

VI. Facilities and Construction Plan



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A. Goals and Objectives

The DNERR has these primary goals for the St. Jones Center:

- Provide and maintain facilities that enable research to be conducted at the Reserve.
- Provide and maintain facilities that support education and outreach programming for both the general public and coastal decision-makers.
- Increase awareness that outside individuals and groups working in environmental science and management fields can use the DNERR's labs and meeting space.

The DNERR is working to become the focal point for estuarine research in the State. The usefulness of the Center goes even further. It is a neutral meeting ground for many environmental groups to exchange points of view on issues facing Delaware's environment. Facilitating dialogue is necessary to achieve positive results. The Center strives to foster an academic atmosphere and the free exchange of information, targeted at coastal decision-makers and the environmental community at large.

Specific objectives to aid in achieving these goals include:

- Featuring the DNERR's facilities in Reserve publications, on the website, and at public events and speaking engagements to promote their use by outside groups. Scientists, educators, environmental nonprofit groups, and other State agencies will be the primary groups targeted.
- Maintaining and upgrading current assets as needed to ensure a quality experience for Reserve visitors.

B. Existing Facilities

The DNERR Center is located at the St. Jones Reserve component, 6 miles south of the city of Dover. It is a 7,200-square foot research and education center. Laboratories, classrooms, and conference facilities are located within the Center. During the original designation process, it was proposed that the facility would include office space for most of the State biologists as well as the DCP and other researchers. To that end, the original building described in the first management plan was intended to be approximately five times as large as the current structure. The reorganization and consolidation of administrative authority altered the original proposed plan. The current facility is smaller and contains offices for DNERR staff only. The Center was opened in May of 1999.

It is primarily the role of the Conservationist, under the guidance of the Reserve Manager, to provide grounds and facilities maintenance. This includes but is not limited to maintaining security and alarm systems, telephone systems, and electrical and plumbing services, in addition to landscaping and grounds upkeep.

1. Public Access

The St. Jones Reserve component is the only Delaware Reserve site that presently permits public access. The Blackbird Creek Reserve component offers limited access to the public that is required to be coordinated through the Reserve Manager to ensure that the area remains undisturbed. Keen

neighbor concern about public access at the Blackbird Creek site has also reinforced the limited-access policy. As new lands are acquired, an assessment and evaluation of a compatible use policy will be needed.

The Center at the St. Jones River Reserve component is open Monday through Friday from 8:00 a.m. to 4:30 p.m. The Center offers a variety of educational exhibits. The indoor exhibits highlight marsh ecology, estuarine functions, and the historical significance of the area. Many Reserve visitors come to enjoy the outdoor exhibits. They are drawn along a 1-mile trail and boardwalk through the estuary where learning stations are placed periodically to highlight research projects and natural points of interest. All areas are handicapped-accessible.

2. Research Laboratories

Two laboratories constitute the principal research areas at the St. Jones Center. The first is a small but highly suitable and very well equipped lab used exclusively by Reserve staff and visiting researchers. The second area is a combination teaching and research “wet laboratory.” The education program makes use of this large classroom-like lab to support its programs the majority of the time. The teaching wet-lab is utilized for research projects as needed. A unique quality of this space is the public’s ability to observe projects from a distance when researchers are using the wet-lab. This provides a valuable physical demonstration that true scientific research is being conducted locally. Along with laboratories, the Research and Monitoring Program has several boats, vehicles, and storage areas at its disposal. All are housed at the St. Jones River Reserve component.

3. Education Facilities and Exhibits

The education program has one dedicated classroom and use of the teaching wet-lab area. Each room is equipped to hold approximately 16–20 program participants. The classroom is equipped with audiovisual equipment. The wet-lab is fully equipped to handle a variety of programming needs.

Indoor and outdoor exhibits are the anchors for many classroom activities. All exhibits reinforce lessons learned during formal educational programs. (See Chapter VIII, the Education, Interpretation, and Outreach Plan, for a detailed list of exhibits.) Outdoor exhibits and teaching stations are particularly important, as are the canoes and a Carolina skiff used as floating classrooms for visiting groups. These transport participants into the heart of the estuary, where a true respect for its beauty and a personal connection to the environmental issues of the area can be formed.

4. Conference Facilities

The Visitors Center currently has a conference room with a capacity for 75 people seated at tables. A full range of audiovisual equipment is provided to support DNERR-hosted meetings. The conference room has proven to be an invaluable tool in drawing groups to visit the Reserve, thus accomplishing the goal of making the Reserve a place where discussions and exchanges of ideas happen regularly among members of the environmental community.

5. Coastal Resource Library



Figure VI-1. Entrance to Visitor's Center.

In the winter of 2000, it was decided that a single location was needed for coastal resource publications. The Center at the St. Jones Reserve component was selected to house a collection of historical documents and resource publications. To date, the Center has one of the largest collections of such documents in a single location in the State. All materials are available to coastal managers, researchers, and the general public.

6. Trail/Boardwalk

Within the St. Jones Reserve component, there is a 1-mile trail through the estuary. This trail links up with other State property managed by the Division of Fish and Wildlife and provides access to Delaware Bay for a total one-way distance of approximately 5 miles. The trail begins with a quarter-mile raised boardwalk over the marsh. There are several teaching stations along this section. There are also several areas where the boardwalk is lowered to allow up-close access to the marsh. Visitors can learn about the Reserve weather station and atmospheric deposition sampler in this section. The trail then follows a narrow corridor bordering farm fields and marsh, allowing visitors to see prime examples of runoff potential and habitat encroachment.

C. St. Jones Center Expansion

Since the opening of the St. Jones Center in May of 1999, demands for added educational and research spaces have steadily increased. Limits are now being placed on how much research and education can be conducted at the Reserve because of the lack of adequate space. The following have been identified as potential expansion areas: conference, dormitory, exhibit, and library space. A two-phase expansion is addressing most of these issues.



Figure VI-2. Aerial view of the boardwalk at the St. Jones Reserve.

In the fall of 2001, design began on a conference room, meeting room, and visiting researcher quarters addition. The addition will be constructed in two phases due to funding constraints. Phase I was the construction of visiting researcher quarters; this was completed in the fall of 2003. The researcher quarters are connected to the existing St. Jones Center. This section provides a small meeting room and four small quarters for visiting researchers. Phase II, construction of a conference facility began in the fall of 2004 and has a completion date of early 2005. As with any building expansion, these phases require additional maintenance responsibilities as compared to the original facilities. This upkeep will require minor additional assistance from the Conservationist and Reserve Manager, as well as an increase in allocations for grounds and facilities maintenance. There will be a modest increase to the contractual cleaning costs that are covered by federal funds and an increase in energy costs that are covered by State funds.

1. Visiting Researcher Quarters/Meeting Space

Phase I of the proposed expansion, provides corridor access to the proposed new conference space. Within this connector, there is a small meeting room, four small dorm-style rooms/offices for visiting

Two-phase Facilities Construction Plan

Phase	Project Description	Timeframe	Cost	Funding Source
I	Construction of connecting structure to proposed new conference facility. Connecting structure to contain small meeting room and two small quarters for visiting researchers.	To be completed before March 2003.	\$250,000	NERRS Construction Funding
II	Construction of new conference facility, adjoining Visitors Center. ~3,000 sq. ft. to accommodate up to 100 people in theater-style seating, increased exhibit space.	To be completed in 2005.	\$675,000	NERRS Construction Funding

researchers, and bathrooms with showering facilities.

This space serves several purposes for the Reserve's education and research needs. It also eases the transition between the Center and conference facility conference space, in that conference attendees will no longer interfere with public access or other scheduled programs while still retaining the ability to enjoy the educational exhibits in the main Center during breaks.

The budget for Phase I was \$250,000. This figure includes the actual addition, site and utility improvements, design and construction contingency, architectural and engineering fees, and survey.

2. Conference Space

The second phase in facility expansion will address the problem of conference space. The current room can be divided in half by a moveable partition; the front portion serves as a small meeting room and the rear portion as a classroom for education programs. When a large meeting is held, however, this partition is removed and thus precludes the use of the classroom. Expansion of the Education Program is constrained by the lack of a dedicated classroom. Also, large groups are regularly denied use of the facility because the conference room does not comfortably seat enough program participants.



Figure VI-3. Phase I Addition.

With the Reserve's plan to become part of the Coastal Training Program (CTP), the increased popularity of Coastal Decision-Maker Workshops, and the larger education programs, there is a significant need for a larger conference room. The new conference room is designed to handle approximately 75 people seated at tables. The new facility will also offer an expanded exhibit area will be created. The potential benefits of this new addition are enormous. A distinct facility for decision-maker workshops, conferences, and meetings will be established, larger groups will be able to come to the Reserve, and the Education Program will have a dedicated classroom.

The estimated cost for Phase II of the expansion is approximately \$675,000. This figure includes cost of construction estimated at 2,900 square feet of additional building space, as well as costs of site and utility improvements, design and construction contingency, architectural and engineering fees, reimbursable expenses, and a survey. This cost provides for "green-building" expenses as we hope that

Phase II can model environmentally friendly construction practices.

3. Dormitory

An analysis prior to embarking on the above expansion plan identified the need for a small amount of dormitory space. That need is addressed in Phase I of the expansion plan by the addition, within the connecting structure, of four dorm rooms for visiting researchers. Demands at this time do not call for anything larger than the proposed space. However, long-range projections suggest that eventually a dormitory facility with the ability to accommodate 15–20 people will be required. The Reserve will continue to monitor demand, and when timing and funding are appropriate, a suitable living space for researchers will be constructed.

4. Library

The current location of the Coastal Resource Library is in the St. Jones Center office space common area. It is projected to outgrow this space over the course of the next several years. Options to address this issue will be developed following the successful completion of Phases I and II of the expansion plan. After an evaluation of future space requirements, it will be determined if the library has grown enough in size and importance to require a new dedicated space.

D. Blackbird Facility Development

The Blackbird Component, until 2004, had no properties suitable for any facilities. This changed with the addition of the Lowe Tract. The property offers easy access to Blackbird Creek, trails and parking areas. The Reserve anticipates establishing a variety of facilities over the next five years. It is anticipated that new properties will be acquired for inclusion in the Blackbird component. Any new holdings that contain facilities will be evaluated for proper use and maintenance. Any facility converted for Reserve use will be designed for maximum efficiency and will offer programs that best meet community environmental needs while accomplishing the mission of the Reserve.

1. Visitor Center

The Reserve will, over the next five years, develop plans for the construction of a Visitor Center for the Blackbird component. If funding becomes available within that timeframe construction will begin. A visitor center offers many benefits. It will increase Reserve exposure and influence. Education programming for the K through 12 and decision maker audiences will be advanced, and it will allow visitors to gain an appreciation for the importance of protecting the Blackbird Creek watershed.

2. Interpretive Trail

A small trail was in place at the time of purchase of the Lowe tract. The Reserve will improve and expand this trail to include adjoining Reserve properties. A loop trail will be established and educational signage will be placed along its length. The trail will address public access needs in the area as well as become an asset to the Reserve education program. The trail head will offer a small parking area. Trail development and supporting facilities i.e., restrooms, picnic areas etc., will be determined by the public access/development plan.

3. Canoe/Kayak Launch

A recommended action from the most recent 312 evaluation called for the acquisition of property with access to Blackbird Creek. The Lowe Tract satisfied this recommendation. The Reserve is a strong supporter of passive recreational opportunities and conducts quarterly canoe trips on the

Blackbird. The Reserve will establish a canoe and kayak launching area to facilitate these trips.

E. Action Plan for Facilities and Construction

As the DNERR programs expand, it is evident that the facilities must also expand to meet the demands for space and resources. To accommodate these demands, the DNERR aims to do the following:

- **Action 1: Implement the Facility Expansion Plan.**
As funding allows, the DNERR will proceed with the planned construction to add more conference space at the St. Jones Reserve component. It is projected that this expansion project will be completed in 2005.
- **Action 2: Consider future space issues at the Reserve.**
Post-expansion, the DNERR will evaluate the Coastal Resource Library's needs and determine whether to enlarge its space or relocate it within the Reserve's facilities. As properties are added to the Blackbird component, facility needs and uses will be evaluated.
- **Action 3: Encourage greater use of the Reserve facilities.**
The DNERR will promote the use of the expanded Visitors Center by local schools and educational institutions through yearly mailings, and will inform State agencies of the conference space available through broad network email.
- **Action 4: Develop a public access plan.**
The DNERR has begun to formulate a public access plan to address increasing visitation to the St. Jones Reserve component (see Chapter VII, the Public Access Plan, for details).
- **Action 5: Continue the overall monthly and seasonal maintenance procedures for both Reserve components.**
The DNERR has established and will continue standard maintenance procedures for both Reserve components, including: carpet cleaning, floor waxing, geothermal maintenance to include monthly filter screen monitoring and bi-annual liquid ph testing, septic system pumping, lawn mowing, and lighting replacement.
- **Action 6: Develop facilities at the Blackbird Creek Component.**
Over the next five years the DNERR will plan for the addition of a visitor center, construct a loop interpretive trail and establish a canoe/kayak launch site. The timeframe for completion is budget dependent. As funds become available projects will be completed.

