

# COASTAL ECOSYSTEM LEARNING CENTER NETWORK

Educators Workshop – Shaping the Future



February 17-18, 2016  
Aquarium of the Pacific, Long Beach, CA

Summary Report

# EXECUTIVE SUMMARY

---

The Coastal Ecosystem Learning Center (CELC) network has a rich, 20-year history of collaboration among members across the U.S., Canada and Mexico. From art contests and youth summits to fruitful partnerships and multi-institution projects, the past two decades form a solid foundation from which to build the future of the CELC.

A major component in creating a pathway forward towards a common goal with measurable results is the commitment and follow-up of the leadership team. From the beginning, the team at NOAA and key leaders in the CELC network were committed to engaging all stakeholders in the process. They knew it was essential to bring everyone together, face-to-face, for facilitated discussions directed towards making decisions for the future of the network.

In February, 2016, the Aquarium of the Pacific hosted the Education leaders of member institutions for a two-day, results-oriented workshop. Prior to the in-person meeting, I held one-on-one conversations with selected Education leaders, Executive Directors, external stakeholders, and solicited input from all of the member institutions. These conversations formed the basis for the meeting along with the strategic plan put together by five Education leaders with input from the entire group. The goals of the two-day workshop included better understanding each institution's unique strengths and contributions to the network, putting the 'meat on the bones' of the CELC strategic plan, identifying action steps for the network in the near future, and ultimately determining the unique niche and influence of the network.

The participants at the workshop were engaged and committed to making collaborative decisions. I found them to be lively, spirited and very passionate about their work as educators. They worked hard over our two days together and used 'thoughtful decisiveness' to help the network move forward.

The key is now in the follow-up from this successful workshop. Members are energized through deepening both personal relationships and better understanding of what each member brings to the table. Concrete, actionable items were identified and teams created to further the momentum and accountability. I believe the CELC is revved up, ready to move forward as a viable, engaged network with a unique niche and common goals. I enjoyed working with the CELC and look forward to providing accountability and support in the future.



# AGENDA

---

## Tuesday, February 16

6:30 pm Kick-off reception and welcome

### DAY 1: Influence and Strategy

8:30 am Morning social time

9:00 am Icebreaker

9:30 am Welcome (Jerry Schubel)

9:40 am NOAA Strategic Plan + the role of the CELC (Christos and Jon)

10:00 am Influence – why is the CELC important? What can we influence together?

10:30 am Feedback from CELC Education members, stakeholders and beyond

10:45 am Break

11:00 am Member strengths and unique contributions to CELC (breakout groups)

12:00 pm Lunch

12:45 pm Teambuilding activity

1:00 pm SWOT analysis

1:45 pm CELC Strategic Plan (Dave, Jonathan, Sam, Lisa and John)

2:15 pm Break

2:30 pm CELC Strategic Plan breakout groups

3:45 pm Measures of success and potential action initiatives

4:30 pm Reflections and wrap-up

5:00 pm Adjourn

6:30 pm Dinner

## **DAY 2: Action and Implementation**

8:30 am	Morning social time
9:00 am	Day 2 Kick-off (Christos and Jon)
9:30 am	Icebreaker
10:00 am	Action initiatives
10:45 am	Break
11:00 am	Action initiatives
12:00 pm	Lunch
12:45 pm	Teambuilding activity
1:15 pm	Implementation steps
2:30 pm	Break
2:45 pm	Implementation steps
3:30 pm	Reflections
4:00 pm	Meeting wrap-up (Christos and Jon)
4:30 pm	Adjourn and closing social time



## WHY IS CELC IMPORTANT?

---

- Power in numbers
- Range
- Federal partner
- Many strengths
- Sharing across silos
- People
- Best practices
- Share common vision
- Opportunity to connect learners
- Varied experience members bring to the table
- Opportunity to learn from each other
- Urgency of ocean health issues
- Targeted audience
- Maximize resources
- Creates a niche for aquariums to work together
- Unified messaging
- Workforce development
- Common voice
- Way to reach the public
- Source of support

## WHAT CAN WE INFLUENCE TOGETHER?

---

- Unified message
- Priorities
- Grant programs
- Unified action
- Diversified action
- Impact assessment
- Attitudes about the ocean
- Professional development
- Each other
- Next generation of environmental leaders
- Public perception of aquarium work
- Public perception of NOAA
- Helping general public understand science
- Which theories guide our work
- Our approach / practice
- Policy
  - Internal (organization)
  - Community
  - Federal

## WHAT CAN WE DO TOGETHER?

---

- Support each other
- Collaborate
- Learn
- Educate
- Pool resources
- Seek funding
- Review programs to reflect together
- Literature club / review
- Design experiments
- Unified message
- Engage research community to collaborate / provide a test bed
- Develop a community of practice
- Promote each other
- Develop tomorrow's ocean leaders
- Connect our learners
- Connect our educators
- Citizen science projects

- Evaluate our collective impact
  - Create best practice and resources manual
  - Clarify what we're best suited to do
    - Educators
    - Organizations
    - CELC
    - NOAA
  - Identify complementary strengths of partners we can collaborate with
  - Collaborative social media campaigns
  - Leverage strengths to NOAA/CELC and maximize that
  - Audit what we collectively offer
  - Enhance what we collectively offer
  - Fill in the gaps
  - Influence policy
  - Interpret
  - Develop programs
- Develop materials
  - Training opportunities
  - Change behavior
    - Audiences
    - Ourselves
  - Offer accessible programs
  - Develop skills
  - Influence perception of aquariums and science research
  - Build clarity about what's in our control
    - Educators
    - Organizations
    - CELC
  - Share our expertise
  - Meet annually
  - Awareness campaigns
  - Action campaigns



# MEMBER STRENGTHS AND UNIQUE CONTRIBUTIONS TO CELC

---

## CONTENT

- Leverage existing efforts
- What will be our impact and how can we accomplish this at individual institutions
- Empowerment as a focus
- Creating accessibility to our content/research
- There should be an 'end goal' to content
- Research content within organizations
- Honest broker of issues facing local communities; advocates for causes
- Relying on each other for species and habitat specific messaging related to our organizational areas of expertise
- Internal capacity building in CELC institutions
- ID flagship projects for each CELC

## AUDIENCES

- Number of people reached
- Diversity of audiences – train other CELC members; knowledge; strategic planning
  - Underserved
  - Special needs
  - All ages
  - Social media
- Canadian and Mexican perspectives
- Teen programming
  - Underserved
  - Youth Summit
- Leverage potential of teens/youth
  - Marine-related careers
  - Future leaders
  - Putting plans into action
- Expertise and experience to develop a coordinated youth program
- Bookend action/conservation plans
- Consistent messages to audiences (we want to be the ones influencing)
- We see success in human to human interactions
  - Best strategies
  - Which topics
  - Share expertise through listserve (niche)
  - Collectively move forward with same target
  - Go for bigger grants
- Target audiences
  - Millennials
- We need to share expertise with others to help fill gaps
- Use collective knowledge to look forward to best serve

- Use resources to best serve
- Make connections for audiences
- How do we adapt to cultural differences?

## EXPERIENCE

- Cruise ship – international reach
  - Field experience connected to local watersheds, Gulf, Atlantic, Pacific
- Experiential based outdoor programming
- Family experiences – how are other facilities doing it?
- Authentic experiences
  - Knowledge and best practices and audiences engaged in the field
- Digital experiences
  - Capacity; multimedia

## ORGANIZATIONAL FOCUS

- Direct link to global conservation issues
- Multiplier effect – pooling our connections
- University connections – research/conservation/education
- Help broker information – we are not the government
- Honest interpretation of information
- Regional connections (i.e. Pacific, Midwest)
- Common theme – local messaging
- Local connections to the ocean
- Campaigns – umbrella issues
- Regional expertise
- Location
- Field experience
  - Research and programming

## MINDSET

- Credibility
- Research – social / cognitive
- Key programs / principles to max ROI
- Overall messaging / similar language
  - Ocean literacy – focus on this so new opportunities are accepted
- Build our use of social science to guide education efforts
- We can teach about strategic framing
- This is not easy...so, we need to support each other



# SWOT ANALYSIS

STRENGTHS (Internal)	WEAKNESSES (Internal)
<p>NOAA leadership  NOAA data  Connection to a Federal agency  Multi-institution support  NOAA Office of Education is supporting the network  Connect like-minded people and agencies  Cooperation  Together we can have and can access a wide variety of technical expertise and knowledge  Dedicated network of like minded people  Collective expertise  Lots of expertise  Lots of expertise and connections  Large knowledge base, lots of experience  Inter-institutional commitment  Large group of experts  Collective group of institutions – ton of knowledge and skill  Leadership experience – individuals; institutions  Varied expertise to rely on (no more re-inventing the wheel)  Not re-inventing the wheel  Awesomeness – people, place, program  Powerful organizations both locally, regionally, and some nationally  Passionate members  Action driven  All want to protect ecosystems  Strong desire for protecting coastal ecosystems (a strong orientation toward ‘true north’)  Common focus on ocean/water health  Communication  Geographic scope  Represent diverse organizations (size, location, nonprofit, government)  Collective reach  Reach a lot of people  Huge network  Collectively we have a large audience  Power in numbers  Huge reach (audiences and numbers)  Reach lots of people  Connections to local communities  Great resources (people, skills, info)  Raise awareness among a large number of people over a large geographical area</p>	<p>Lack of knowledge about who/what CELC is  No clear path or direction  We lack focus and a purpose (unclear)  Lack of focus  Lack of method/organization for collaborative work/sharing  Undefined role  Clear definition of CELC  No clear vision/ goal  Another group with goals/initiatives = more new work  We have not yet anchored a singular guiding goal or objective to guide all of our collaborative efforts  CELC aims and objective clear and unambiguous  Lack of agreement on direction/activities  It’s a NOAA program but not a true network  Individual organization’s goals vs. group/network goals = competing priorities  Competing agendas with existing programs at institutions  If we don’t find a niche that’s different from other networks we will still have same issues  Everyone is busy with multiple competing interests/projects/responsibilities  There are other organizations accomplishing similar things  Organizations doing similar things  Unclear how CELC benefits my institution  Communication between CELC members  Lack of time (dedication to CELC)  Lack of resources  Lack of funding  Limitations – financial; state vs. private  No dedicated funding  Lack of funding  Not as well funded as in the past  Lack of money  Goals are not shared or funded directly  Lots of busy people  Geographically separated members</p>

OPPORTUNITIES (External)	THREATS (External)
<p>We could reach a lot of people in a short time with simple projects</p> <p>Strength from partners (Federal)</p> <p>More dissemination of NOAA science</p> <p>Higher profile and branding</p> <p>Increase the footprint of our impact</p> <p>Ability to measure impact of collaborative programming</p> <p>Many people and organizations share interest in habitat protection</p> <p>Support and draw on strengths of other networks</p> <p>Help overcome institutional challenges/hurdles</p> <p>U.N. goals to create Marine Protected Areas in 20% of world's ocean by (year?) (30% by 2030?)</p> <p>Continue to build a strong network for action and change</p> <p>Create a strong, useful network</p> <p>Better communication collaboration between organizations</p> <p>Networking with awesome facilities</p> <p>Share resources</p> <p>Leverage work done (don't redo the wheel)</p> <p>Save time and money</p> <p>Internal professional development</p> <p>Professional development</p> <p>Change public policy and perception</p> <p>Drive (some) research agendas</p> <p>Credibility among our audiences</p> <p>Collective reach</p> <p>Influence others with our collective knowledge and impact</p> <p>Chance for a unified, collective message rather than many varied, individual voices</p> <p>Sharing the reach of messaging through collaborativity</p> <p>Joint messaging</p> <p>Unified messages/themes</p> <p>Improve ocean literacy</p> <p>Certification / honest broker recognition</p> <p>Perceived neutrality</p> <p>Lowering or eliminating barriers through sharing resources (stuff)</p> <p>Lowering or eliminating barriers through share capacities (brains)</p> <p>Funding increased</p> <p>Grant funding</p> <p>Collaborative grants</p> <p>Applying for money</p> <p>Funding opportunity</p> <p>Funding grants</p> <p>Next administration</p> <p>New government administration</p>	<p>Institutional priorities</p> <p>Institutional vs. individual commitment</p> <p>Competition for interest with other groups (why invest here)</p> <p>Other like committees (similar work)</p> <p>In a time limited position, what makes this network 'better' / more worthwhile of the organizations time than other networks</p> <p>Role with regards to other networks – is CELC needed</p> <p>Network redundancy</p> <p>Loss of interest in CELC</p> <p>Lack of progress from non-action</p> <p>Inertia both external and internal</p> <p>Time – figuring out what 'it is' we tackle</p> <p>Too many things</p> <p>So many priorities from other organizations take up time</p> <p>Limited time and money to put towards another organization that accomplishes similar things</p> <p>Time – will a new initiative put a strain on existing work</p> <p>Lack of assessment of 'signature' programs</p> <p>Climate/environmental fatigue</p> <p>Shift in government support</p> <p>Non-support from public</p> <p>Not enough legislative support (potentially)</p> <p>Government policy (i.e. 'can't talk about climate change')</p> <p>Politics</p> <p>Funding</p> <p>Funding availability</p> <p>Funding priorities</p> <p>Financial support</p> <p>Lack of financial support</p> <p>Economy decreasing = decreases in funding</p>

# CELC STRATEGIC PLAN – POSSIBLE IDEAS

*Key question – what could the CELC do together that would support a strategic plan objective and the outcome would be amplified by doing it together, as a network? (1 + 1 = 3 concept)*

<b>1. Improve ocean and climate literacy among our audience.</b>		
<i>Top 8 ideas</i>	<i>Top 5 ideas</i>	<i>Top 3 ideas</i>
<ul style="list-style-type: none"> <li>▪ Work study teen program / teen learning lab</li> <li>▪ Public events at aquariums</li> <li>▪ Alignment with NGSS</li> <li>▪ Online community for volunteers</li> <li>▪ Teachers workshops (scientists + NOAA + teachers) and online/digital resources for teacher workshops</li> <li>▪ STEM career conference for students</li> <li>▪ Live Blue Ambassadors (high school field programs)</li> <li>▪ Leadership development for high school students</li> </ul>	<ul style="list-style-type: none"> <li>▪ Public events at aquariums</li> <li>▪ Online community for volunteers</li> <li>▪ Teachers workshops (scientists + NOAA + teachers) and online/digital resources for teacher workshops</li> <li>▪ STEM career conference for students</li> <li>▪ Leadership development for high school students</li> </ul>	<ul style="list-style-type: none"> <li>▪ Public events at aquariums</li> <li>▪ Online community for volunteers and scientists + NOAA + teachers</li> <li>▪ Teens</li> </ul>
<b>2. Increase participation in coastal and ocean conservation and stewardship activities.</b>		
<i>Top 8 ideas</i>	<i>Top 5 ideas</i>	<i>Top 3 ideas</i>
<ul style="list-style-type: none"> <li>▪ Citizen science</li> <li>▪ Youth Ocean Conservation Summit</li> <li>▪ Teen field programs</li> <li>▪ Adult field programs</li> <li>▪ Distance learning (social media)</li> <li>▪ Beach clean-ups</li> <li>▪ Field conservation programs</li> <li>▪ Teen volunteer / community service projects</li> </ul>	<ul style="list-style-type: none"> <li>▪ Citizen science</li> <li>▪ Youth Ocean Conservation Summit</li> <li>▪ Distance learning (social media)</li> <li>▪ Beach clean-ups</li> <li>▪ Field conservation programs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Citizen science</li> <li>▪ Distance learning (social media)</li> <li>▪ Field conservation programs</li> </ul>
<p><i>Top idea: Collective conservation field activity leveraging citizen science amplified by social media</i></p>		

**3. Foster our audience’s relationship with the coastal environment to increase community resilience.**

<i>Top 8 ideas</i>	<i>Top 5 ideas</i>	<i>Top 3 ideas</i>
<i>(This group narrowed their ideas initially down to the top 5)</i>	<ul style="list-style-type: none"> <li>▪ “Field” programs</li> <li>▪ Youth conference</li> <li>▪ Stakeholder meetings</li> <li>▪ Exhibits</li> <li>▪ Resources from NOAA</li> </ul>	<ul style="list-style-type: none"> <li>▪ “Field” programs</li> <li>▪ Youth conference</li> <li>▪ Stakeholder meetings</li> </ul>

**4. Establish and support a CELC community of practice with emphasis on cross-institution communication, coordination, and professional development.**

<i>Top 8 ideas</i>	<i>Top 5 ideas</i>	<i>Top 3 ideas</i>
<ul style="list-style-type: none"> <li>▪ Impact studies / impact assessment protocol shared</li> <li>▪ Climate change community outreach initiative</li> <li>▪ List of mission outcomes tested with visitors</li> <li>▪ CELC members coming together for an annual (virtual?) training</li> <li>▪ Share research and evaluation protocols</li> <li>▪ Collaboration in teen / staff training</li> <li>▪ Digital content shared</li> <li>▪ Social learning theories shared</li> </ul>	<ul style="list-style-type: none"> <li>▪ Impact studies / impact assessment protocol shared</li> <li>▪ CELC members coming together for an annual (virtual?) training</li> <li>▪ Share research and evaluation protocols</li> <li>▪ Collaboration in teen / staff training</li> <li>▪ Social learning theories shared</li> </ul>	<ul style="list-style-type: none"> <li>▪ Impact studies / impact assessment protocol shared</li> <li>▪ CELC members coming together for an annual (virtual?) training</li> <li>▪ Social learning theories shared</li> </ul>



# CELC STRATEGIC PLAN – PREFERRED ACTIONS

---

*Implementation timeframes*

*Phase 1: 2016-17*

*Phase 2: 2018-2020*

*Phase 3: 2020+*

## **1: Ocean and climate literacy**

- Public events at aquariums (Phase 1)
- Teens (Phase 1)
- Online community for volunteers/teachers; sharing resources (hold)

## **2: Participation in conservation and stewardship**

- Distance learning/social media (Phase 1)
- Citizen science (Phase 2)
- Field conservation programs (activity)

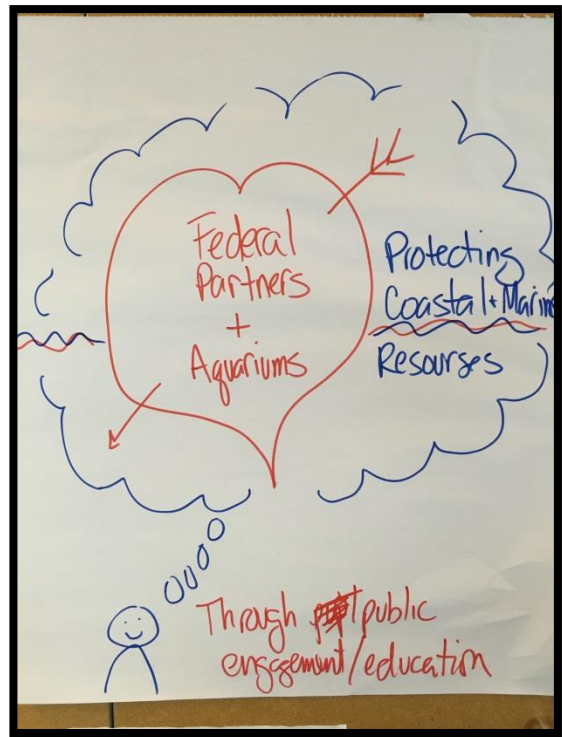
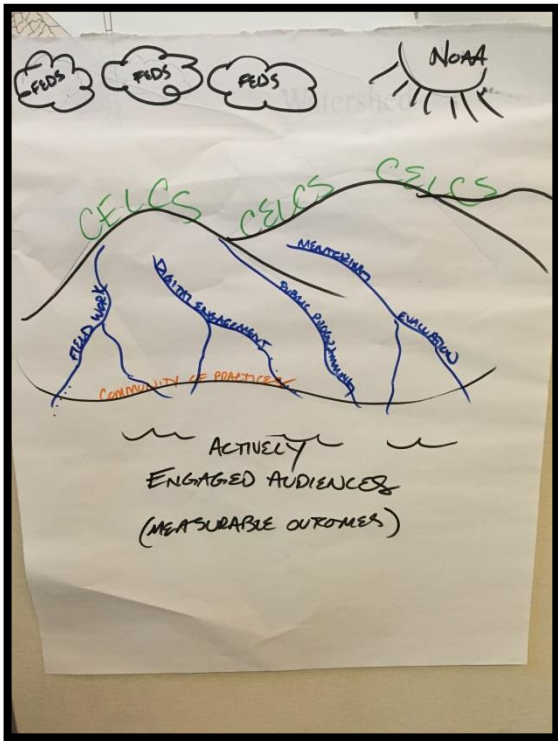
## **3: Community resilience**

- Youth conference (Phase 1)
- Stakeholder meetings (Phase 1 – passive)
- ‘Field’ programs (Phase 2 – action)

## **4: Community of practice**

- Members coming together (Phase 1)
- Social learning theories / resources shared (Phase 1)
- Impact studies (Phase 1 – share existing studies; Phase 3 – do our own)

## CELC Is: (IDENTITY)



- Partnership between NOAA / Federal and Aquariums / Labs / Centers
- Focused on coastal and marine resources
- Building community engagement and action for awareness, protection and stewardship

## CELC (WORKING) GUIDING PRINCIPLES

- 1 + 1 = 3
- Continually work to improve (standard of practice)

# MEASURES OF SUCCESS OF THE NETWORK

---

- ✓ All here, talking, common understanding of the value of the network
- ✓ Branding/activities
- ✓ Funding
- ✓ Something to show the CEOs / Administration
- ✓ More than half the members participate in the activities
- ✓ Invite people to action (as a community) on a regular basis; community resilience
- ✓ CEOs sign off on CELC strategic plan

## WORKING GROUPS

---

### Public Events

- Kelly Matis (Lead)
- Heather Segura
- Andrew Rossiter
- Kim Morris-Zarneke

### Digital Benchmarking

- Jim Wharton (Lead)
- Windy Arey-Kent
- Waikiki Aquarium

### Youth

- Lisa Ostrego (Lead)
- Joe Harber
- Sam Norton
- Jack Carr
- Kim Swan
- Marsh Myers
- Seattle Aquarium
- Mark Wagner
- New England Aquarium

### Community Resilience

- Dave Bader (Lead)
- Jonathan Hultquist
- John Anderson
- Brian Thill
- Kelly Matis
- Dean Watanabe
- Tina Miller-Way
- Patricia Raves
- National Aquarium

