Report to the Seacoast Science Center Board of Directors

from

The Pathways Project Steering Committee

July 15, 2022
EXECUTIVE SUMMARY

The Seacoast Science Center’s (SSC’s) Pathways Planning Project (PPP) was created to explore the future envisioned in SSC’s capital campaign. The PPP was comprised of six subcommittees, each focusing on a selected task area or Pillar, plus a Steering Committee. The six Pillars explored are:

- Expanded physical facility that reflects best practices in sea-level rise resilient construction and planning
- Enhanced exhibits, aquariums, and community spaces
- Upgraded marine mammal rescue, rehabilitation, and education
- Teaching Laboratory
- Interpreting regional history and culture
- Nature-based early learning program

Each subcommittee, comprised of SSC board members, staff, and community representatives was tasked with developing a forward-looking vision for their task area.

The Pathways Project Steering Committee (PPSC) presents the following synthesis of the visions, hopes, desired outcomes, and community benefits articulated throughout the Pathways Project. The six Pathways task force committees have collectively:

1. Identified a set of powerful and transformative community benefits.
2. Articulated the associated desired outcomes that can change constituents’ and communities’ approaches to coastal and ocean conservation.
3. Recognized the importance of measuring and documenting that change.
4. Identified the complexities of implementing the task force vision.

The PPSC has identified the inter-dependence among the campaign’s pillars, and the potential to leverage their synergies. Finally, the Steering Committee offers functional recommendations which are designed to assist the Center on its journey including:

- Establish and support an operational planning group (OPG).
- Monitor and track the work of the OPG.
- Ensure coordination across the many facets of the operational plan.
- Organize Board efforts for maximum support of the operational planning process.

The results of the Pathways Project and the findings contained in this report are offered to the Board of Directors to energize, empower, and galvanize the Seacoast Science Center toward realizing its vision.

Respectfully submitted:

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FULFILLING THE PROMISE OF THE CAPITAL CAMPAIGN
REPORT ON THE PATHWAYS PLANNING PROJECT
AND
RECOMMENDATIONS TO REALIZE THE VISION

Section 1. The SSC Capital Campaign and the Pathways Planning Project

SSC will meet the challenges of informing, inspiring change, and conserving the seacoast and ocean environment through a set of forward-looking capital investments that form the pillars of the Center’s capital campaign. In 2020, Copley Raff, Inc. (CRI - the campaign consultants) presented an integrated vision of those investments to donors, donor candidates, community members, and partners in a formal campaign study. The study results were positive, and in 2021 the SSC Board of Directors approved six Pillars for the capital campaign. The effort to secure leadership gifts is underway.

SSC designed the Pathways Planning Project (PPP) to create a framework for the operational planning that a re-envisioned SSC will require. An independent CRI facilitator worked with the staff, board, and community representatives on each Task Force to:

1. Envision the transformational benefits of the campaign.
2. Prioritize the benefits.
3. Describe the desired broader community impacts that might result from community engagement in these benefits.

To accomplish their work, the Task Forces operated under the following guidelines:

1. They would work from the assumption that SSC’s delivery of high-impact, mission-driven services is the central justification for its existence.
2. Their discussions would focus on what would be good for the community, not what would be good for SSC as an organization.
3. They would identify the benefits of the pillars and the associated outcomes to the community.
4. Their work was not to map out how SSC would “deliver the promise,” but what the promise might look like and what it could achieve.

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1 See Attachments for an Overview of the SSC Mission and Offerings.
2 See Attachments for Thumbnail Descriptions of the Six Pillars.
3 See Attachments for the SSC Capital Campaign Case: Changing Tides, A Community Anchor
4 See Attachments for the SSC Task Force Campaign Pillar Envisioning Questions
5 See Attachments for the Task Force Reports.
Section 2. Community Benefits Play Out Across Six Pillars

Guided by the facilitator, the Task Forces envisioned the community benefits across the six Pillars, categorized them, and described ways in which they will play out in the new Center. Eight short summaries of these visions6 are provided below:

A. Visitors and non-visitors alike will have **easy access** to information, curated experiences, and individually selected explorations about the ocean and seacoast ecosystems that are not available to them in any other local venue. The Center will be exciting, informative, and entertaining, offering sophisticated, contemporary exhibits and advanced interpretive strategies indoors and outdoors. Participants in outdoor investigations will be able to come indoors to extend their investigations in a new teaching laboratory.

B. **Activities and programs** for people of all ages will be offered in an accessible, welcoming, and open environment. The Marine Mammal Rescue and Rehabilitation program will expand to allow holding non-releasable animals and to help visitors understand how an ocean-in-balance impacts the species who live in it as well as humans that depend on it. The implications of sea-level rise will be included in SSC programs, as will key facts about the future of the Gulf of Maine. An effort to reach out to underserved communities will engage and involve additional community organizations. An effort to open the teaching laboratory to students who have no practical access to such a facility is a key goal. A broadened program for early-learners will allow the Center to serve more families and children as young as three years old in formal and informal programs.

C. **Education and information** will be fact-based and driven by best practices, historic baselines, and the latest research findings. Marine mammal work will adhere to NOAA’s best practices and be informed by the results of SSC’s research partners. Witnessing the rescue and rehabilitation of marine mammals will raise community awareness of ocean health and its impacts on all mammals (including humans), provide educational opportunities for school children and lifelong learners, and strengthen SSC’s role in the Northeast and Atlantic marine mammal networks. The power of live marine animals to motivate conservation action will be a central focus for teaching and exhibits. Opportunities to evaluate and think critically about information will be available throughout the facility (indoors and outdoors) and in each program/activity; efforts to share the principles of analysis that underlie this important skill will span the center. Teaching the interdisciplinary perspective needed to address environmental issues and systems will enhance the pipeline of students interested in related careers. The facility itself will be a demonstration project, blending its state-of-the-art sea level rise resilient features into a broad and diverse range of opportunities to learn about sea level rise and the future of the seacoast community.

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6 See Attachments for the Facilitator’s Observations of the consensus within and among the Task Forces around a set of ideas, values, and hopes that motivated and shaped the visions for each Pillar.
D. **Community spaces, indoors and outdoors**, will welcome people and organizations, making the Center an anchor and a hub for conservation work and learning throughout the year. The facility will be a classroom – for teachers, students and interns, families, employers, and any individual who seeks information to effect positive environmental change. Ongoing professional development efforts will be expanded in this unique environment and will take advantage of the new teaching laboratory. Important contributions to mission fulfillment will come from student interns in educational programs, exhibits, mammal programs, and early-learners programs, K-12 teachers, science researchers, science learning professionals, university laboratories and marine science projects, historians, social equity advocates, parents, local officials, businesses, foundation and nonprofit sector leaders, peer institutions, and organizations that serve the marine conservation field, and more.

E. The importance of the **interdependent history** of humans and oceans will become part of the many conversations that take place between visitors and staff. Volunteers and staff will be oriented to the new opportunities to include Indigenous and European history and culture in their work. Visitors will learn about populations, cultures, and technological developments that shaped the site and the local region. With a better understanding of the past, visitors will have the tools to embrace their custodial responsibility for the conservation, health, and balance of the ocean, including its shoreline, regional waterways, and the lands beyond.

F. Committed to influencing positive environmental outcomes, the SSC will ask constituents to **participate in ocean and seacoast conservation through interactions** with individuals across the Center. Reflection on their learning and their own place in ocean conservation will be amply available to anyone who visits the Center, and in off-site programs such as lectures and events.

G. **Digital interpretation** and exhibits, contemporary wayfinding, program announcements, capacity tracking, building controls, security technology, cafeteria amenities, retail activities, and a host of other services will be supported by new technology that will increase efficiency for the institution and learning and enjoyment for visitors.

H. Finally, across the wide spectrum of dynamic and reflective opportunities and multiple venues (exhibits hall, cafeteria, rooftop gardens, and beachfront), the SSC will invite **people to take action** through a broad range of strategies, from providing handouts, emphasizing “one simple thing you can do” statements, connecting people with like-minded organizations, promoting events, and pinpointing key choices on social media, in live interactions, and in written and verbal communications. Community meetings, and other activities, will be anchored by SSC’s invitation to everyone it engages to act in small ways and large to protect and conserve the world ocean.
These community benefits, linked across the six pillars, point to a future where the Seacoast Science Center plays a significantly larger and transformative role in:

A. Informing the public about marine science, the health of marine animals and seacoast regions, the expected impacts of climate changes, and the history and culture of human-ocean interactions.

B. Influencing the public’s appreciation of the vulnerability of seacoast/ocean environments through direct experiences at the Center and in the larger region.

C. Effecting changes in public behavior and by extension in their communities by embracing a more direct and stronger role in advocating actions that will protect, conserve, and preserve the world ocean.

Section 3. Desired Outcomes in the Community

The top nine desired outcomes are expressions of a deeply held belief that the capital campaign will empower SSC to step fully into a regional, national, and international influence on individual and organizational growth and action on behalf of the marine environment:

- People will take positive actions for ocean health.
- The SSC will be viewed as a trusted and influential resource on ocean and seacoast conservation.
- People will see the linkage between ocean health and human health.
- People of all ages and backgrounds will learn critical thinking skills through SSC programs.
- Professional educators will turn to SSC for unique growth and development opportunities.
- SSC will be viewed as a diverse and accessible community partner.
- Ocean researchers will value and utilize SSC expertise in marine science communication and education.
- The pipeline of future marine scientists and educators will increase through SSC’s work.
- Researchers will work with SSC to better understand how people learn science in informal settings.
Section 4. Recommendations to the Board of Directors for Next Steps

The Pathways Planning Project has yielded many ideas for the transformative expansion and renovation of programs and facilities at Seacoast Science Center. The planning work has also surfaced issues that will affect realizing the desired outcomes of the campaign:

- A critical impact of the capital campaign is that Center activities and opportunities for visitor engagement will be significantly reduced or eliminated during construction.
  - The impacts on staffing, programming and activities, financing, and communications around alternative methods of serving SSC constituents and maintaining brand vibrancy may be significant.

- Planning Considerations:
  - perceived value or perceived risk,
  - inclusion and access,
  - ease or complexity of implementation,
  - tension between brand and reputation,
  - hiring specialists or generalists,
  - distinctions between metrics that are ideal and those that are achievable,
  - fixed or flexible space allocations
  - new or refined policies, such as ticketing and visitor control,
  - use of the facilities,
  - social media policies that address sponsors’ or partners’ practices and reputation,
  - credentialing of staff in key areas, and
  - memoranda of understanding with partners and stakeholders.

Recognizing the Board’s responsibilities in the growth of the Center, the Steering Committee offers four broad recommendations to the Board, with detailed sub-recommendations:

1. **Together with the CEO, establish and support an operational planning group (OPG):**
   - Define the scope and design of the framework for operational planning.
   - Select a core group of SSC staff to serve on the Operational Planning Group (OPG).
   - Develop a charter for the OPG and state the SSC’s expectations for how it will work, who will be permanent and who will be ad hoc members, and expectations for accountability, confidentiality, and conflicts of interest. The Charter should state any SSC assumptions and parameters that will affect planners in the execution of their task, especially in how to organize and integrate the operational plans. Examples include expectations about planners’ communications with prospective vendors and outside subject matter experts, how OPG planners are expected to address Diversity, Equity and Inclusion issues, and the timeline and schedule for reporting to the Board.
   - Appoint or hire a planning coordinator to support the CEO and planners and keep the process on track, document the planning work, consult with the board and staff, prepare reports for the CEO to share with the board, and perform additional duties as directed by the CEO.
F. Provide guidance, backup, and procedures for SSC employee staff planners to take time away from their jobs to serve effectively on the planning committee.

G. Ensure that there is a secure space (physical or digital or both) for planners to use and provide tools (technology, laptops, space, etc.), training, and special services, as needed.

H. Contribute to the investigations of how other organizations have addressed similar challenges and opportunities.

I. Respond to planners’ requests and communications to the CEO and Board promptly.

2. Monitor and track the work of the OPG:

   A. Structure the plan so it clearly speaks to SSC’s mission and values, delivers top-ranked benefits to the community, defines specific programs, financial projections, legal and risk management implications, personnel requirements, evaluation metrics and methods, timelines, implementation roles, operating budgets, and partnerships.

   B. Monitor the operational planning through regular review and discussion with the CEO and with the OPG.

   C. Ensure that there are clear expectations for Board, CEO, and staff accountability, confidentiality, and progress reporting.

   D. Ensure that the OPG has the necessary human, financial, and leadership resources.

   E. Anticipate and prepare for any outcomes that may arise in the planning process whenever possible.

   F. With the CEO, establish contingency plans as necessary and clarify the conditions under which such plans would be triggered.

3. Ensure coordination across the many facets of the operational plan:

   A. Encourage the OPG and board to focus on mission, values, and service to the community in the development of the operational plan.

   B. Engage the expertise and opinions of Task Force members, partner organizations, board members, constituents, and outside experts as needed and broker such relationships as appropriate.

   C. Encourage the OPG to keep the principles of the Pathways Project’s aspirational work in mind throughout:

      i. Communities have needs.

      ii. Nonprofits offer solutions.

      iii. Nonprofits that present their “needs” up-front risk poor alignment with community values.

   D. Support the OPG’s assessment of assets, opportunities, challenges, performance metrics, and other conditions that could affect the implementation of the plan.

   E. Identify and assess the cross-cutting issues that will have a broad impact on the success of the plan, such as human resources, financial and legal requirements or implications, phasing, and timing of contracts, hiring, etc., credentialing, memberships, regulatory issues, capability to gather and analyze actionable data and metrics, revenues from outside use of facilities, etc.
F. Build confidence in the planning work by ensuring that there is Board transparency in the planning process through periodic disclosure (in meetings or in writing) about the membership of the OPG, its outside experts, its timelines, its subgroups, key issues under discussion, how the Board is monitoring the effort, and other similar information going forward.

G. Be prepared to address questions that may arise around confidential, private, or sensitive issues.

H. Establish a mechanism to review and/or establish any policies that would be required to manage the operational planning process or its implementation.

4. **Organize Board efforts for maximum support of the operational planning process:**
   
   A. Discuss and arrive at clarity around the roles of the board, chief executive, staff, and consultants.
   
   B. Ensure that the board’s standing committees have full access to the potential impacts of the operational planning (i.e., Finance, Facilities, Executive, and Development).
   
   C. Create a responsive committee structure, including enhancing the board with new members who have the experience and expertise that will be required for governing the new Center, and other committees as necessary.
   
   D. Assess and make recommendations about stakeholder relationships, subject matter experts, sources of funding, etc.
   
   E. Address diversity, equity, inclusion, and justice solutions specific to SSC.

**Section 5. Conclusion**

The SSC’s Pathways Planning Project working groups are commended for their creativity and commitment to generating the vision for the future of the SSC. The Steering Committee recognizes and values the service offered by these members.

The PPPSC has completed its review of the working groups’ deliberations, leading to specific recommendations to the SSC Board of Directors for implementation. The PPPSC’s work is now complete. Establishing the Operational Planning Group and establishing a Board Sub-committee to monitor and track its progress are the next steps.

The PPPSC now defers to the Board for execution.
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ATTACHMENTS

1. Overview of Seacoast Science Center Mission and Offerings

2. Thumbnail Descriptions of Six Capital Campaign Pillars

3. SSC Capital Campaign Case: Changing Tides, A Community Anchor

4. Task Force Campaign Pillar Envisioning Questions

5. Six Task Force Reports:
   a. Marine Mammal Education, Rescue and Rehabilitation
   b. Exhibits, Aquariums, and Community Spaces
   c. Commitment to Local History and Culture
   d. Teaching Laboratory for an Increased Focus on Environmental Literacy
   e. Sea Level Rise Resilient Construction and Environmentally Conscious Operations
   f. Nature-Based Early Learning

6. Facilitator’s Observations from Task Force Meeting
1. OVERVIEW OF SEA COAST SCIENCE CENTER MISSION AND OFFERINGS

The Seacoast Science Center’s mission is to spark curiosity, enhance understanding, and inspire conservation of our Blue Planet. The Center does this by engaging people of all ages from toddlers to seniors at its remarkable ocean-side location in Rye, New Hampshire’s Odiorne State Park. There SSC offers a signature brand of marine and environmental education where visitors to the Center experience first-hand New Hampshire’s coastal environments including sandy beaches, rocky shores, tidal estuaries, diverse freshwater habitats, and woodlands. Offering multiple opportunities for self-pacing and self reflection, the Center celebrates the beauty and power of its Odiorne Point site and connects visitors to their natural surroundings and the everyday choices that impact ocean and seacoast conservation.

These experiences often come with in-person conversations and interactions with the Center’s expert and dedicated naturalist educators, delivered from an oceanside setting. Children, age one through 12th grade, can participate in SSC’s educational programs and environmental day camps. The Center offers a diverse collection of high quality, standards-aligned STEM school programs comprised of destination field trips, in-school outreach programs and off-site after-school activities. Families can enjoy the SSC experience together with daily public programs. There are special after-hours family-oriented educational programming events and domestic and international eco-adventure travel. Virtual programs deliver the SSC experience and programming to remote audiences globally. SSC’s community events have become part of the cultural fabric of seacoast New Hampshire and include programs such as Music-by-the-Sea summer concerts, Rescue Run for Marine Mammals, Earth Day Celebration, World Ocean Day Family Festival, and BioBlitz! - a park-wide dawn to dusk species scavenger hunt. Beyond its special programs, the Center welcomes people of all ages, and from all corners of the world, to visit and learn about NH coastal environments and culture. Self-guided tours and explorations offer visitors the opportunity to pace and tailor their visit to personal preference.

SSC’S pre-COVID visitation had reached over 90,000 persons annually, including 32,500 children through school programs. Faced with challenges of the pandemic when visitors could no longer visit the center in person, SSC quickly pivoted to developing and delivering brand-new digital activities and videos such as the “Your Learning Connection” newsletter, the “Teacher Learning Connection” resource web pages, and the “Do It Yourself: Odiorne Point State Park Adventures” activities for families. The response to these and other new online SSC materials was so successful that the Center has integrated them into its online programming. Across all its digital platforms, these SSC resources have been accessed by about 100,000 viewers per year in each of the last two years.
2. THUMBNAIL DESCRIPTIONS OF SIX CAPITAL CAMPAIGN PILLARS

2.1. A re-imagined and expanded physical facility will be the most visible manifestation of the transformed SSC. The renovated and expanded facilities will be designed as a planning model and demonstration site for Sea Level Rise resilient construction. With a focus and attention to climate-sensitive, environmentally conscious facility design, the building itself will be a showcase for conservation coupled with environmental adaptation and mitigation practices. It will provide opportunities to elevate public awareness of best practices. The new construction will also provide additional space for upgraded SSC educational programming and visitor experiences.

2.2. Exhibits, aquariums, and community spaces will be updated and expanded to enhance the visitors’ experience of ocean habitats, and to demonstrate the science of balanced and healthy natural systems and the interdependence of humans, the ocean, and seacoast environments. The goal is to develop contemporary exhibits designed to advance coastal and ocean conservation. It will provide visitors with a variety of experiences that encourage return visits and serve as teaching/learning resources. These spaces also create an opportunity to highlight other SSC programming and partnerships, including UNH and NH Parks and Recreation. Community spaces will reinforce the Center’s role as a community anchor organization, designed to host meetings, forums, community science programs, and a wide range of ocean-focused public events for the broader community.

2.3. The SSC marine mammal rescue, rehabilitation, and education program will be expanded to include a public-facing short-term rehabilitation facility. Providing the public visibility into marine mammal rehabilitation activities will create new opportunities for the SSC and its NOAA partner to educate and engage the public about marine mammals while providing the highest standard of short-term care. The marine mammal rehabilitation will be a draw for visitors to the SSC and enhance partnerships with NOAA, UNH and others.
2.4. SSC will add a teaching laboratory facility to complement SSC’s signature field and community science experiences. This facility will allow for hands-on qualitative and quantitative experiences to build experimental skills and comfort in a science laboratory setting. This new facility will strengthen SSC’s capacity to help develop critical thinking skills through experimental design, data collections and analysis, and provide exposure to scientific concepts that help to differentiate fact from opinion through the evaluation and use of data.

2.5. Building on the idea that the past gives us context for the present and helps to inform our future, SSC’s historic Sugden House will be redeveloped as the backdrop for a new commitment to interpreting regional history and culture. The redesigned space will highlight the relationship between humans and the ocean in the Odiorne Point region. New exhibits and history-themed interpretive opportunities within the Sugden House gallery space will tell the stories of Indigenous peoples, the first European settlers through the era of Victorian homes and hotels, subsequent military development, to the experiences of today’s visitors to Odiorne Point State Park and the SSC.

2.6. Children’s learning about nature is often a catalyst for their parents and families to learn about the environment, to share nature-based experiences, and to express their perspectives and enthusiasm to others. SSC’s signature youth programs are a desirable and impactful feature of the SSC. Extending that experience to younger children through a new nature-based early learning program would be a service to the region and would allow SSC to reach curious young children, inform them and their families and inspire them to action.
3. Changing Tides,  
A Community Anchor:  
Campaign for the Seacoast Science Center
Who We Are

Seacoast Science Center is a beloved anchor of the community – a place to learn and have fun while developing an appreciation for our coastal environment and its inhabitants. We are an integral part of New Hampshire’s cultural economy and educational framework, attracting 90,000 visitors annually, with 30,000 participating in school-related field trips and summer camp programs. As a valued public resource, we encourage social interaction, community collaboration, and the pursuit of shared values.

At our home in historic Odiorne Point State Park, one of New Hampshire’s ocean-facing treasures, we inspire visitors to discover the wonders of our natural habitats. Families are encouraged to get their feet wet in the tide pools, explore our touch tank full of wondrous creatures from the Gulf of Maine, marvel at the aquarium exhibits, and develop a deeper appreciation for the preservation and health of our planet.
Part of the Solution

As we move into 2022, Seacoast Science Center is poised to further its mission to spark curiosity, enhance understanding, and inspire conservation. We must advance our ability to feed the emotional and intellectual curiosity of our children while fostering a sense of environmental responsibility and personal empowerment. We must protect our marine mammals, whose ecosystems are threatened by global warming. We must expose more young people to marine science, encouraging them to pursue ecology-oriented careers. We must honor the rich cultural history of the Park and those who inhabited this land before us. And we must do all of this with a strong focus on sustainability.

As strong proponents of a conservation ethic, Seacoast Science Center plays an important advocacy role as experts in coastal and ocean matters. There is increasing urgency to our work as we are called on to amplify our commitment to address the effects of climate change.
Taking Action Through Investment

To expand our mission and programs, we are undertaking a $15,000,000 capital campaign. Through philanthropy and community support, we will create a transformational experience for our visitors, now and into the future. Our campaign centers around six pillars, each integral in our mission.

This major capital campaign for Seacoast Science Center will be instrumental in increasing public awareness about coastal and ocean conservation and environmental responsibility. Our educational model is based on the premise that through first-hand interactions, people establish personal connections with the natural environment. Heightened appreciation of precious coastal and ocean resources and their changing ecosystems will lead to greater personal commitment to the health of our planet and motivation to take action in our daily lives.

After listening carefully to our community, we recognize that it is time to respond to external expectations by making a meaningful investment in Seacoast Science Center’s visitor experience and public programming. Our most significant long-term partner, the New Hampshire Division of Parks and Recreation, is enthusiastic and supportive of our transformational vision.
Environmentally-Conscious Construction and Ongoing Operations: $2 million

The renovation and expansion project will be implemented using climate-sensitive, environmentally conscious plans and construction techniques. The result will be a transformed Seacoast Science Center re-engineered around sustainable energy options and principles including sea level rise and resilient coastal construction with a minimized operational environmental impact.
Larger Scale Aquarium Exhibits & Community Spaces: $5.5 million

We will create new contemporary exhibit spaces designed to advance critical messaging relevant to coastal and ocean conservation. Our goal is to provide an unforgettable experience for our visitors through greater variety, a more impactful scale, and increased relevance. New exhibits and amenities will encourage return visits and excel as teaching resources.
Marine Mammal Conservation and Rescue: $2 million

We will increase the educational impact and visibility of the Marine Mammal Rescue program with the addition of a marine mammal rehabilitation facility. This new area will provide for both animal rehabilitation and public education as we provide the highest standard of short-term care for rescued animals.
Increased Focus on Environmental Literacy: $2 million

We will build new teaching laboratory facilities and classrooms to give students and visitors a deeper marine science learning experience. New laboratory teaching space will add critical experimental layers to SSC field experiences and expand internship and other educational opportunities for grade school, high school and college students.
**Commitment to Local Culture and History: $1 million**

We will rededicate the historic Sugden House as a cornerstone exhibit space for the interpretation of NH Seacoast culture and history. Through exhibits, new programs, and creative partnerships with other historically-focused organizations, we will advance an Odiorne-based perspective on human-use at this remarkable oceanside location over time, pausing in the present and inviting visitors to consider the future.
Nature-Based Early Learning Center: $2.5 million

We will build a dedicated indoor space designed for the needs of younger children and leverage the natural setting of Odiorne Point State Park as an outdoor classroom for early learner education. We will use this opportunity for capital construction to create space to accommodate age-appropriate aquariums, terrariums, technology, and restrooms.
Your Involvement Matters

Generous philanthropy from those who appreciate the mission and impact of Seacoast Science Center will be essential to making our vision a reality.

Campaign contributors will be recognized through legacy naming opportunities that will include new and existing educational programs, spaces on the renovated main floor, new second floor, and Sugden House. Your name, or the name of someone you choose to honor, can be proudly and permanently linked to the important work of the Seacoast Science Center.

We are deeply grateful for your consideration in helping us to further our mission through this necessary and mission-focused campaign. We welcome continued conversations as we move towards a brighter future, together.
4. TASK FORCE ENVISIONING GUIDE / QUESTIONS

4.1. What are the potential benefits and impacts of SSC adding [campaign pillar] for the seacoast community, and to New Hampshire, and beyond?

4.2. Rank the benefits from marginal to transformational, i.e., 1 is marginal, 10 is transformational

4.3. Who will be supportive of SSC’s commitment to [campaign pillar]?

4.4. How might the development of [campaign pillar] build deeper relationships for SSC with the community?

4.5. Will the community understand the connection between the benefits of [campaign pillar] and SSC’s mission?

4.6. With [campaign pillar] in mind, identify potential partners and collaborators. How can SSC best leverage the power of those collaborations to the benefit of the community?

4.7. What assets does SSC already have relative to [campaign pillar]? What assets will be necessary to acquire?

4.8. How should we measure success?

4.9. Other critical considerations necessary for the successful implementation of [campaign pillar] at SSC?
Pathways Project
Final Task Force Report

Sea Level Rise Resilient Construction and Environmentally Conscious Ongoing Operations

By Amanda Preston | March 16, 2022 (rev. 6-28-22)
5.a. Sea Level Rise Resilient Construction and Environmentally Conscious Ongoing Operations

I. Introduction

After 30 years of offering hands-on education to thousands of New England residents and visitors from around the world, SSC is poised to expand how we spark curiosity in children and adults, enhance understanding of how we can act locally, and inspire action to protect our planet. Our $15,000,000 campaign will transform our facilities and launch our aspirational vision.

II. Charge to the Task Force

SSC asked each Task Force to work within its focus to develop a focused vision of high-impact experiences and what community benefits can result from them. The results of each Task Force’s deliberations and recommendations will go to the Steering Committee, which will integrate them to form the foundation for full operational planning. That planning will take place from 2022 to 2024 so that we are fully ready when the reimagined Center opens to the public. The Report serves another critical purpose in building confidence and enthusiasm in conversations with the community throughout the campaign.

III. Acknowledgments

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- Yvonne Zinicola
IV. Sea Level Rise Resilient Construction and Environmentally Conscious Ongoing Operations

The Center’s campaign feasibility study describes this campaign objective as below: The renovation and expansion project will be implemented using climate-sensitive, environmentally conscious plans and construction techniques. The result will be a transformed Seacoast Science Center re-engineered around sustainable energy options and principles including sea level rise and resilient coastal construction with a minimized environmental and climate impact from museum operations.

V. Relevance to SSC’s Mission: To Spark Curiosity, Enhance Understanding, and Inspire Conservation of our Blue Planet

The Task Force members discussed the importance of explicit messaging that puts the facility and the site-as-demonstration-project squarely into SSC’s mission to conserve the ocean. The group discussed how this endeavor is an act of courage and how it empowers SSC to step into leadership of community conversations around climate change and coastal resiliency. SSC will demonstrate how the facility and the site will be resilient to sea level rise and use that information to advocate for action. The Task Force recognized these connections might be challenging, and discussed how the demonstration of architectural design, materials choices, building operations, and external resiliency (if implemented creatively) can be a critical emotional pathway to living more sustainably. Visitors will be inspired them to act in ways that minimize their own contributions to the environmental, particularly ocean, changes we will see in the coming decades.

VI. Discussion Guide: The Nine Envisioning Questions

1. What are the potential benefits and impacts to the seacoast community, to New Hampshire, and beyond, of implementing SSC’s renovation, expansion, and ongoing operations as a demonstration site for sea-level-rise resilient, environmentally conscious construction techniques?
The Task Force envisions that the demonstration project approach will provide many opportunities influence the public around sustainability and environmental consciousness. SSC will spark and shape what might sometimes be difficult conversations about climate change, sea level rise, and choices that organizations and individuals can take in the face of these changes. The facility and its systems speak to a holistic way of integrating the physical side of SSC with the emotional world that can move people to change. Demonstrating aspects of the building, and the site, will be interesting, even fascinating, to some. The problem-solving that goes into construction, and engineering, will likely attract a special audience of technical thinkers. Visitors will see and experience new or recently improved technologies, natural solutions to challenges in operating systems and procedures, materials choices, and innovation across the entire project. Ultimately, the Task Force hopes that the diverse range of eco-positive problem-solving features on display will encourage different ways of behaving to propel change in the seacoast communities themselves.

2. Rank the benefits from marginal to transformational (i.e., 1 is marginal, 10 is transformational):

A. The Task Force articulated the following as the most transformational benefits and impacts for people and organizations resulting from the demonstration project planned for the new facility and the site:
   a. Respond emotionally and intellectually to SSC’s courageous and tenacious leadership in redesigning itself – both physically and in its role and purposes
   b. Connect emotionally and intellectually to the reality of climate change/coastal sea level rise, the power of the ocean, and other effects (heat, wind, storm surges, salinity, etc.)
   c. Take away for their own possible use ideas and strategies for deploying building design to achieve sea level rise resiliency and environmentally conscious building operations
   d. Envision new ways of looking to nature for passive strategies for energy
efficiency and conservation (i.e., biomimicry)
e. Energize and motivate themselves to action and advocacy
f. Embrace the goal of living respectfully in coastal New Hampshire and influence attitudes toward a custodial mindset
g. Find moments and places of reflection throughout the building and in outdoor spaces of special purpose and design
h. Feel themselves and their close connection to the ocean
i. New Hampshire Parks will have the opportunity to:
   i. Partner with SSC to teach about challenges to the NH seacoast in the coming decades
   ii. Develop its own interpretation to complement SSC’s facility and the surrounding site

3. Who will be supportive of SSC’s commitment to becoming a demonstration site for sea level rise resilient, environmentally conscious construction techniques? Who will be supportive of making SSC operations environmentally sustainable?

A. **The building itself could become a popular destination for residents and other visitors.** Communicating that the facility and the site are part of a larger experiment can elicit interest and positive emotions. People may return to follow the results over time and to re-connect emotionally with the site and the aesthetics of the building and the exhibits in it. This can create a community of “watchers and doers” who can stay connected through visits, or through virtual conduits and information channels.

B. **Beyond SSC’s visitors, staff, and construction partners, there are other entities that will look favorably on this aspect of SSC’s growth: the State of New Hampshire, NH Parks, NH Coastal Adaptations Workgroup, NOAA, UNH, fisheries groups, and others to be discovered.**

C. **The Task Force also recognized a generational opportunity: among the most vocal and active proponents of mitigating the “carbon footprint” are young people. SSC can lead efforts to engage young people in the local community in**
the larger fight for a future that is sustainable, by supporting their engagement in an apolitical conversation.

4. How might the development of a demonstration site for sea level rise resilient, environmentally conscious construction techniques and more environmentally sustainable operations build deeper relationships for SSC with the community?

The Task Force discussed the way that both visitation and outreach can build credibility within its constituent groups. SSC will reinforce the concept of “walking the talk” in making its values real and measurable through the new building and the site, in the communications that surround SSC’s development into a more impactful force in the community.

Community organizations will be invited to host events in the new community spaces, and we envision these as a sound way to communicate the a-political nature of the Center and its leadership.

SSC will teach people not only how the building is resilient and environmentally conscious, but also why this is important. Individuals and organizations can adapt their own facilities to sea-level rise and learn how specific choices they make can mitigate the impacts of climate change.

Another important strategy that the Task Force discussed on several occasions is the importance of sharing with people the “why we’ve done what we’ve done” in the building. This is expected to influence visitors, and others who might learn about the building through community outreach, to see that choices have practical adaptations behind them, and that different choices can be equally effective in different ways. This aspect of the visitor experience will also reinforce that SSC “stands for science” in its choices and its mission-impacts.

5. Will the community understand the connection between SSC’s mission and the benefits of a demonstration site for sea level rise resilient, environmentally conscious
construction techniques and more environmentally sustainable operations?
This project will greatly enhance SSC’s credibility to be a true “voice for the Earth” and will propel the Center into stronger ways to fulfill its mission and lead through the lens of its core values.

6. With a demonstration site for sea level rise resilient, environmentally conscious construction techniques and more environmentally sustainable operations in mind, identify potential partners and collaborators. How can SSC best leverage the power of those collaborations and partnerships to the benefit of the community?

The Task Force discussed several partners whose active support can help SSC leverage its influence. NH Department of Economic Development (identifying manufacturers and producers of product and systems in the new construction); businesses and individuals who make their living on the sea; University of New Hampshire, Coastal Adaptations Workgroup, and others.

7. What assets does SSC already have relative to the utilizing the new facility and the site as a demonstration site? What assets will be necessary to acquire?

A. A green team is already in place to recommend and implement strategies for environmentally conscious operations. SSC seeks to establish sound policies and implementation strategies to “walk the talk.” SSC has taken mitigating steps in partnership with NH Parks on solar collectors. Light bulbs were swapped out throughout the entire building. Other ongoing efforts are demonstrating already that SSC has the commitment and the know-how to lead a seacoast effort in resilient and sustainable construction and operations.

B. SSC has history and strong relationships with many individual and institutional leaders in environmental conservation, who will envision, advise, and implement important coastal adaptation initiatives with SSC.

C. The new equipment for the facility will be 20 years ahead of what is currently in use.
D. The project architects are committed to sustainability and resilience and have completed many successful projects that incorporate state of the art approaches and aesthetically appealing design.

E. SSC boasts a knowledgeable and creative group of professionals whose ideas will be very influential when the time comes to decide exhibit content and design.

F. The Task Forces are equally dedicated and creative and encourage SSC to be “courageous” in moving into a strong leading role in seacoast and ocean conservation.

8. How should we measure success with regard to a demonstration site for sea level rise resilient, environmentally conscious construction techniques and more environmentally sustainable operations?

   A. Efficient metrics include utility costs, electricity generated, indoor air quality, and others, as well as operational efficiencies in the new café, restrooms and waste management, ticketing, wayfinding, traffic management, etc. Green rating systems are also a useful tool.
   B. Awards for building design, efficiency, “green” certifications, etc.
   C. Tracking visitation trends and feedback from visitors
   D. Numbers and types of meetings taking place
   E. Tracking social media “buzz”
   F. Invitations to present on sustainable design to community groups
   G. Requests for tours by community groups
   H. Press and media coverage

9. Other critical considerations necessary for the successful implementation of a demonstration site for sea level rise resilient, environmentally conscious construction techniques and more environmentally sustainable operations?

   The Task Force resonated with the phrase “The Future Is Now” as tagline, or framework for the re-design.
SSC will be mindful of unintended impacts on people, animals, the land, and the water from the construction project.

This Task Force (in concert with most of other Task Forces) spoke to SSC’s place in the center of the ripples that flow out from its work and influence.

An important discussion was held on the topic of certifications: which ones might be the best for SSC to seek. The group also discussed whether certifications will materially advance SSC’s mission, and questions that need to be framed and answered around certifications.

The Task Force noted a particular challenge in parking at the site. (Must build eco-friendly, permeable parking surface lot.)

There is the potential to “phase” the construction, depending on factors of funding availability, environmental impact, etc.
Pathways Project
Final Task Force Report

Exhibits, Aquariums, and Community Spaces

By Amanda Preston | March 25, 2022 (rev. 6/22/22)
5.b. Exhibits, Aquariums, and Community Spaces

I. Introduction
After 30 years of offering hands-on education to thousands of New England residents and visitors from around the world, SSC is poised to expand how we spark curiosity in children and adults, enhance understanding of how we can act locally, and inspire action to protect our planet. Our $15,000,000 campaign will transform our facilities and launch our aspirational vision.

II. Charge to the Task Force
SSC asked each Task Force to work within its focus to develop a focused vision of high-impact experiences and what community benefits can result from them. The results of each Task Force’s deliberations and recommendations will go to the Steering Committee, which will integrate them to form the foundation for full operational planning. That planning will take place from 2022 to 2024 so that we are fully ready when the reimagined Center opens to the public. The Report serves another critical purpose in building confidence and enthusiasm in conversations with the community throughout the campaign.

III. Acknowledgments
Seacoast Science Center acknowledges its debt to the members of this Task Force, who devoted great thought and focus and energy to developing their insightful recommendations:

Nikki Annelli  Robin Ellwood  Karen Provazza
Laura Bahl  Brian Fitzgerald  Larry Raff
Danielle Bastian  Jeanne Hayes  Alex Rosenberger
Paul Bonacci  Kathryn Jerome  Rob Royer
Jim Chase  Kate Leavitt  Lucy Schlaffer
Thomas Cook  Wendy Lull  Ashley Stokes
Heidi Duncanson  Sean McKenna  Allan Waterfield
Hollie Dutton  Jay Orr
IV. Exhibits, Aquariums, and Community Spaces

The Center’s campaign feasibility study describes this campaign objective as below:

We will create new contemporary exhibit spaces designed to advance critical messaging relevant to coastal and ocean conservation. Our goal is to provide an unforgettable experience for our visitors through greater variety, a more impactful scale, and increased relevance. New exhibits and amenities will encourage return visits and excel as teaching resources.

V. Relevance to SSC’s Mission: To Spark Curiosity, Enhance Understanding, and Inspire Conservation of our Blue Planet

The Task Force affirmed that enhancing and modernizing exhibits, aquariums, and community spaces is integral to SSC’s mission. The compelling feelings and thoughtful inquiry that people experience while visiting the exhibits provide an inspiring pathway to action and advocacy for the ocean. The “whys” of rethinking and redesigning the exhibits are entirely consistent with SSC’s mission to move people from curiosity to understanding into active conservation.

VI. Discussion Guide: The Nine Envisioning Questions

1. What are the potential benefits and impacts of SSC developing larger scale, more contemporary, exhibits, aquariums, and community spaces for the seacoast community, and to New Hampshire, and beyond?

   The EACS Task Force approached its work through two complementary methods. Asked to find a “mission” for exhibits and aquariums and community post-campaign (the purpose of the effort from a community perspective) the group found that articulating how SSC could design and implement new exhibits and aquariums and community spaces would a be good start. In the end, this strategy proved helpful, although sometimes circular, in formulating benefits, and in selecting the “whys” that will likely be the most transformational for the community. The Task Force found that a significant capital investment in exhibits, aquariums, and community spaces will energize and motivate visitors through a rich emotional and intellectual experience. These visits will forge trust between SSC
and its constituents as they explore the challenges of restoring the ocean to balance
and promoting the choices and behaviors that people can take for a local – and thus global – impact on the future of the ocean.

2. Rank the benefits from marginal to transformational (i.e., 1 is marginal, 10 is transformational):
   A. Seacoast residents, and people from across the region and the globe, will learn about the ocean and marine science, and will understand the forces that are at work in global climate change.
   B. Visitors will develop empathy for the environment and the oceans, becoming a collective Voice for the Earth.
   C. People who engage with the Center will show enhanced critical thinking skills\(^1\) that they can apply in their daily lives, particularly with respect to marine science and global climate changes.
   D. Those who have engaged with SSC will look to influence others to promote ocean conservation.
   E. Individuals, community organizations, and SSC’s research partners will recognize its stature as an authority – and a trusted resource – in ocean conservation.
   F. Local individuals and organizations will use SSC as an influential “hub” for community learning, sharing, planning, and implementing strategies and efforts to support SSC and its mission.

3. Who will be supportive of SSC’s commitment to developing larger scale, more contemporary, exhibits, aquariums, and community spaces?
   A. SSC members, contributors and volunteers will welcome updated exhibits and spaces, including spaces for quiet reflection and contemplation of seascapes, as a resource and a source of joy, reflection, and learning
   B. Educators will use the updated Center as a resource for both onsite and classroom teaching tools through Center educators.

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\(^1\) We recognize that “critical thinking” has recently become a politicized term. SSC may in future apply
different language to describe this specific ability. For the purposes of the Pathways Planning Project, we decided to defer that deliberation to another time.
C. SSC partners will see a “new” SSC as a good place for meetings, visits, volunteer positions for their members, and a key resource for learning about marine science.

4. How might the development of more contemporary exhibits, aquariums, and community spaces build deeper relationships for SSC with the community? Discussions on this topic resulted in agreement that deeper relationships will flourish throughout the community when the re-designed and re-envisioned Center reopens. Families, schools, community organizations, corporations and businesses will respond enthusiastically, and the learning experiences that will flow from the new exhibits and community spaces will increase engagement well above current levels. The Task Force expects deepened relationships with:
   a) Local businesses
   b) Donors and members
   c) Volunteers
   d) Schools, colleges, and universities
   e) Members of the health professions
   f) STEM professionals
   g) Families
   h) Young children
The Task Force also discussed how the substantial capital investment will inspire staff and volunteers’ personal interactions with visitors of all ages.

5. Will the community understand the connection between more contemporary exhibits, aquariums, and community spaces and SSC’s mission? The Task Force agreed that the community fully understands that exhibits and aquariums are a joyful and intrinsic part of SSC’s mission. Task Force members expressed their belief that the community will be enthusiastic about new and redesigned exhibits and aquariums. The group further expects that a new, “Wow!” exhibit is likely to have a particularly strong, potentially transformative, lifelong impact on visitors.
6. With a developing larger scale, more contemporary exhibits, aquariums, and community spaces in mind, identify potential partners and collaborators. How can SSC best leverage the power of those collaborations to the benefit of the community?

A. The Task Force expects that corporations and businesses will seek out opportunities to be part of the new facility and share their SSC connections with their customers and clients (i.e., restaurant coupons, pre-paid gift cards, etc.).

B. The Task Force also suggested that SSC make a formal and organized effort to engage scientists living in the seacoast region through their workplaces (education, pharmaceutical, fisheries-related, technology, scientific equipment, etc.), or through like-minded science-based nonprofits with overlapping or complementary interests.

C. Corporation, government agencies and community organizations can offer their employees and members new opportunities for science learning, possibly through community science projects.

D. Interest groups like birders, butterfly watchers, and other wildlife lovers can find indoor-to-outdoor experiences that are tailored to their interests.

E. Eco-tourism companies and guides will discover that SSC is a solid and well-reviewed experience for their customers.

F. Aquariums and coastal conservation organizations locally and across the world can partner with SSC in virtual exhibits and activities through remote digital and robotic learning tools, etc.

7. What assets does SSC already have relative to the development of more contemporary, larger scale exhibits, aquariums, and community spaces? What assets will be necessary to acquire?

The Task Force conversations confirmed these as the strongest assets:

A. SSC’s 30 years of experience in crafting impactful visitor experiences

B. A newly renovated and bigger facility, purpose-built for aquariums and other exhibits requiring advanced tech and resources (energy efficient tanks and life support systems)

C. SSC’s institutional commitment to and skill in delivering unhurried, non-judgmental personal interactions with visitors (advantages of reality-based vs virtual exhibitions)
D. Experienced naturalists, volunteers, and staff with years of developing and supplying specialized programs and experiences for all types and ages of visitors

E. Strong relationships with schools and youth-oriented organizations and the educators and adult leaders in those organizations

F. A wide network of healthy partnerships, peers, and advisors

It may be necessary to secure expertise in the future (either through new staff, through re-training staff, or through consulting services) in:

A. Exhibit design and development (including “wayfinding” and associated visitor services)

B. Engineering and technical help for any exhibits that have a live, remote component

C. Assessing the potential need for security staff and facility policies

D. Designing and building a professional catering kitchen and other space for wedding participants; a new walkway into the tent

E. SSC will need the support and participation of NH Parks in those areas where an “indoor-to-outdoor” component will be a critical element in the exhibit

F. Discovering how best to provide close visitor experiences with live animals in an ethical and educational way

G. Identify ways in which SSC can be as welcoming, accessible, and inclusive as possible (disabilities, language, etc.)

8. How should we measure success?

A. Increases in:
   a. Visitors/campers/programs/schools
   b. Members
   c. Donors/corporate sponsors
   d. Volunteers/camp counselors
   e. Social media and website visits (number and duration)
   f. Inquiries and requests for speakers/offsite visits, facility use, etc.

B. Longitudinal statistics on:
a. Students’ academic careers
b. Educational and avocational interests of visitors who came to SSC as kids
C. On site surveys of visitor experience and “take aways”

9. Other critical considerations necessary for the successful development and implementation of more contemporary, larger scale exhibits, aquariums, and community spaces at SSC?

A. With a fluid exhibit “pathway” between outdoors and indoors that can connect to the learning opportunities at Odiorne that are already accessed in SSC programs, SSC could begin to think about itself as a “campus” and perhaps begin to utilize a learning station strategy across the facility and the Park.

B. The Task Force gave considerable discussion to ensuring that the Center goes forward able to engage with visitors of all abilities, and with underserved audiences, and the organizations that can help SSC reach those audiences.

C. SSC is appreciated for the degree to which it can personalize visitors’ experiences. Its intimacy is one of its main assets; the Task Force was forceful about not losing that attribute as the Center grows in complexity and size.

D. The Task Force discussed that it is time for SSC to be more directed and purposeful about asking visitors to take actions in their daily lives that support ocean conservation and health. Traditionally a safe place where every visitor is welcomed and helped to have an enjoyable experience, the Task Force wants the next phase in its growth to include a stronger focus on what needs to be done to conserve the ocean. They also intend to keep the visitor experience a warm and welcoming one and believe that the two intentions can be honored going forward.
Pathways Project Final
Task Force Report

Marine Mammal Education, Rescue, and Rehabilitation

By Amanda Preston | March 26, 2022 (rev. 6/22/22)
5.c. Marine Mammal Education, Rescue, and Rehab

I. Introduction

After 30 years of offering hands-on education to thousands of New England residents and visitors from around the world, SSC is poised to expand how we spark curiosity in children and adults, enhance understanding of how we can act locally, and inspire action to protect our planet. Our $15,000,000 campaign will transform our facilities and launch our aspirational vision.

II. Charge to the Task Force

SSC asked each Task Force to work within its focus to develop a focused vision of high-impact experiences and what community benefits can result from them. The results of each Task Force’s deliberations and recommendations will go to the Steering Committee, which will integrate them to form the foundation for full operational planning. That planning will take place from 2022 to 2024 so that we are fully ready when the reimagined Center opens to the public. The Report serves another critical purpose in building confidence and enthusiasm in conversations with the community throughout the campaign.

III. Acknowledgments

Seacoast Science Center acknowledges its debt to the members of this Task Force, who devoted great thought and focus and energy to developing their insightful recommendations:

Nikki Annelli       Kate Leavitt       Ashley Stokes
Jim Chase           Gregory Lynch     Allan Waterfield
Richard Dumore      Karen Provazza    Ron Watson
Bruce Freeman       Larry Raff        Brian Yurasits
IV. Marine Mammal Education, Rescue, and Rehab

The Center’s campaign feasibility study describes this campaign objective as below:

We will increase the educational impact and visibility of the Marine Mammal Rescue program with the addition of a marine mammal rehabilitation facility. This new area will provide for both animal rehabilitation and public education as we provide the highest standard of short-term care for rescued animals.

V. Relevance to SSC’s Mission: To Spark Curiosity, Enhance Understanding, and Inspire Conservation of our Blue Planet

Marine mammal1 rescue was added to the Center’s work in 2014, and in its early years, was managed as a stand-alone activity. Over time, it has evolved into an intrinsic pillar of the Center’s mission-impact activities.

VI. Discussion Guide: The Nine Envisioning Questions

1. What are the potential benefits and impacts of the enhancement of the SSC Marine Mammal Education, Rescue, and Rehabilitation program to the seacoast community, and to New Hampshire, and beyond?

The Task Force discussed a wide range of benefits, which can be roughly grouped into the following categories:

a) Improved care, outcomes, and placement for stranded animals
b) Improved regional support for stranded animals as a result of ongoing storytelling/data collection of animals in rehab, and research and animal husbandry partnerships
c) Enhanced educational opportunities for visitors and program participants (including pre-K through university level) and professional development

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1 The Task Force discussed the need for sea turtle rescue and rehab along the seacoast from Virginia to Maine and the response to this need that the Center is currently considering. An expansion of the program to embrace turtle rescue could necessitate re-naming Marine Mammal Rescue and Rehabilitation to Marine Animal Rescue and Rehabilitation. The staff do not expect that such a name
change would have any material effect on current operations or funding or public perceptions.
d) Opportunity for individuals to develop or increase empathy for marine mammals with the consequent opportunity to “spread the word” to family, friends, and others

e) Expanded exposure to scientific basis for conservation advocacy on behalf of marine animals

2. Rank the benefits from marginal to transformational (i.e., 1 is marginal, 10 is transformational).

The Task Force agreed that the following impacts and benefits from a capital investment in MMERR will be most transformative for the community:

A. Stranded/injured/ill animals will receive the care and support that reflect best practices for this critical preservation service (see: the National Oceanic and Atmospheric Administration – Marine Mammal Health and Stranding Response Program) (and SSC can assure people that a rehab facility is available nearby)

B. Community members will appreciate that keeping the ocean healthy contributes to human health

C. Seacoast residents and visitors with a commitment to animal welfare, ocean habitats and conservation will know that SSC’s expertise is working on their behalf

D. Visitors’ experiences can develop deeper empathy for the ocean’s animals

E. SSC’s marine rescue and rehab partners will appreciate and respect SSC’s contributions to the research data on stranded animals (i.e., necropsies, telemetry tracking, etc.)

F. College and universities will establish formal agreements with SSC to implement paid internship programs to students seeking a state-of-the-art facility and highly trained, certified experts to instruct them

G. Numbers of students entering marine science work post-education will increase

H. The Center could leverage marine mammal/animal rescue into a
specialized field to inform the study of how people learn science in an informal environment

3. Who will be supportive of SSC’s commitment to Marine Mammal Education, Rescue and Rehabilitation program?

Seacoast visitors and residents, regional residents and organizations, and a network of marine animal rescue and marine animal research partners will welcome SSC’s new capabilities.

4. How might the development of an enhanced Marine Mammal Education, Rescue, and Rehabilitation program build deeper relationships for SSC with the community?

Existing partnerships will become stronger through SSC’s expanded capability (NH Veterinary Diagnostic Laboratory at UNH, Blue Ocean Society, North Atlantic Seal Rescue Consortium, Greater Atlantic Marine Mammal Stranding Network, NH Cooperative Extension, Shoals Marine Lab, Marine Mammals of Maine, Gulf of Maine Research Institute, UNH Marine Science, NH Department of Education, etc.) with whom new opportunities for research, education, and conservation can be pursued. Seacoast residents will develop a stronger “pride of place” about SSC’s role in the region.

5. Will the community understand the connection between the benefits of an enhanced Marine Mammal Education, Rescue, and Rehabilitation program and SSC’s mission?

The Task Force described that its current efforts in marine mammal rescue are well respected in the community. This is based on comments from visitors and observers on the beach during rescues, the feedback from SSC’s partners in this work, news features, and other similar responses. We believe that an enhanced program to increase services to stranded animals, and — soon to allow for the rehabilitation and placement of animals on site, will be well received and seen as a deeper expression of how SSC fulfills its mission. The Task Force believes that AZA accreditation would be a recognition of SSC’s ability and credibility. It is also
important that the enhanced MMERR facilities and program will prove that SSC is doing conservation in addition to inspiring conservation.

6. With an enhanced Marine Mammal Education, Rescue, and Rehabilitation program in mind, identify potential partners and collaborators. How can SSC best leverage the power of those collaborations and partnerships to the benefit of the community? Schools, colleges, and universities throughout the region can become engaged with SSC’s marine animal program (Tufts University, College of the Atlantic, Maine Center for Coastal Fisheries, regional high schools, Slow Fish, Gundalow, etc.) Organizations with an interest in ocean health such as fishers, fisheries advocates, and fisheries protection programs can also take part in re-balancing the ocean through SSC MMR work. Another potential research partnership might be through US Fish and Wildlife at Duck Island.

7. What assets does SSC already have relative to marine mammal education, rescue, and rehab? What assets will be necessary to acquire?
   
   A. SSC’s primary asset is the expertise, experience, and passion of the staff; a dedicated volunteers corps complements that strength.
   
   B. Another primary asset is the Center’s commitment to and ability in meaningful personal interactions between staff (and volunteers) and visitors of all ages. MMERR will continue to spotlight this expertise.
   
   C. SSC has excellent media relationships and will readily be able to bring its message of ocean health to the region, and likely to the nation on occasion.
   
   D. SSC may need to both acquire AZA accreditation and require AZA certification.

8. How should we measure success in the area of Marine Mammal Education, Rescue, and Rehabilitation?

   A. Statistics on successful (and unsuccessful) rescues and rehabs
   
   B. Number of animals released or put into placement
C. Health outcomes for non-releasable animals
D. Overall statistics of stranded animals
E. Visits, supports, etc. from hot line interactions
F. How SSC’s data is enriched and more useful to its network partners
G. How many individuals and organizations align their public images with the SSC’s brand
H. What visitors take away from their MMR experiences (evaluated both at the time of their visit and at a future time)
I. Number of students who moved from their relationship with SSC to working in marine science
J. Growth in requests for SSC involvement from its marine mammal organizational partners
K. Growth in contacts from media, independent science writers, etc.
L. Growth in visitation, membership and gifts at all levels
M. Growth in government and foundation grants
N. Growth in indicators of deepening involvement (repeated visits, repeated financial support, social media engagement, etc.)
O. Outside groups sponsoring conservation symposia at SSC
P. Digital profile/brand growth (web visits, social media growth, etc.)

9. Other critical considerations necessary for the successful implementation of an enhanced Marine Mammal Education, Rehabilitation & Rescue program?
A. The educational programs that teach from the MMERR platform with live animals can supply useful data and models for informal science learning efforts, including substantial teaching opportunities from satellite telemetry.
B. SSC must create a suitable facility for any permanent, or even temporary, placement of animals that balances the educational value of teaching about them with their health needs and the AZA standards.
C. In general, the operational plan as it develops will establish standards for staff credentialing and professional development.
D. The Task Force discussed how the expanded MMR program might lead SSC into
more advocacy and that the Center should prepare itself for push-back from the
community. The group discussed how there will be people and organizations that will never embrace SSC’s positions on conservation, ocean balance, and the vital important of human stewardship of the ocean and its seacoast lands.

E. SSC is at a watershed moment. The MMERR program through its work with charismatic, sentinel animals will be a crucial factor in attracting more visitors, garnering more attention, and strengthening a trusted reputation. The successful implementation of the MMERR program – along with the other components of the capital campaign – can transform SSC from an important force for change to a locally, regionally, and even nationally treasured institution.
Pathways Project Task Force Final Report

Teaching Laboratory for Increased Focus on Environmental Literacy

By Amanda Preston | March 16, 2022 (rev. 6-22-22)
5.d. Teaching Laboratory for Increased Focus on Environmental Literacy

I. Introduction

After 30 years of offering hands-on education to thousands of New England residents and visitors from around the world, SSC is poised to expand how we spark curiosity in children and adults, enhance understanding of how we can act locally, and inspire action to protect our planet. Our $15,000,000 campaign will transform our facilities and launch our aspirational vision.

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III. Acknowledgments

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- Henry Burke
- Jim Chase
- Robin Ellwood
- Bruce Freeman
- Jeanne Hayes
- Amanda Komarek
- Kate Leavitt
- Gregory Lynch
- Sean McKenna
- Larry Raff
- Alexa Rosenberger
- Rob Royer
- Allan Waterfield
- Mark Wiley
IV. Teaching Laboratory for Increased Focus on Environmental Literacy

The Center’s campaign feasibility study describes this campaign objective as follows:  
We will build new teaching laboratory facilities and classrooms to give students and visitors a deeper marine science learning experience. New laboratory teaching space will add critical experimental layers to SSC field experiences and expand internship and other educational opportunities for grade school, high school, and college students.

V. Relevance to SSC Mission: To Spark Curiosity, Enhance Understanding, and Inspire Conservation of our Blue Planet

The Task Force addressed the connection between SSC’s mission and a new teaching laboratory by imagining that the Lab had its own distinct mission – one or more “whys” that form the purposes of the effort. The group agreed that promoting environmental literacy is a key part in “enhancing understanding” and “inspiring conservation.” The new laboratory will be an essential complement to the Center’s already strong work in qualitative science. The Task Force focused particularly on the importance of developing “critical thinkers”, as this set of skills is essential to any type of science literacy. It is particularly important for environmental literacy, especially because environmental science can be presented taught without addressing and building complementary quantitative skills in learners.

VI. Discussion Guide: The Nine Envisioning Questions

1. What are the potential benefits and impacts of SSC adding laboratory-style teaching facilities for the seacoast community, and to New Hampshire, and beyond?
   
   A. Instilling critical thinking competencies in learners, particularly middle- and high-school students, and college and university students. These competencies include:
      
      a. Developing strong confidence (through learning lab technical skills and cultivating resilience in the face of mistakes or even failures)

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1 We recognize that “critical thinking” has recently become a politicized term. SSC may in future apply different language to describe this specific ability. For the purposes of the Pathways Planning Project, we decided to defer that deliberation to another time.
b. Embracing the importance of systems thinking versus acquiring specific pieces of knowledge

c. Learning by addressing authentic problems in a laboratory setting

d. Applying rigorous scientific criteria and filters to the evaluation of data and evidence

B. Giving people the skills to take more informed actions and make more informed decisions in support of ocean conversation

C. Contributing to public understanding of the interdisciplinary nature of environmental science (biology, archaeology, chemistry, geology, etc.)

D. Partnering with SSC to increase opportunities and accessibility for students who have no practical access to laboratory facilities for environmental science

E. Building the pipeline of students interested in careers in environmental science, especially ocean science

2. Rank the benefits from marginal to transformational (i.e., 1 is marginal, 10 is transformational). The Task Force selected the following as the top transformational benefits, offer the community the opportunity to:

A. Develop critical thinkers in people of all ages and educational backgrounds

B. Strengthen individuals’ ability and confidence in evaluating public science data and information

C. Partner with SSC to increase access to resources for underserved students

D. Broaden the scope of investigational science that SSC visitors can undertake

E. Provide educators and other scientific organizations with opportunities for training and professional development

3. Who will be supportive of SSC’s commitment to increasing environmental literacy through the addition of laboratory-style teaching facilities?

A. The State of New Hampshire’s Learn Everywhere program administrators

B. Current and future participants in SSC’s Marine Fellows program

C. Participants in “community science” programs (4-H, Scouts, etc.)

D. SSC docents, who can deepen their own understanding of environmental systems

E. Employers seeking scientifically literate workers with essential skills in lab science

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2 Traditionally known as “citizen science,” sometimes also called “public science,” “civic science,” “crowd science,” and other terms
F. **Middle- and high-school teachers looking to provide their students with lab investigations tied directly to field observations at SSC**

G. **Young people who have no practical access to a full laboratory experience and those who work to build accessibility (Shoals Marine Lab, etc.)**

H. **Community organizations in general**

I. **Organizations seeking professional development programs for their staff (i.e., GMRI)**

4. How might the development of laboratory-style teaching facilities build deeper relationships for SSC with the community?

A. **Working to increase accessibility through efforts with other institutions (Shoals Marine Lab, local housing authorities, after-school programs**

B. **Making the laboratory quantification available to participants in key SSC programs (BioBlitz!) will significantly affect participants’ learning and understanding of environmental systems**

5. Will the community understand the connection between the benefits of laboratory-style teaching facilities and SSC’s mission?

   *The Task Force believes that SSC will be able to make that connection clear to its constituents and community partners as the benefits of the lab become known.*

6. With increasing environmental literacy through the addition of laboratory-style teaching facilities in mind, identify potential partners and collaborators. How can SSC best leverage the power of those collaborations to the benefit of the community?

A. **See Section 3. above.**

7. What assets does SSC already have relative to increasing environmental literacy through the addition of laboratory-style teaching facilities? What assets will be necessary to acquire?

A. **SSC’s strengths are embedded in its programs, and more importantly, in its staff. The Marine Fellows program, for example, has proven success in launching young people into the study of marine science through laboratory experience. The extent to which SSC can increase the impact of this program, and others, is dependent on a larger and more sophisticated laboratory that can further the development of young peoples’ interest and commitment to marine science. Other assets are SSC’s reputation, and its extraordinarily strong relationships with schools, research centers and other**
conservation organizations. The Center’s contractual arrangements with NH Parks and the University of New Hampshire are critical assets. Staffing the new lab appropriately may mean that SSC needs to recruit staff with more focused skill and experience to ensure that users can work with and learn from experts in an efficient and focused way.

8. How should we measure success?
   A. All the Task Forces recognize that measuring success is difficult, particularly in informal learning venues like nature centers and museums. Efforts to track “alumni,” encourage visitors to share their responses, engage teachers in sharing their students’ progress, and instilling the importance of “measuring” in lab staff, can over time yield useful data.

9. Other critical considerations necessary for the successful implementation of increasing environmental literacy through the addition of laboratory-style teaching facilities at SSC?
   A. SSC will decide to engage outside experts in deciding how to fit out the new laboratory. Equipment, supplies, disposables, safety measures, teaching materials and other requirements will need to be accessible to differently abled students, teachers, staff, and visitors, as well as meeting standards and requirements for credit granting institutions.

   B. The Center’s plans and detailed strategies to make meaningful use of and deliver high impact through this new facility will be a crucial factor for prospective donors.

   C. The Task Force emphasized that supplying sufficient time for each participant to learn and develop science “know-how” in the lab will be a challenge but will remain an important part of SSC’s intention to realize the lab’s full potential for creating change.

   D. The sense of the Task Force was that SSC should give preference to organizations and groups, particularly young people, who have little or no access to a lab facility.
Commitment to Local History and Culture

By Amanda Preston | March 18, 2022 (rev. 6/28/22)
5.e. Commitment to Local History and Culture

I. Introduction

After 30 years of offering hands-on education to thousands of New England residents and visitors from around the world, SSC is poised to expand how we spark curiosity in children and adults, enhance understanding of how we can act locally, and inspire action to protect our planet. Our $15,000,000 campaign will transform our facilities and launch our aspirational vision.

II. Charge to the Task Force

We asked each Task Force to work within its focus to develop a focused vision of high-impact experiences and what community benefits can result from them. The results of each Task Force’s deliberations and recommendations will go to the Steering Committee, which will integrate them to form the foundation for full operational planning. That planning will take place 2022-2024 so we are fully ready when the reimagined Center opens to the public. The Report serves another critical purpose in building confidence and enthusiasm within the community throughout the campaign.

III. Acknowledgements

Seacoast Science Center acknowledges its debt to the members of this Task Force, who devoted many hours to developing their insightful recommendations:

| Nikki Annelli | Kathryn Jerome | Karen Provazza |
| KK Brown      | Kate Leavitt   | Larry Raff     |
| Jim Chase     | Wendy Lull     | J. Dennis Robinson |
| Richard Dumore| Gregory Lynch  | Linda Sanborn  |
| Brian Fitzgerald| Denise Pouliot | Allan Waterfield |
| Alex Herlihy  | Paul Pouliot   |               |
IV. A Commitment to Local History and Culture

The Center's campaign feasibility study describes this campaign objective as below:

*We will rededicate the historic Sugden House as a cornerstone exhibit space for the interpretation of NH Seacoast culture and history. Through exhibits, innovative programs, and creative partnerships with other historically focused organizations, we will advance an Odiorne-based perspective on human-use at this remarkable oceanside location over time, pausing in the present and inviting visitors to consider the future.*

V. Relevance to SSC’s Mission: To Spark Curiosity, Enhance Understanding, and Inspire Conservation of Our Blue Planet

Our strategy for connecting SSC’s renewed commitment to local history and culture was to imagine that CLHC had its own distinct mission – a set of “whys” that form the purposes of the effort. After much discussion, we agreed that relevance to SSC’s mission lies in telling stories through the lens of the complicated relationship between humans and the ocean on the NH seacoast. The lessons of these stories can change perspectives and encourage choices that residents and visitors can make in support of ocean conservation.

VI. Discussion Guide: The Nine Envisioning Questions

1. What are the potential benefits and impacts to the seacoast community, to New Hampshire, and beyond, of rededicating the historic Sugden House as a cornerstone exhibit space for the interpretation of NH Seacoast culture and history?

*We strongly recommend that the local history and culture stories are “told” and interpreted in an interactive “adventure.” We propose that Sugden House can be developed to host a wide range of small exhibits, informal talks, meetings, and shows that support the stories on human use and human impact over time. We recommend minimizing the traditional museum reliance on objects, labelling, and*
written narratives in favor of less passive interpretation. We envision an interdependent set of virtual “doors” that will unleash engaging ways to tell the fascinating and instructive stories of the site, the region and the ocean that has shaped them. Small physical exhibits and displays will tie into these virtual journeys.

2. Rank the benefits from marginal to transformational (i.e., 1 is marginal, 10 is transformational).

We name here the benefits/outcomes that this refreshed focus on local history and culture at SSC will engender. We hope that Seacoast area residents and visitors will:

A. Connect the disciplines of history and science through the inter-related experiences at SSC
B. Be well informed about the inextricable relationships among humans, non-human species, and the ocean over thousands of years
C. Embrace their custodial responsibility for the conservation, health, and balance of the ocean, including its shoreline, regional waterways, and the lands beyond
D. Explore and incorporate the influences and beliefs of Indigenous people in the area’s past, present, and future, and be influenced by their inherent values in their own choices
E. Feel the emotional pull of the stories of population, cultural, and technological developments that shaped the site and the local region
F. Absorb and embrace the principle of sustainable decisions to benefit future generations
G. Grow in understanding and be part of the “ripple effect” of human choices in the environment and use this understanding to educate and motivate others
H. Connect to a cause that is bigger than one’s self
I. Support the preservation efforts made possible by SSC’s collaborations with local organizations and individuals
3. Who will be supportive of SSC’s rededicating the historic Sugden House as a cornerstone exhibit space for the interpretation of NH Seacoast culture and history?

_We expect that there will be broad support for this use for Sugden House. We expect particular interest in our intention to honor the place, history, and values of Indigenous people at Odiorne Point and its environs. We will also cultivate relationships with community organizations eager to share their interpretations of local history and culture with a broader public._

4. How might the rededication of the historic Sugden House as a cornerstone exhibit space for the interpretation of NH Seacoast culture and history build deeper relationships for SSC with the community?

_We expect that our re-focused LHC experiences will reach deeply into the surrounding communities and lead to wide use of Sugden House for meetings, debates, community forums, and unique events with a history and culture focus. SSC will invite community organizations to organize temporary relevant displays and shows in the space._

5. Will the community understand the connection between SSC’s mission and the benefits of rededicating the historic Sugden House as a cornerstone exhibit space for the interpretation of NH Seacoast culture and history?

_Yes. The Center’s “home” at Odiorne Point is an accepted jumping off point for interpretation of local culture and history. Our focus on the relationship of human use and the ocean will make this clear._

6. With the rededication the historic Sugden House as a cornerstone exhibit space for the interpretation of NH Seacoast culture and history in mind, identify potential partners and collaborators. How can SSC best leverage the power of those collaborations and partnerships to the benefit of the community?

_We identified organizations and individuals who would be effective partners in this effort, such as Great Bay National Estuarine Research Reserve, NH Parks, the Gundalow, Portsmouth Shipyard, New Castle, Rye and other historical societies,_
the Rye Heritage Commission, the NH Archeological Society, NH Coastal Adaptation Workgroup, Cameron Wake, Jeffrey Bolster, and others. Indigenous peoples will be essential partners, playing key roles in the development of conceptual frameworks and exhibit content. The Indigenous New Hampshire Collaborative Collective, and regional and statewide Indigenous artists, scholars, writers, naturalists, and others will be invited to help shape the work that SSC will undertake.

7. What assets does SSC already have relative to interpreting the local history and culture? What assets will be necessary to acquire?

One chief asset is Sugden House itself, a historic building well known by locals and an anchor of community engagement at SSC. The Park surrounding SSC is another critical asset, offering he opportunity for exhibits and experiences throughout the park. SSC is not a history organization; its exhibit expertise is in science. The Center has good relationships within the larger community, and it will need to extend them more into the history and culture realm. The stories of the life and culture of the Indigenous peoples will need telling by experts, who have accepted the invitation to take part in this process and goal. Similarly, we included two local historians in our Task Force, and two members of the Indigenous New Hampshire Collaborative Collective; their ongoing commitment will be especially important. The Center will need to engage expertise in exhibits through a consultant. Another need is to acquire the talent to produce 1) the content and story arcs and 2) the database engine that will enable the virtual “rooms.”

8. How should we measure success regarding rededication of the historic Sugden House as a cornerstone exhibit space for the interpretation of NH Seacoast culture and history?

It will be difficult to figure out the success of the LHC effort. We recognize the serious challenges in measuring attitudinal and behavioral changes, satisfaction, and perceived relevance. Metrics based on observable and readily collectible
indicators about mission impact can eventually probe the deeper and broader impact of SSC in its varied communities and constituent groups. In the interim, we expect to see visitor interest in Sugden House exhibits increase and more demand for related programs. Our network of partners will grow and with it the representatives of more diverse groups with historical and cultural contributions to offer.

9. Other critical considerations necessary for the successful rededication of the historic Sugden House as a cornerstone exhibit space for the interpretation of NH Seacoast culture and history?

A. The volume of historical, scientific, and cultural data needed for the recommended virtual experience is enormous. A rigorous system for creating the content and format for a massive, relational database will likely take a few years to develop, test, refine, and release. The relational database will also need to incorporate into the first design and development the features that will preserve its integrity as future technologies roll out. The use of QR codes should be at the top of the list of current technologies.

B. SSC will need to engage and keep onboard a wide range of local experts (both individuals and organizations like historical societies), as well as Indigenous experts, to aid in creating and shepherding the Center’s new face and programs. We are interested and hope we can remain engaged in the next phases.

C. The desire and need for the collaboration and input of NH Parks cannot be understated.

D. We discussed (when considering metrics) that an effort could be made to track the people who came to us as youngsters. This idea of an “alumni” group is attractive and should probably be applied to all of SSC programs if and when it is adopted.

E. At the end of each visitor’s encounter, SSC will invite them to take specific actions for conservation. Because SSC has not been strongly assertive in encouraging specific – possibly controversial – conservation actions, people
may be uncomfortable with some content. SSC will need to articulate its positions and how they are based on its organizational values.
5.f. Nature-Based Early Learning

I. Introduction

After 30 years of offering hands-on education to thousands of New England residents and visitors from around the world, SSC is poised to expand how we spark curiosity in children and adults, enhance understanding of how we can act locally, and inspire action to protect our planet. Our $15,000,000 campaign will transform our facilities and launch our aspirational vision.

II. Charge to the Task Force

SSC asked each Task Force to work within its focus to develop a focused vision of high-impact experiences and what community benefits can result from them. The results of each Task Force’s deliberations and recommendations will go to the Steering Committee, which will integrate them to form the foundation for full operational planning. That planning will take place from 2022 to 2024 so that we are fully ready when the reimagined Center opens to the public. The Report serves another critical purpose in building confidence and enthusiasm in conversations with the community throughout the campaign.

III. Acknowledgments

Seacoast Science Center acknowledges its debt to the members of this Task Force, who devoted great thought and focus and energy to developing their insightful recommendations:

Laura Bahl  
Danielle Bastian  
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Karen Provazza  
Larry Raff  

Allan Waterfield  
Mark Wiley  
Yvonne Zinicola
IV. Nature-Based Early Learning

The Center describes this campaign objective as below:

We will build a dedicated indoor space designed for the needs of younger children. Programs will leverage the natural setting of Odiorne Point State Park as an outdoor classroom for early learner education. We will use this opportunity for capital construction to create space to accommodate age-appropriate teaching spaces, aquariums, terrariums, technology, and restrooms.

NB: Discussions with donors and advisors during the campaign feasibility study identified enthusiasm the development of a formal learning program for children (aged 3-6), which the Task Force discussed early on. The Task Force, therefore, spent much of its time discussing a formal program for preschoolers, kindergarteners, or a type of hybrid program for both. Conversations approached the prospect of a formal school program as an entirely new business model for SSC, leading to key changes in management, advisory groups, staffing and regulatory requirements. Accommodating working parents, or differently abled participants will require study and examination of choices yet unknown. The current thinking of the Task Force is that the ramifications of a formal pre-school or kindergarten program are extensive, and not always well-understood. SSC needs to do additional research and build a plan that takes key factors into consideration before such a program is approved. The Task Force is unequivocally supportive of full investment (capital and program) in a broad and balanced program of nature-based early learning that includes the build out of age-appropriate learning spaces in the redesign of the facility. Having these spaces can allow for a formal program, and still accommodate informal programs with and for young children.
V. Relevance to SSC’s Mission: To Spark Curiosity, Enhance Understanding, and Inspire Conservation of Our Blue Planet

All Task Force members strongly asserted that nature-based early learning, whether in a formal school setting or an informal venue (as is the case now at SSC) is entirely consistent with SSC’s mission. The cultivation of lifelong interest and advocacy for conservation, particularly ocean and seacoast conservation, may be SSC’s most valuable mission-impact in the long term.

VI. Discussion Guide: The Nine Envisioning Questions

1. What are the potential benefits and impacts of SSC developing an Early Learner Program with dedicated, age-appropriate facilities for the seacoast community, and to New Hampshire, and beyond?
   A. The Task Force finds that nature-based learning for young children can provide the foundation for a lifelong love of nature, understanding of the interdependence of living systems, and for action to promote environmental health and conservation. Children’s learning can, and often is, a catalyst for their parents and families to learn, to share nature-based experiences, and to express their perspectives and enthusiasm to others in their spheres of influence. This is another concrete example of the “ripple effect.”
   B. Seacoast Science Center is committed in all areas to working collaboratively both internally and with external partners. It would be, therefore, an ideal venue for collaborations with learning researchers to study how young children learn in a nature-based setting. SSC’s early learner programs may also prove appropriate for longitudinal studies that might have an important impact on existing challenges in metrics and evaluation.
   C. A formal school program can benefit families who seek high-quality preschool programs within a 30-minute drive to SSC. Were the Center to devise programs, such as double-sessions (essential for working parents, that use its dedicated space flexibly throughout the day, an estimated seventy-five families might be accommodated during the school week. A further benefit is
that both formal and informal early learner programs at SSC include a
dedicated parent program, which helps parents learn how they can teach children in a family setting (at home or in outside recreational activities.)

D. Through its relationship with UNH and other colleges, SSC could offer education students internships that would satisfy graduation requirements and provide students with unique nature-based early learner insights.

2. Rank the benefits from marginal to transformational (i.e., 1 is marginal, 10 is transformational)
   A. The Task Force presumes that all SSC programs for young children, including any prospective formal school programs, are highly likely to have transformational impacts. This view is informed by the public’s positive view of SSC’s teaching, its commitment to personal interactions with children and adults, and its work in ocean conservation.

3. Who will be supportive of SSC’s commitment to Early Learner development and education?
   A. Parents, teachers, and many community organizations will see an expanded commitment to early learners as a positive and dynamic opportunity to become involved with, or more involved with, SSC.
   B. SSC’s education collaborators are likely to welcome an expansion of early learner efforts, through which they can provide training to students and teachers.

4. How might the development of a bolstered Early Learner Program build deeper relationships for SSC with the community?
   A. See #3, and #6

5. Will the community understand the connection between the benefits of an Early Learner Program and SSC’s mission?
   The Task Force is convinced that the community will have no difficulty connecting an early learner program to SSC’s mission.
6. With a formalized Early Learner Program in mind, identify potential partners and collaborators. How can SSC best leverage the power of those collaborations to the benefit of the community?

The Task Force has identified potential partners and collaborators with whom SSC can be a hub for community benefit:

UNH Child Study Development Center, Shelburne Farms’ Sustainable Schools Project, Blue Heron School-Squam Lake, Great Bay Community College, Eastern Region Association of Forest and Nature Schools, Natural Start Association, North American Association for Environmental Education (NAAEE), National Science Teachers Association, NH Science Teachers Association, NH Extension (4H and Professional Development and Training), New Hampshire Environmental Educators (NHEE), Audubon, Center for Wildlife, Gundalow, Blue Ocean Society, STEM Docents, UNH Department of Education, NH Library Association, SNHU, NH Department of Education Libraries, and more to be determined.

7. What assets does SSC already have relative to the development of a formal Early Learner Program? What assets will be necessary to acquire?

A. A capital expansion program that can provide up to 2,500 square feet for early learner programs

B. Experience and success in early learner programming for children and families

C. Strong relationships with varied organizations in the educational field, particularly in nature-based and marine education

D. A brand identity based on small group and one-on-one interactions

E. It will be necessary to become familiar with NH state requirements and nature-bases early learning school business models.

8. How should we measure success?

Each of the Task Forces has recognized the inherent difficulty with measuring success. SSC will be looking at how children absorb concepts and materials, and how their families can connect with the nature-based curriculum. Longitudinal
studies may be possible in the future. Other measures of success will be how the formal education community welcomes SSC as a partner, and the depth and effectiveness of our partnerships.

9. Other critical considerations necessary for the successful implementation of an early learner program with dedicated, age-appropriate facilities at SSC?
   A. SSC will need to work with NH Parks on outdoor play area and drop-off/pick-up issues.
   B. The Task Force prefers a slow and phased approach to a formal early learner program, including recruiting a director of early learning to coordinate and secure resources for early learning programs (informal and formal). SSC should look for someone with direct experience, and whose values are consistent with the Center’s values. Reevaluation and retooling will be important going forward.
   C. The Task Force notes that teachers and staff for a formal early learner program should embody the SSC’s particular educational values and style. It is important to note that the contract between SSC and the State precludes sub-letting (and thus subcontracting) with an external provider of preschool programming.
   D. The recent market viability study indicated that there is likely to be a high demand for a formal preschool at SSC. The Task Force noted the importance of the application procedure that SSC puts in place to determine admission criteria.
   E. Decisions about accessibility, equity and diversity will be important considerations, including specific requirements for differently abled children.
   F. A formal preschool will need an advisory group to address unique requirements that will not apply across the board at SSC.
   G. Task members expressed concern about a potential competition between SSC’s preschool program(s) and others in the community. Particular care should be taken to ensure that SSC remains a resource for others and that
its programs complement learning options in the seacoast area.
H. A comprehensive early learner program will benefit from the advice and counsel of those who have direct experience managing similar programs.

I. A program that is outside most of the day might be appropriate.

J. SSC will want to consider the impact of a preschool on the SSC brand. Concerns about community perceptions of SSC include being more identified with young children than with the range of ages that the Center now serves. Because of campaign recognition opportunities, names of programs will become more important, and a preschool could overshadow other aspects. SSC will need to manage its public perception purposefully to preclude “accidental” misperceptions.

K. It will be important to set and manage appropriate internal and external expectations when considering a formal preschool program.

L. The Task Force has indicated that its role might extend through at least part of the next planning phase to assist in evaluating opportunities, asking good questions, and assisting in other ways.
6. FACILITATORS’S OBSERVATIONS FROM TASK FORCE MEETINGS

Throughout the several months of Task Force meetings, I was privileged to share in the exuberance, intelligence, and determination of the Pathways participants. Over time, across all six Task Forces, a clear consensus developed around the following ideas and values. Each Task Force:

1. Emphasized the centrality of the “ripple effect” in SSC’s work, and stated that it is a universal metaphor for change.
2. Emphasized that there is an undeniable urgency to be strong, steadfast, and courageous in urging and influencing every visitor, every website viewer, every community group, every school child, every parent, every funder, every stakeholder to choose action for conservation now.
3. Expressed the necessity for SSC to be an undisputed and valued “authority” in the field of ocean and seacoast conservation.
4. Unequivocally supported SSC’s founding values, which it continues to uphold:
   a) The site is itself a central “personality” in the work of informing and influencing people.
   b) SSC’s size and personalization drive excellence in informing and influencing individuals.
   c) Individuals’ experiences at SSC are meant to have impacts that are intellectual and emotional - and that the development of “critical thinking skills” AND empathy are partners in the individual’s becoming conservation-minded in a wide range of decisions.
   d) All SSC guidelines, curriculum, suggestions to visitors, conversations with stakeholders, and internal decision-making must be based on the best science and scientific practices as defined by marine science experts.
   e) SSC has an obligation and an opportunity to guide young people into thoughtful consideration of marine science as a choice for education and employment.
   f) The past is the present and the future: learning from other cultures and historical times tells us important and actionable information.
   g) To the extent possible, SSC programs and opportunities must be welcoming and accessible.
   h) The fact that the SSC facility will double in size and lead to large increased in visitor counts must not distract the Center from pursuing its mission-critical programs and activities.
   i) Partnerships with a wide range of stakeholders will be crucial in SSC’s achieving its objectives and creating maximum impact within its constituencies.