

# **Lacawac Sanctuary Foundation**

## **Strategic Plan 2022-2024**

Approved by the Board of Trustees on: January 20, 2022

# **I. Introduction:**

## **1. Mission**

The Mission of Lacawac Sanctuary is Research, Education, and Preservation.

- To preserve and maintain the natural resources of Lake Lacawac, its watershed, our surrounding woodlands, and the inhabitants;
- To provide an educational venue for students at all levels, as well as for the public, regarding issues affecting our environment and the conservation of natural resources; and
- To provide world-class research opportunities for scientists, researchers, and students.

## **2. Situational Analysis**

Lacawac's primary work as a nonprofit is to preserve the natural beauty of Lake Lacawac, its watershed, and surrounding lands and conduct long-term research on natural ecosystems as part of a global effort to understand and protect the Earth's biodiversity. Lacawac seeks to increase the appreciation of these efforts through innovative, field-based educational programs for students, teachers, and the community.

Nestled on five hundred fifty acres near the shores of Lake Wallenpaupack in the Northern Poconos, Lacawac Sanctuary is an environmental education center, nature center, and biological field station.

Visitors have the opportunity to enjoy a rich outdoor education and exposure to a blend of diverse habitats, including wetlands, open fields, forests, and lakes.

To fulfill our mission of Research, Education, and Preservation, Lacawac offers environmental education and public programs to the community, educating environmental stewards by communicating the core values of environmental responsibility, citizenship, inclusiveness, and the pursuit of knowledge.

### **RESEARCH**

Due to the nature of its protected watershed, Lake Lacawac has drawn scientific researchers since the 1950's. Lacawac has a decades-long water quality record. The protected, pristine, dystrophic, glacial lake remains a unique and rare ecosystem that will draw researchers and collegiate educators.

Lacawac is also fortunate to have a strong, dedicated group of researchers and college faculty who use the field station and are committed to its success. These include faculty with long-term funded projects, faculty from primarily undergraduate institutions conducting smaller-scale research, and faculty who use Lacawac as part of their college courses

Several factors limit Lacawac's research and collegiate education potential, including:

- Housing capacity is limited, particularly in the summer and fall and researcher housing needs often conflict with other events such as weddings. This limitation is mainly due to differences in planning timeframes; weddings are booked years in advance while field trips are often booked months in advance at best, and research lodging needs can change weekly or even daily.
- Current research income streams need to be diversified and discussed further by the Board of Trustees.
- Aging or outdated infrastructure needs to be evaluated and corrected.

## **EDUCATION**

As a living laboratory and biological field station, Lacawac is ideal for experiential learning for all ages. Field trips are available to public and private schools, scouts, daycare centers, home school groups, and afterschool programs. Trained environmental educators lead each class/group on trails through diverse habitats as students participate in hands-on, minds-on activities. All environmental education field trip programs align with the Pennsylvania Department of Education Science Curriculum Framework focusing on STEAM (Science Technology Engineering Art and Mathematics) content.

Education Department Strengths:

- Lacawac is the only environmental education center in Wayne County.
- Lacawac has a strong science and research foundation that attracts higher-level educational opportunities.
- Diverse habitats make Lacawac an ideal location for outdoor, environmental education.

## **PRESERVATION AND PUBLIC USE**

Lacawac preserves 550-acres, including a mature second-growth forest, Lake Lacawac, two ponds, several wetlands, and over a mile of shoreline along Lake Wallenpaupack. The highlight of the Sanctuary's natural resources is the 52-acre, pristine glacial lake, which sits roughly in the middle of the property. The kidney-shaped lake is one of the southernmost glacial lakes in the United States and has remained nearly pristine and protected. In contrast, many similar lakes in the Northeastern United States have been impacted or otherwise affected by human hands.

Lacawac's infrastructure was established at the turn of the 20th century and today stands as a historically significant estate. The suite of buildings includes the main house or Lodge, an Ice House, coachman's house, pump house, and a carriage house. The Lodge, the Ice House, and the Carriage House are all on the National Register of Historic Places (listed in 1979). Lake Lacawac was listed as a National Natural Landmark in 1968.

## **II. Goals and Objectives**

This document aims to create a three-year functioning strategic plan for Lacawac Sanctuary and its committees.

### **1. Top Strategic Priorities**

#### **Priority 1: Increase the capacity to house individuals visiting Lacawac.**

The Watres Lodge and Ice House are on the National Registry of Historic Places. Because of the sensitive nature of these landmarks, Lacawac would like to provide additional student housing for both short and long-term residents at Lacawac.

To provide the additional housing, Lacawac will construct up to three modular housing units, each consisting of three bedrooms and one bathroom and one modular housing unit with a common area and kitchen, each in the vicinity of the Gate House. The timeframe for completion of this project is by year-end, 2023. The estimated overall cost of the project is \$350,000.

#### **Priority 2: Make upgrades to the current structure at the Environmental Education Center.**

In 2008, Lacawac purchased the former home of its founder, intending to develop the building into a new environmental education center. There is also a need to have additional meeting space for groups visiting Lacawac, such as K-12 classes, conferences/workshops, and public programs. Lacawac will construct an additional building behind the existing environmental education center to meet this need.

Construction will begin in 2022 with completion in 2023. The estimated overall cost of the project is \$600,000. Miscellaneous upgrades and remodeling to the existing structure will be completed by 2024, with an estimated cost of approximately \$100,000.

#### **Priority 3: Make upgrades to the internet infrastructure.**

With more usage of Lacawac's infrastructure by researchers, K-12 students, and the public, there is a growing need to have better internet capacity at all structures, including the lake. Cohesive internet infrastructure will be developed by the beginning of 2023, with an estimated overall cost of \$25,000.

#### **Priority 4: Develop and evaluate a Volunteer Program to include application, screening, onboarding, and evaluation.**

Over the last two decades, the number of Lacawac volunteers has declined. To complete special projects, maintain trails, and offer public programming at Lacawac, a strong core of volunteers is needed to help the Sanctuary carry out its mission.

## **2. Science Committee**

**Goal 1: Evaluate and, if necessary, revise the current consortium model and fee structure.**

**Goal 2: Continue to grow and support the PLEON program, including lake monitoring, public workshops, Wallenpaupack community-led water quality monitoring, and partnership with the Pennsylvania Harmful Algal Task Force.**

**Goal 3: Lacawac will update and expand infrastructure to support research and collegiate education**

Objective 3.1: Maintain and expand existing field infrastructure

Action Item 1.1.1: Update current boating capacity, including re-positioning the boat rack for easier access, outfitting all rowboats with new oars, oarlocks, and anchors, and repairing or replacing the wooden dock.

Action Item 3.1.2: Repair permanent deer exclosures by re-setting fencing poles as needed and replacing fencing.

Action Item 3.1.3: Facilitate access to wetlands for research and (limited) education purposes.

Objective 3.2: Invest in the collection, management, and accessibility of Lacawac datasets.

Action Item 3.2.1: Post a searchable list of existing datasets on Lacawac's website.

Action Item 3.2.2: Develop a long-term management plan for the Lacawac Raft/ARTHUR sensor arrays for the next 5-10 years with clearly delineated responsibilities and commitments for each entity.

Objective 3.3: Expand laboratory capacity

Action Item 3.3.1: Create a microscope laboratory.

**Goal 4: Lacawac will grow and diversify its research portfolio**

Objective 4.1: Facilitate research opportunities for current and potential researchers.

Action Item 4.1.1: Mobilize new and existing relationships to apply for grants that build collaborative research opportunities (e.g., NSF REU, FSML, and LTREB solicitations).

Action Item 4.1.2: Increase research awards funding to offer \$10-20,000 for the Moeller award(s) and \$5,000 for Watres award(s). These awards will attract faculty from undergraduate institutions who rely heavily on student-supported research.

### **Goal 5: Lacawac will expand as a source of field-centered collegiate education**

Objective 5.1: Facilitate field trip planning and development for collegiate faculty

Action Item 5.1.1: Develop Lacawac-centered teaching resources for faculty, including easily accessible datasets, species lists, field protocols, scientific literature, and curriculum.

Action Item 5.1.2: Redesign Lacawac's website to feature field and virtual teaching materials.

Action Item 5.1.3: Develop audio and visual resources for classes, including game camera database, drone footage, and Ecosystem Exploration videos (part of the Virtual Field Project).

## **3. Education Committee**

### **Goal 1: Lacawac will grow and diversify K-12 environmental education programs.**

Objective 1.1: Provide classroom programs to schools, including the winter months when schools cannot access Lacawac by bus.

Objective 1.2: Create displays and program capabilities in the new EE center using current technology.

### **Goal 2: Lacawac will expand camp programs.**

Objective 2.1: Increase camper attendance by increasing the number of day camps provided.

Action Item 2.1.1: Provide multiple camps per week once the new EE Center is completed.

Action Item 2.1.2: Hire additional staff to accommodate additional weeks of camp per week.

Action Item 2.1.3: Improve the integration of Lacawac research and researchers into the day camp program.

Objective 2.2: Continue to offer Conservation Leadership Academy.

### **Goal 3: Lacawac will evaluate and revise and expand public education programs if necessary.**

## **4. Operations Committee**

**Goal 1: Provide adequate parking for guests and visitors. Determine how, when, and where this may or may not be feasible.**

**Goal 2: Increase public toilet facilities at the Coulter Visitor Center**

**Goal 3: Increase usage of the Carriage House**

Objective 3.1: Complete upgrades to the Carriage House. The carriage house has progressed as a venue for functions and events at Lacawac. Renovations over the last two years have enhanced the appeal of the building. It still has significant infrastructure issues that need to be addressed. The facility cannot be heated or cooled due to a lack of insulation and infiltration issues. Upgrades will allow the space to be used for three seasons for functions.

Action Item 3.1.1: Replace the existing roof of the carriage house.

## **5. Finance Committee**

**Goal 1: Develop a plan to eliminate yearly drawdowns from the principal endowment.**

## **6. Marketing and Communications Committee**

**Goal 1: Grow year-over-year revenue and add new revenue sources.**

Objective 1.1: Support the organization's aim of increasing revenue and income by 10% year-over-year.

Action Item 1.1.1: Evaluate and look at growing existing, core fundraising events (Farm-to-Plate, 8K Trail Run, Cocktails for Conservation) at Lacawac by evaluating each event, updating as needed, and increasing our marketing emphasis.

Action Item 1.1.2: Evaluate the addition of new events assuming profitability metrics can be met. The focus will be on events that reach a constituency not participating in our current events. Examples of ideas to evaluate: Business/Corporation focused event, High donor appreciation event, Education focused event.

Objective 1.2: Support the organization's aim of increasing corporate sponsorships.

Action Item 1.2.1: Enhance and update our list of corporate donors (past, current, prospective).

Action Item 1.2.2: Re-evaluate and complete the corporate sponsorship package for distribution by the end of Q1.

**Goal 2: Increase community engagement with Lacawac.**

Objective 2.1: Increase the membership of Lacawac.

Objective 2.2: Increase community awareness and engagement of Lacawac and the organization's accomplishments.

**Goal 3: Develop and improve Marketing & Communications Tools to support decision-making.**

Objective 3.1: Develop a Marketing Dashboard with relevant metrics and key performance indicators.

Action Item 3.1.1: Set up Google Analytics to report all website interactions and traffic sources to evaluate content and website structure.

Action Item 3.1.2: Create an Event Analysis tracking sheet completed after each event to ensure profitability goals are attained.

Action Item 3.1.3: Evaluate Dashboard Software solutions to integrate digital analytics from the web and social.

**Goal 4: Support Mission and Objectives of Research and Education Committees**

Objective 4.1: Ensure that our website is meeting the needs of both the Research and the Education Committees

Objective 4.2: Develop a content management and distribution process and plan that will enable the organization to educate key constituencies better.

Objective 4.3: Create a segmented communications plan for each critical constituent groups of the Research and Education Committees.

**Goal 5: Increase Marketing & Communication Resource**

Objective 5.1: Re-evaluate the M&C Committee in Q1, determine resource needs for ongoing marketing functions and new business. Determine if alternate resource channels (e.g., interns, marketing pro-bono work, etc.) exist.

## Strategic Plan Committee Timeline

Project/Goal	Status	2022 (Year 1)	2023 (Year 2)	2024 (Year 3)
<b>TOP PRIORITIES</b>				
Increase housing capacity			Who: Craig/Bill When: May 2023 Cost: \$350,000	
Construction of the EE Center			Who: Craig/Bill When: Dec 2023 Cost: \$600,000	Who: Craig/Bill When: Dec 2024 Cost: \$100,000
Develop a better internet infrastructure		Who: Craig/Bill When: Dec 2022 Cost: \$25,000		
Develop a Volunteer Program			Who: Staff When: May 2023	
<b>RESEARCH</b>				
Revise current fee structure		Who: Ad hoc Committee When: July 2022		
<b>PLEON</b>		Ongoing	Ongoing	Ongoing
Update boating capacity		Who: Beth/Bill When: December 2022 Cost: \$2500 (cost does not include dock)		
Repair deer exclosures			Who: Beth When: January 2023 Cost: \$5000	
Access to wetlands				Who: Beth When: Dec 2024
Post a searchable list of existing datasets		Who: Beth When: Dec 2022 Cost: \$500 annually		
Develop a long term management plan for Lacawac Raft/ARTHUR				Who: Beth When: Jan 2024

Create a microscope laboratory				Who: Beth When: Dec 2024 Cost: \$10,000
Apply for grants that build collaborative research opportunities		Ongoing	Ongoing	Ongoing
Increase research award funding				Who: Beth When: Dec 2024 Cost: \$25,000 annually
Develop Lacawac-centered teaching resources			Who: Beth When: Dec 2023	
Redesign website to feature field and virtual teaching materials			Who: Beth When: Dec 2023	
Develop audio and visual resources for classes			Who: Beth When: Dec 2023	
<b>EDUCATION</b>				
Increase classroom programming		Who: Jamie When: Dec 2022		
Create displays in EE Center			Who: Jamie When: Dec 2023 Cost: \$25,000	
Increase number of day camps			Who: Jamie When: June 2023	
Evaluate and revise public education programming		Who: Jamie/Charlie When: Summer 2022		
<b>OPERATIONS</b>				
Increase parking spaces at visitor center, Great Camp and Education Center		Who: Bill When: Dec 2022 Cost: \$35,000		
Build a new public restroom at the visitor center			Who: Craig/Bill When: Dec 2023 Cost: \$45,000	
Upgrades to Carriage House				Who: Craig/Bill When: Dec 2024

				Cost: \$150,000
<b>FINANCE</b>				
Develop a plan to eliminate drawdown from the endowment		Who: Mary Ellen When: Dec 2022		
<b>MARKETING</b>				
Evaluate core fundraising events		Who: Charlie/Craig When: Dec 2022		
Increase Corporate Sponsorships		Who: Charlie/Craig When: March 2022		
Increase Memberships			Who: Charlie/Craig When: May 2023	
Develop Marketing Dashboard		Who: Charlie When: June 2022		
Support Mission/Objectives of Research & Education Committees			Who: Charlie, Beth, Jamie When: Dec 2023	
Re-Evaluate Marketing Committee		Who: Charlie/Craig When: April 2022		