to fishing opportunities at rural ponds and urban water bodies.
  - c. By June 30, 2023, actively promote access to lakes owned by water companies.
2. By June 30, 2023, coordinate with other public landowners on fisheries habitat management and access on publicly-owned lakes and streams.

#### **Fish Culture**

3. Continue to rear and stock fish to re-establish populations in lakes and provide angling opportunities per fisheries management plans.
  - a. By June 30, 2023, partner with cooperative nurseries to ensure trout are most effectively raised and used in locations and practices consistent with fisheries management plans.
  - b. By June 30, 2021, implement pilot production studies to provide larger fingerling species for improved survival after stocking.
  - c. By June 30, 2023, develop an additional early spawn-specific, pathogen-free brood system to supply hatcheries with Brown Trout eggs.
  - d. By June 30, 2023, perform a study to determine the efficacy of vaccination programs in hatcheries to reduce specific pathogens.

The PFBC understands that Pennsylvania’s anglers are passionate about their sport. Therefore, the PFBC’s goals for sport fish management are intended to deliver long-term sustainable sport fisheries and ensure anglers have abundant access to those resources.

#### **Fisheries Management**

4. By June 30, 2023, conduct a statewide survey to estimate angler use, catch, harvest, opinions, and economic impact of angling on Pennsylvania’s warm-water, cool-water, and cold-water fisheries to determine angler preferences and inform the Commission on how and where to manage fisheries.
5. Continue scientific aquatic resource assessments, monitoring, and reporting at levels needed to provide effective management.
  - a. Conduct mandated annual sampling and long-term monitoring of anadromous species populations in the Delaware River in accordance with the Atlantic States Marine Fisheries Commission and Mid-Atlantic Fishery Management Council, which provide legal sport fishing opportunities to anglers.
  - b. Participate in Lake Erie and Great Lakes Fishery Commission management committees.

- c. Participate in interstate fisheries management with neighboring states (DE, MD, NJ, NY, OH, and WV) and other wildlife management organizations (e.g., Mississippi Interstate Cooperative Resource Association).
- 6. Continue to review, update, and implement management plans for sport fish species.
  - a. By June 30, 2021, complete and implement the *Black Bass Fisheries Management Plan*.
  - b. By December 31, 2020, complete and implement an update of the *Walleye Fisheries Management Plan*.
  - c. By December 31, 2020, complete and implement an update of the *Trout Fisheries Management Plan*.
  - d. By December 31, 2020, complete and implement an update of *Operational Guidelines for the Management of Trout Fisheries in Pennsylvania Waters*.
  - e. By December 31, 2022, complete and implement an update of the *Catfish Fisheries Management Plan*.
- 7. Continue to protect, conserve, and enhance the Commonwealth's aquatic resources through modern conservation law enforcement practices.
  - a. Conduct overt and covert patrols to address fishing violations.
  - b. Conduct specialized fisheries details to address complaint areas for over-harvesting and poaching.
  - c. Establish routine presence at known fish markets to address commercial fishing regulations for both indigenous and imported species.
- 8. By June 30, 2021, identify and begin to implement strategies that addresses climate change impacts on habitat, fish species, and angler behavior.
- 9. By June 30, 2022, identify and collaborate with agriculture and aquaculture community to protect sport fisheries and prevent negative impacts of non-PFBC fish stockings, such as the spread of pathogens and Aquatic Invasive Species (AIS).
  - a. Revise regulations relating to Propagation and Introduction of Fish into Commonwealth Waters (58 Pa Code Ch. 71).
  - b. Revise regulations relating to Transportation of Live Fish into this Commonwealth (58 Pa Code Ch. 73).
  - c. Implement a stocking authorization program.
- 10. By June 30, 2022, adjust delivery of fishing opportunities to angler residence zones via improved data (PALS 2.0).
- 11. By June 30, 2021, conduct an evaluation of the PFBC's voluntary permit program to gauge the effectiveness of directing additional resources to specific projects.

## Non-game Species, Aquatic Resources, and Habitat Conservation

Optimize the protection, conservation, and enhancement of fish, reptiles, amphibians, other aquatic resources, and their habitats.

### Aquatic Resources

12. Annually propagate and stock mussels following the *Freshwater Mussel Propagation Plan for Union City State Fish Hatchery*.
13. By June 30, 2021, complete unassessed mussel sampling protocol.
14. Annually survey at least 500 priority unassessed streams for wild trout as part of the unassessed waters initiative.
15. By June 30, 2023, provide leadership and coordination for AIS in Pennsylvania among federal, state, local, and other organizations.

The PFBC is responsible for aquatic resource management in the Commonwealth, which includes non-game fish, amphibians, reptiles, and other aquatic organisms. The goals found under the Non-game Species, Aquatic Resources and Habitat Conservation priority are intended to make sure healthy ecosystems are available for all PFBC trust species.

- a. Participate in and implement the *Pennsylvania Invasive Species Council Aquatic Invasive Species Management Plan*.
- b. Develop specific control plans for each prioritized AIS species identified through a risk assessment and response approach and an up-to-date Pennsylvania AIS inventory.
- c. Identify and recommend appropriate regulations to control species introduction and distribution.
- d. Develop a comprehensive AIS communications outreach plan to prevent the spread of AIS.
- e. Install boat cleaning stations at PFBC facilities with known AIS occurrences (e.g., Lake Erie marinas).
- f. By September 30, 2021, deliver 8-12 AIS species identification training sessions for PFBC staff as part of Great Lakes Restoration Initiative (GLRI) grant agreement.

### Habitat

16. By December 31, 2020, initiate a 5-year partnership to expand the stream habitat program to perform stream corridor Best Management Practices (BMPs) to improve local water quality and fish habitat and contribute to the goals of the *Pennsylvania Phase 3 Chesapeake Bay Watershed Implementation Plan* and the *Chesapeake Bay Watershed Agreement*.
17. Continue to work with partner organizations to coordinate and implement connectivity plans that improve fish passage.
  - a. Maintain the PFBC's position as a national leader in small dam removal.
  - b. Identify and prioritize culvert replacement opportunities.
  - c. Identify and prioritize water quality improvements to eliminate chemical or pollution blockages to fish movement.
18. By December 31, 2020, expand habitat management to include non-game species.
  - a. Continue to coordinate and implement habitat management for species of greatest conservation need per the *Pennsylvania Wildlife Action Plan* to include Timber Rattlesnake, Eastern Massasauga Rattlesnake, and Bog Turtle.

- b. For PFBC properties, develop and/or implement one management plan per year.
- c. For other public lands, develop and/or implement one management plan per year.

**Non-Game Species**

- 19. By June 30, 2023, initiate, facilitate, or complete population assessments for 29 listed species or species of greatest conservation need (Timber Rattlesnake, Blanding’s Turtle, Eastern Massasauga Rattlesnake, Bog Turtle, Eastern Mud Salamander, Northern Rough Greensnake, Broadhead Skink, New Jersey Chorus Frog, Coastal Plains Leopard Frog complex, Green Salamander, Kirtland’s Snake, Eastern Cricket Frog, Northern Red-bellied Cooter, River Shiner, Ghost Shiner, Hickory Shad, Cisco, Black Bullhead, Threespine Stickleback, Brook Stickleback, Least Brook Lamprey, Brook Floater, Eastern Lampmussel, Tidewater Mucket, Salamander Mussel, Rayed Bean, Accuminate Crayfish, Devils Crayfish, and Digger’s Crayfish).
- 20. Continue to implement climate change adaptation strategies outlined in the *Pennsylvania Wildlife Action Plan*.
- 21. By June 30, 2023, complete or develop 13 non-game species action plans.
  - a. Update 7 existing species action plans (Bog Turtle, Eastern Massasauga, Timber Rattlesnake, Eastern Spadefoot, Eastern Pearlshell, Chesapeake Logperch, and Salamander Mussel).
  - b. Develop 6 species action plans for endangered and threatened species (Eastern Mud Turtle, Northern Redbelly Cooter, Pistolgrip, Round Hickorynut, Longnose Sucker, and inland Burbot populations).
- 22. By June 30, 2022, dedicate law enforcement resources to special investigations regarding non-game species wildlife trafficking.
- 23. Continue to support the PFBC’s pollution response and investigation responsibilities.
  - a. By December 31, 2021, review and update internal reporting protocol for pollution investigation methods and reporting.
  - b. By December 31, 2022, review and update procedures for coordinating response efforts during a pollution event/investigation.
  - c. Regularly conduct pollution investigation refresher training for field staff.
  - d. By December 31, 2020, implement statewide interagency response strategy for Harmful Algal Blooms (HABS) to mitigate potential dangers to public health, water quality, water-based recreation, and aquatic resources.
- 24. Continue to implement restoration/recovery plans for Dunkard Creek, Sinnemahoning Creek, and Texas Eastern pollution events.

## Recreational Boating

Provide safe and enjoyable boating opportunities for users of both powered and non-powered boats.

### Boating Safety

25. By June 30, 2022, improve non-powered boating education and communication to improve safety awareness and reduce the annual fatality rate.
  - a. By March 31, 2021, develop and begin implementing a non-powered boat safety education and outreach initiative designed to reduce the annual fatality rate in this user group.
  - b. By June 30, 2021, develop online materials so that every non-powered boater in the Commonwealth has access to information that highlights the responsibilities, risks, and proper protocols of safe non-powered boating.
  - c. By December 31, 2020, provide retailers with information to include with the sale of non-powered watercraft that highlights the responsibilities, risks, and proper safety protocols.
26. Continue to standardize boat operation and enforcement training by using the National Association of State Boating Law Administrators (NASBLA) nationally recognized programs.

State law grants the PFBC authority to regulate boating activities in the Commonwealth. The PFBC's Recreational Boating goals were crafted to reflect the need to educate and prepare boaters to operate their watercraft safely. Other goals under this strategic priority reflect the growing need to perform water rescue operations, as well as promote boating opportunities in the Commonwealth.

### Water Rescue

27. Maintain the PFBC's status as the national leader in water rescue to benefit all Pennsylvanians.
  - a. Continue to implement and improve training for first responders, all WCOs, the PA-Helicopter Aquatic Rescue Team (PA-HART), and Swiftwater Emergency Response Team (SWERT).
  - b. Continue to facilitate quarterly training exercises to ensure readiness and ability to work with other Commonwealth agencies.
  - c. By June 30, 2022, establish and implement best practices for Voluntary Rescue Service Recognition (VRSR) auditing and recertification.

### Boating Promotion

28. Continue to facilitate water trail development and promotion in conjunction with partner organizations to accommodate the increased interest in non-powered boating.
29. By June 30, 2022, update *Pennsylvania's Fishing and Boating Access Strategy*.
30. Continue to improve boating opportunities and convenience in the Commonwealth.
  - a. Continue to implement the renewed Boating Facilities Grants program to allow partners to update and maintain public boating access.
  - b. By June 30, 2021, change the boat registration expiration date to December 31 to have the expiration date coincide with the calendar year.

- c. By June 30, 2021, begin issuing temporary launch permits for unpowered watercraft to improve the overall efficiency of the permitting process.
  - d. By December 31, 2021, work with other state agencies to promulgate uniform launch permit regulations for Commonwealth-owned or Commonwealth-controlled properties.
31. By June 30, 2023, align the PFBC's boating offerings to accommodate the needs and expectations of both powered and non-powered boaters.
- a. By December 31, 2021, develop a prioritized list of actions to improve user experiences at PFBC properties based upon evaluation of data from field staff and the public.

## Employee Investments and Agency Operations

Improve internal communications, operations, and training to enhance employee awareness, professional development, job satisfaction, and succession planning.

### Employee Development

32. By June 30, 2023, implement PFBC training academy program to ensure employees have the knowledge, skills, and abilities to safely and effectively perform their jobs.
  - a. By June 30, 2021, develop an organizational needs assessment to determine person- and position-specific training needs.
  - b. By June 30, 2022, document all bureau training in LSO to ensure employees have the knowledge, skills, and abilities to safely and effectively perform their jobs.
33. By June 30, 2023, implement PFBC development program to prepare next generation of agency management roles.

If the PFBC is to be successful in implementing this strategic plan, agency leadership needs to remain committed to our employees. The Employee Investments and Agency Operations goals focus on making sure the PFBC workforce is supported and prepared to meet the many challenges that lie ahead.

- a. By June 30, 2021, administer self-assessment tools to improve communication, teamwork, and personal growth among PFBC management employees.
- b. By June 30, 2023, facilitate professional development seminars for management staff to increase their leadership skills and abilities.
34. By June 30, 2023, implement employee development program to provide essential knowledge, skills, and abilities to all PFBC employees regardless of job function.
  - a. By June 30, 2021, implement annual PFBC new employee orientation program to provide an overview of the agency, its operations, and employee resources.
  - b. By June 30, 2022, use needs assessment to develop course catalogue to provide training in succession planning, professional development, and workplace compliance.
  - c. By June 30, 2023, implement internal mentoring program to assist employees with their professional development and help prepare future leaders within the agency.
  - d. By December 31, 2020, develop an experiential learning program to allow staff to spend at least one day per year assisting with an activity conducted by a different bureau within the PFBC to build camaraderie, learn about other functional areas, and encourage collaboration across bureaus.

### Employee Engagement and Communication

35. By December 31, 2020, implement a means of sharing information electronically about staff and Commission activities.
36. By June 30, 2021, implement PFBC employee appreciation event that enhances employee awareness of the agency's mission and builds a sense of community.

### Employee Diversity and Inclusion

37. By December 31, 2020, convene a workgroup of PFBC employees to review recommendations put forth in the *Fish and Wildlife Relevancy Roadmap* as well as other

- relevant sources, and provide recommendations for promoting diversity and inclusion within the agency.
38. Regularly distribute job postings and routinely collaborate with Governor's Advisory Commissions (African American Affairs, Asian American Affairs, Latino Affairs, and LGBTQ Affairs) to help the PFBC with diversity and inclusion efforts.
  39. By June 30, 2021, require mandatory Equal Employment Opportunity (EEO) diversity training for supervisors and management.

**Employee Safety and Agency Operations**

40. By June 30, 2023, increase employee safety through targeted employee training, investment in safety equipment (e.g., viral personal protective equipment), and improving general safety awareness among both employees and management.
  - a. Ensure the PFBC safety committee is comprised of at least 50% union-covered employees.
41. By June 30, 2022, implement annual mandatory on-site safety training at PFBC field locations.
42. Regularly review, update, and maintain the PFBC's Continuity of Operations Plans (COOPs), division operational plans, Standard Operation Procedures (SOPs), directories, and other reference materials.

## Communications and Marketing

Communicate and market the value of the PFBC and the quality of Pennsylvania’s aquatic resources and recruit, retain, and reactivate a diversity of anglers, boaters, and conservationists.

### **Branding**

43. By December 31, 2020, implement an agency-wide approach to messaging and imaging that provides clarity and consistency across all platforms.
  - a. Conduct an audit of current branding at PFBC.
  - b. Identify and communicate approved uses of agency logos.
  - c. Develop an agency style guide for electronic and written communications.

### **Communications**

44. By June 30, 2021, implement a comprehensive communications strategy that increases public awareness and engagement with respect to the PFBC’s programs and the resources entrusted to the PFBC.
  - a. Develop best practices for frequency, content, and delivery methods.
  - b. Develop performance metrics to evaluate effectiveness of communications.
  - c. Employ the media, methods, and content consistent with market research and R3 guidelines.
  - d. Promote positive conservation messaging that encourages non-participants to support agency programs and interests.
  - e. Highlight the value of what fishing licenses and boat registrations provide for all Commonwealth residents and visitors.
  - f. Incorporate content about angler and boater ethics to address public perception issues, such as littering, trespassing, and knowledge of fishing and boating regulations.
45. By December 31, 2020, develop and implement targeted initiatives to improve the PFBC’s customer service experience.
46. By June 30, 2021, refine the PFBC’s social media presence.
  - a. By December 31, 2020, develop and implement a social media policy to ensure consistency across all agency platforms.
  - b. By June 30, 2021, complete an agency-wide social media strategy that considers a workload analysis and evaluation of the PFBC’s existing social media effectiveness, as well as an evaluation of social media platforms, management tools, and performance metrics.
47. In conjunction with the Pennsylvania Game Commission, host the 2021 Annual Northeast Fish & Wildlife Conference for the Northeast Association of Fish & Wildlife Agencies (NEAFWA).
48. Host a 1-day Pennsylvania Fisheries Summit in 2021.

The Communications and Marketing goals are intended to serve two critical purposes. First, these goals will help the PFBC inform and engage the general public in our efforts to carry out our mission. Second, the R3 goals will help increase interest and participation in fishing and boating, and in turn will ensure the PFBC has the customer base and revenue needed to effectively carry out the agency’s mission.

### **Marketing**

49. By December 31, 2020, administer a survey to evaluate the human dimensions aspect of anglers and boaters.
50. By June 30, 2022, implement a marketing strategy that segments the PFBC's customer base into recruitment, retention, and reactivation (R3) segments.
  - a. Enhance marketing to traditional and emerging markets along state, regional, national, and international lines.
  - b. Implement programs designed to attract customers and participants from diverse social and demographic backgrounds to fishing, boating, and conservation programs.
  - c. Align and work with other Commonwealth agencies, local tourism offices, and businesses to identify and promote fishing and boating opportunities in Pennsylvania.
  - d. Develop an eCommerce and search engine optimization strategy.
  - e. Seek additional partners and channels for co-marketing and promotion of products and services.

### **Education**

51. By June 30, 2023, based upon an evaluation of all the PFBC's outreach and education programs, direct staff, funding, and volunteer efforts toward those programs that effectively and efficiently meet R3 goals and objectives.
52. Continue to increase recruitment, retention, and reactivation of under-represented populations by expanding high demand programs that target diverse audiences.
53. Optimize Trout in the Classroom (TIC) program to increase conservation awareness and the recruitment of new anglers and/or boaters.
  - a. By June 30, 2023, increase the total TIC participation in fishing, conservation, and/or boating activities by 25% over 2018-2019 school year levels.
54. Continue to increase fishing and paddling skills via in-person training and education.
55. By June 30, 2023, develop and provide alternative learning opportunities online to increase knowledge and skills for fishing and boating (e.g., internet tools, instructional/experience-based videos, and educational series).
56. By June 30, 2021, explore opportunities to engage veterans and senior citizens through state veterans homes, senior centers, long-term care facilities, and retirement communities.
57. By June 30, 2023, investigate improving the use of visitor centers to better share the PFBC's message and increase public engagement.
  - a. By June 30, 2021, compile and analyze data on visitation, costs, and benefits.
  - b. By June 30, 2023, based upon a prioritized listing, make improvements to existing visitors centers that convey updated content, branding, and messaging that is relevant to today's public.
  - c. By June 30, 2023, evaluate the potential to develop visitors centers at additional PFBC facilities.

## Infrastructure and Equipment

Modernize and maintain PFBC facilities and equipment and align them with user needs.

### Facilities

58. By June 30, 2021, complete analysis of regional facilities to improve public service and energy efficiency while providing a modern and safe work environment.
  - a. By June 30, 2021, begin design of a new LEED certified Northeast Regional Office in Sweet Valley, Luzerne County, and a new LEED certified Northwest Regional Office in Fairview, Erie County.
  - b. By December 31, 2020, conduct a study to begin consolidation and identify optimal locations for remaining regional facilities.
  - c. By June 30, 2021, set priorities and develop a detailed scope of work, project cost estimates, and establish general locations for regional office facilities.
59. By December 31, 2022, initiate upgrades of hatchery facilities based on priority needs.
  - a. By September 30, 2021, establish prioritized list and scope of work and construction estimates to modernize existing hatchery facilities to improve customer experience, functionality, and safety.
  - b. By December 31, 2021, develop a schedule for design and construction for hatchery facilities upgrades.
  - c. By December 31, 2022, initiate design of projects and obtain permitting documents for hatchery facilities upgrades.
60. Continue to improve the condition of the PFBC's access facilities.
  - a. By June 30, 2021, finish the current staff evaluation of boating access facilities.
  - b. By June 30, 2022, replace and improve docks, signs, ramps, and parking lots for regional priority projects.
  - c. By June 30, 2023, develop a new regular inspection program that uses an index-based condition rating system to accurately rate the condition of PFBC-owned and maintained access areas and begin remediation of the top 10 deficient access areas identified through this inspection program.
  - d. By June 30, 2021, implement an adopt-an-access pilot program to provide opportunities for local organizations to partner with the PFBC.
61. Continue to repair and improve the PFBC's dams to protect public safety and provide fishing and boating opportunities.
  - a. By June 30, 2021, initiate design for ten priority hazardous dam projects: Cloe Lake, Fords Lake, Harris Pond, Hemlock Lake, High Point Lake, Hunters Lake, Kahle Lake, Rose Valley Lake, Stevens Lake, and Virgin Run Lake.
  - b. By June 30, 2023, complete construction of the following seven high hazard dam projects: Belmont Lake, Childrens Lake, Lower Woods Pond, Meadow Grounds Lake, Miller Pond, Somerset Lake, and White Oak Pond.
  - c. By June 30, 2021, evaluate PFBC's low hazard dams and prioritize for future rehabilitation.

The Infrastructure and Equipment goals allow the PFBC to address facility improvements and equipment needs in a way that reflects the evolving needs of aquatic resources and public preferences.

### **Equipment**

62. Continue to implement the PFBC's 5-year strategic project list to replace aging vehicles and equipment.
63. By December 31, 2020, submit Property Disposition Reports to the Department of General Services for liquidation of all surplus equipment at PFBC properties.

### **Energy Efficiency and Sustainability**

64. By June 30, 2021, begin making energy efficiency and systems improvements identified through the Commonwealth's Guaranteed Energy Savings Act (GESA) program. Improvements will include the following: installation of electric vehicle charging stations at the Harrisburg Headquarters and Centre Region Office, and the installation of solar panels at the two PFBC facilities best suited for solar electric generation.
65. By September 30, 2020, order battery electric or plug-in electric hybrid passenger fleet vehicles based at the Harrisburg Headquarters and Centre Region Office.

### **Information Technology**

66. By March 31, 2021, replace current online licensing system with a new user-friendly Pennsylvania Automated Licensing System (PALS 2.0) to improve customer service by streamlining the license application and purchase process and facilitating auditing and reporting for licensing agents.
67. Continue to evaluate IT infrastructure needs of all PFBC employees and facilities.
68. Continue to ensure the FishBoatPA app is current, relevant, regularly updated, and promoted.
  - a. By June 30, 2021, increase FishBoatPA app capability to include instant purchase and "proof of license" capability to improve customer convenience and increase total license sales.
  - b. By June 30, 2021, determine if the FishBoatPA app can be used for two-way communication (e.g., creel surveys and weekly regional reports).
  - c. By June 30, 2023, double the number of FishBoatPA app users.
  - d. Continue to analyze FishBoatPA app usage data to determine opportunities and optimization.
69. By June 30, 2023, investigate the ability to harness GIS technology and improve user interface.
  - a. Allow the public to view multiple layers of data on one web page instead of needing to access multiple pages within the map galleries on the PFBC website.
  - b. Leverage GIS applications and data to provide accurate and precise analyses to improve service and product delivery.
  - c. Increase promotion of existing PFBC mapping and locational tools available to the public, including development of online tutorials that help the public maximize the capabilities of the PFBC's online tools.
70. By December 31, 2020, develop new fishing license evaluation process to routinely review the PFBC's license offerings to ensure they achieve the greatest return on investment.
71. By June 30, 2021, create bundled license options that target specific segments of the PFBC's customer base.
  - a. By June 30, 2021, create bundled launch permit with multiyear fishing license.

- b. By June 30, 2021, create non-resident Pennsylvania college student fishing license.
  - c. By June 30, 2021, work with the Pennsylvania Game Commission to explore cross-promotion and sales of combined hunting and fishing license packages.
72. By December 31, 2020, complete a redesign of the Outdoor Shop to modernize online sales opportunities and improve overall customer experience.
73. Improve the efficiency of permit issuance and administration (e.g., scientific collectors' permit and special activities permit).
- a. By December 31, 2020, develop and implement credit card payment system for the scientific collectors', Grass Carp, and blasting permit programs.
  - b. By December 31, 2021, identify and implement improvements for online reporting for scientific collectors' permit program.
  - c. By December 31, 2021, identify redundancies and inefficiencies and consider implementing updates for species impact reviews.
  - d. By December 31, 2020, implement PALS reporting system for venomous snake and commercial snapping turtle permit reporting.
  - e. By June 30, 2023, develop a web-based application and reporting system for amphibian and reptile rehabilitation and education/outreach possession programs.
  - f. By June 30, 2023, develop and implement an online application form for Special Activity Permits.
  - g. By June 30, 2023, develop and implement an online application form for certifications, inspections, and licenses associated with the PFBC's Passenger for Hire program.
  - h. By June 30, 2023, develop and implement an online application form for Aid to Navigation (ATON) permits.