

**Networked for
Environmental Quality through Science®.
SETAC-North America's 3–5 Year Long Range Plan
(2015 – 2018/20)**

Slogan

Environmental Quality through Science®.

Vision

To become the society of choice for individuals and organizations involved with the study or management of environmental stressors and the “go to” society for associated science-based information.

Mission

Advance and communicate reliable environmental science and associated applications to effectively inform decisions and actions to protect, manage and enhance environmental quality and ecosystem integrity in North America, and to promote environmental sustainability and ecosystem health within a global context.

Core Challenge

Amplify the advancement and impact of SETAC-relevant environmental science and its applications on environmental decision-making, and enhance SETAC-North America's growth and sustainability.

Strategic Priorities

The *Core Challenge* will be pursued through four strategic priorities:

1. *Enhancing recognition and advancement of our expertise in environmental and engineering sciences;*
2. *Maximizing the relevance and impact of our networks and services;*
3. *Promoting multidisciplinary, tripartite, integrated science and engineering to identify, address and solve environmental problems; and*
4. *Expanding member services and pursuing new revenue streams for SETAC-North America.*

Executive Summary

The SETAC-North America (SETAC-NA) Board of Directors examines and, if necessary, adjusts the strategic directions and initiatives of the Geographic Unit (GU) on an annual basis to reflect current and anticipated environmental, as well as operational, challenges and opportunities, and the competencies our professions will need to meet them. The 2011 Long Range Plan focused the energies and resources of SETAC-NA, its Directors, Advisory Groups, and Committees on embracing emerging digital technologies, establishing and growing an endowment fund, collaborating with complimentary scientific societies, involving more members in Advisory Group and Committee leadership, and promoting students in the governance and science of the GU (a summary of the recommendations and action items from the 2011 Long Range Plan is provided in the Appendix to this document). Many, if not all, of these initiatives are now integral parts of SETAC-NA operations.

Over the intervening four years several refinements have been made to the 2011 plan. The Board of Directors has taken on efforts aimed at: performing routine evaluation and streamlining of how the Board functions; improving the SETAC-NA financial status and contingency planning; strengthening communications with SETAC-NA members, Advisory Groups, Committees, and Regional Chapters; supporting early- and mid-career development of members; and exploring the creation of a professional certification program for the core disciplinary strengths of SETAC – environmental toxicology, environmental chemistry and ecological risk assessment.

The 2015 Long Range Plan sets out goals and actions to bring ongoing efforts of the last four years into SETAC-NA's mainstream practices and build on them to: (1) bring enhanced recognition for SETAC-NA scientific expertise by environmental decision makers; (2) provide greater relevance and value of our networks and services to current and potential Society members; (3) continue to promote multidisciplinary, tripartite science for solving environmental problems; and (4) expand the Society's member services and revenue streams.

Strategic Priorities

1. *Enhancing recognition and advancement of our expertise in environmental and engineering sciences.*

SETAC-NA will be widely recognized as *the* North American society for integrated, multi-sector expertise and inter/multi-disciplinary science to identify, inform and address complex regional and global environmental challenges, educate stakeholders and help solve pressing and emerging environmental problems.

2. *Maximizing the relevance and impact of our networks and services.*

SETAC-NA will be recognized as *the* North American scientific society of choice for environmental scientists and environmental policy professionals at all career stages. Member services and professional opportunities provided by the Society will be highly valued aspects of the member experience and will keep members actively engaged with the Society and in the Society's mission and purpose.

3. *Promoting multidisciplinary, tripartite, integrated science and engineering to identify, address and solve environmental problems.*

SETAC-NA will continue its fundamental practice of promoting the use of science-based, multidisciplinary, multi-sector approaches to examine the impacts of stressors, including chemicals, practices and technology, on the environment, on understanding the consequences of such impacts, and on advancing knowledge in the environmental and risk assessment sciences with an ultimate goal of enhancing environmental sustainability and ecological integrity.

4. *Expanding member services and pursuing new revenue streams for SETAC-NA.*

The SETAC-NA Board of Directors and staff will strive to expand member services, sustain current revenue-generating activities and explore, and implement where appropriate, new initiatives and efforts to expand revenue streams for the organization and its initiatives. This will strengthen the Society's financial status and allow for sustainment and expansion of Society initiatives and services.

Meeting the Core Challenge

Amplify the advancement and impact of SETAC-relevant environmental science and its applications on environmental decision-making, and enhance SETAC-North America's growth and sustainability.

Current and future environmental challenges in North America and around the world are far more complex than those of the past. These include, but are not limited to: the need for adequate water quality and quantity for ecosystem and human needs; chemical and non-chemical stressors in the environment; untangling the intersections of energy, agriculture and water policy (the energy-agriculture-water nexus); the impact of environmental degradation on ecosystem [wildlife and human] health and socio-economics; expanding urbanization; industrial and municipal water uses and reuses; eutrophication of global water supplies and associated impacts on animal and human health; impact of climate change on all of these challenges, and more. Equally, they must be addressed within current-day economic and social constraints and expanding expectations for quality of life for a larger, longer-living and more interconnected global population. SETAC-NA will meet these challenges by building on its existing programs and membership expertise, while growing its capacity to meet the science needs of this new environmental protection-socioeconomic reality and those that make decisions on our behalf. The end-goal: Environmental Quality [for all] through Science.

To achieve the *Core Challenge* requires us to recommit to SETAC's core values:

1. Multidisciplinary approaches to solving environmental problems,
2. Multi-sector balance among academia, business and government, and
3. Science-based objectivity.

These core values or “founding principles” are what separate SETAC from most other scientific societies. They are often cited by members as the reasons they joined and stay in SETAC. They are often the reason SETAC is looked to for expertise and leadership. They are the reason our meetings, workshops and publications are so well received and respected. And, they are the reason SETAC has made a difference. That SETAC-NA has

stayed true to these values for over 35 years is a tribute to its members who are both the substance and leadership of the Society.

Strategic Priority 1: Enhancing recognition and advancement of our expertise in environmental and engineering sciences.

SETAC-NA will be widely recognized as the North American society for integrated, multi-sector expertise and inter/multi-disciplinary science to identify, inform and address complex regional and global environmental challenges, educate stakeholders and help solve pressing and emerging environmental problems.

For SETAC-NA to achieve the *Core Challenge*, the Society must provide professional opportunities to all members so that they can become experts in their fields and be recognized as such, if they are not already experts, and called on by both public and private sectors to investigate and provide insights that help decision-makers address the environmental challenges before them. SETAC-NA publications, meetings and workshops must address current, complex environmental challenges in a timely manner, help focus and foster advancement of the science needed to address specific challenges, and synthesize the state of the science so that it can inform stakeholders now and/or identify key areas where the science and consensus need to be focused in the future. Finally, SETAC-NA must bring its science and expertise to the public and to decision-makers in formats that meet their particular needs and with content that communicates the science clearly and the recommended approaches in practical terms.

For the Strategic Priority “*Enhancing recognition and advancement of our expertise in environmental and engineering sciences*”, SETAC-NA will pursue activities that:

- attract members with the appropriate expertise to tackle environmental challenges of the day;
- engage members in the mission of the Society;
- provide opportunities for members to develop professionally and be sought after for their expertise;
- ensure publications and workshops embrace the state of the science, as well as

address emerging and complex environmental problems; and

- ensure outreach and education activities enable decision-makers and empower the public.

Strategic Priority 2: *Maximizing the relevance and impact of our networks and services.*

SETAC-NA will be recognized as the North American scientific society of choice for environmental scientists and environmental-policy professionals at all career stages. Member services and professional opportunities provided by the Society will be highly valued aspects of the member experience and will keep members actively engaged with the Society and in the Society's mission and purpose.

For SETAC-NA to achieve this strategic priority, North America's scientists, researchers, environmental managers, science policy professionals, and science-based policy implementers must want to be and remain members of SETAC-NA. SETAC-NA must give them both reason and opportunity to develop professionally and bring their expertise and skills together to solve today's and tomorrow's environmental challenges. Through SETAC-NA, members will find opportunity to engage with each other in multi-sector, respectful and open forums. They must find in SETAC-NA a professional and engaging home for their personal and professional growth and associated networks, and opportunities to excel in their respective disciplines, their friendships, and their contributions to environmental science and protection. For people to want to be part of SETAC-NA, they need to be invited and encouraged to participate in Society initiatives, and to feel that they are contributing, or at least have the opportunity to contribute, that their contributions are respected and welcomed, and that they make a difference both professionally and personally.

For the Strategic Priority "*Maximizing the relevance and impact of our networks and services*", SETAC-NA will pursue activities to ensure members have:

- Opportunities to help solve environmental challenges:
 - Provide opportunities for individuals from all sectors to help identify and address on-going, new and emerging environmental challenges that require a concerted focus.

- Facilitate respectful interaction of interested parties and consensus-based approaches and solutions.
- Organize meetings and workshops where individuals can present their findings, express their opinions and engage in dialogue with individuals with similar or complementary interests.
- Opportunities for personal and professional growth:
 - Strong, state of the science and science-focused approaches to addressing environmental challenges.
 - Exciting and stimulating annual meetings and workshops.
 - Large and broad professional membership for expansion of personal and professional networks.
 - Becoming part of an inviting and welcoming global science family.
 - Expanded member services, including new professional development courses.
- Reasons for wanting to be part of and stay part of SETAC-NA:
 - Expanded opportunities for participation in Society affairs.
 - Broad member participation in Society leadership and within SETAC-NA Committees and Advisory Groups.
 - Openness and responsiveness by SETAC-NA leadership to membership feedback.
 - Acknowledgement and appreciation of volunteer efforts and contributions.
 - Value for their time and financial investment in the Society.
 - Encouragement and support for student activities and initiatives.
 - Support for membership retention at the student-to-professional transition.
 - Activities and opportunities to enhance retention at mid-career.
 - New member recruitment to expand and enhance the expertise within SETAC-NA that is needed to address emerging environmental challenges.
 - Pursuit of a professional certification program.

Strategic Priority 3: Promoting multidisciplinary, tripartite, integrated science and engineering to identify, address and solve environmental problems.

SETAC-NA will continue its fundamental practice of promoting the use of science-based, multidisciplinary, multi-sector approaches to examine the impacts of stressors, including chemicals, practices and technology, on the environment, on understanding the consequences of such impacts, and on advancing knowledge in the environmental and risk assessment sciences with an ultimate goal of enhancing environmental sustainability and ecological integrity.

For the Strategic Priority “*Promoting multidisciplinary, tripartite, integrated science and engineering to identify, address and solve environmental problems*”, SETAC-NA will recommit to pursuing activities that ensure we continue to stay true to our core values. This includes all activities described above, but specifically we must strive for more balanced, tripartite membership, as far as that is feasible. This may necessitate identifying new and innovative ways to better engage government scientists and environmental regulators in SETAC, and expanding reasons and opportunities for private sector scientists and managers to choose SETAC-NA as their professional home.

Through all activities, SETAC-NA will remain an open and collaborative forum for scientists and institutions engaged in a broad cross section of environmental science activities, including: the study of environmental challenges and problems; the management and regulation of natural resources; the reduction in the environmental footprint of product development, manufacturing and use; the advancement of research approaches and methodology; and the continued education of students and young professionals.

Strategic Priority 4: Expanding member services and pursuing new revenue streams for SETAC-NA.

The SETAC-NA Board of Directors and staff will strive to expand member services, sustain current revenue-generating activities and explore, and implement where appropriate, new initiatives and efforts to expand revenue streams for the organization and its initiatives. This will strengthen the Society’s financial status and allow for sustainment and expansion of Society initiatives and services.

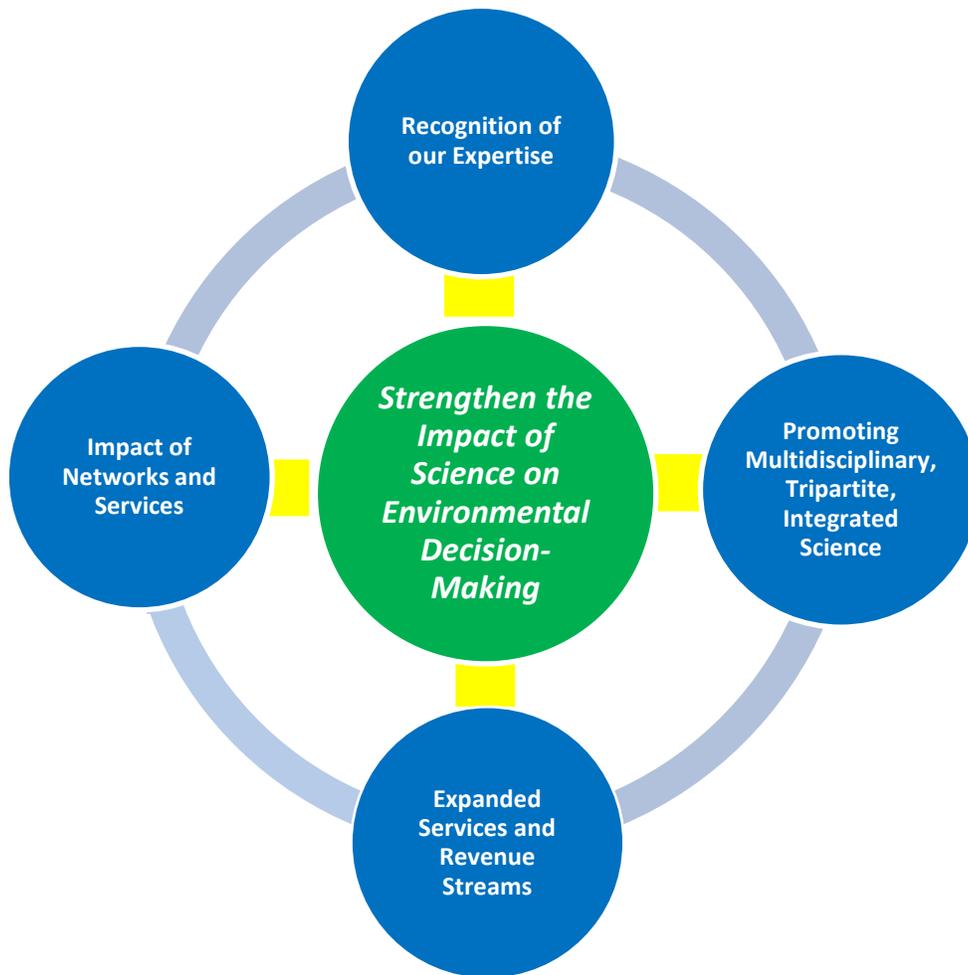
SETAC-NA depends heavily on the annual North American meeting for Society revenue; in some years the annual meeting has accounted for >80% of the annual income. This leaves the Society financially vulnerable should some unforeseen event or natural disaster cause an annual meeting to be cancelled or very poorly attended. While the Society has accumulated reserve funds and an endowment fund, those ‘contingency funds’ can only keep the Society solvent for one to two years. A recently enhanced effort on consistently organizing Pellston™ Workshops and Focused Topic Meetings has helped, to some extent, alleviate the dependence on the annual meeting for Society revenue. SETAC-NA membership dues is another important revenue stream, providing additional rationale for why Society membership numbers must not just be maintained, but grown. Other activities and services contribute to much lesser extents.

Important initiatives over the past few years have made several previous membership benefits less clearly aligned with being a SETAC member. Reduced journal page charges used to be a value of SETAC membership, but we have recently eliminated page charges altogether for our two journals. Accessing recorded SETAC-NA annual meeting presentation used to be discounted for members, but now those are free to anyone. Both of these changes are positive in many ways, but we need to identify and deliver additional services of high value that will retain current SETAC-NA members and attract new ones.

While reliance on the annual meeting for financial solvency has worked adequately so far, the changing landscape of voluntary, professional membership in societies and attendance at associated scientific conference, and the growing number of society/organization choices currently available to professionals, necessitate new efforts to diversify revenue streams for the Society and/or enhance the probability that members will continue to come and continue to stay. In an increasingly competitive environment, it is risky to be so dependent on one revenue source. SETAC-NA therefore commits to explore, and implement where appropriate, new initiatives and programs that can further diversify revenue streams and can lead to enhanced Society membership and membership retention. Such initiatives could include, but are not limited to:

- Continued efforts on organizing Pellston™ Workshops and Focused Topic Meetings that generate revenue for SETAC-NA, but that do not detract from attendance at the annual meeting.
- Additional/expanded publications of various sorts (e.g., environmental sciences textbook, digital books).
- Provision of Professional Development courses and associated Continuing Education credits for participation in courses delivered at SETAC-NA meetings or elsewhere (serving existing certification or licensing programs).
- Development and delivery of preparatory courses in support of professional certification and licensing requirements, including a potential, SETAC-affiliated certification program.
- Organizing and/or managing large, multidisciplinary research projects (e.g., global in nature).
- Expanded opportunities to serve as a ‘knowledge broker’ where SETAC-NA assists agencies or organizations find suitable individuals for critical peer-reviews (e.g., U.S. federal agencies often hire companies to run/organize peer reviews) and subsequently compile and synthesize reviews from multiple sources.

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Appendix

SNA Long Range Planning (2011-14): Summary of Recommendations and Action Items

(Revisions from Board Discussion on August 12, 2011)

Goal - Promote research, education, communication, and training in the environmental sciences

1. Turn short courses, special presentations, and Pellston workshop summaries into 45 minute webinars that could be presented as lunchtime seminars that are downloadable for distribution.
2. To stimulate mentoring program, consider recognition and/or reduced fees at SNA Annual Meetings; continue efforts with students, and also target early career professionals
3. Select topics workshops, focused topic meetings and Pellston conferences that have the potential to attract new members to SNA
4. Increase interdisciplinary focus of SNA by expanding number of advisory groups
5. Offer special registration fees for SNA annual meeting, focused topic meetings, and workshops to members/employees of local groups and government organizations to garner new members (contact directly by phone rather than by email)
6. Enhance SETAC website to improve functionality, navigation and content (being done)
7. Communicate how SNA endowment funds are used, and pick a reasonable fundraising target (being done)
8. Student Advisory Committee should continue to lead exchange program for students to visit other research labs to obtain training (being done)
9. Continue to mentor incoming SNA Board members (insert table in communities to direct new board to certain documents and SOPs)

Goal - Promote balanced, interdisciplinary approaches to managing chemicals and other stressors

10. Promote/advertize SETAC goals and activities at scientific meetings and other venues (being done)
11. Establish a short-term committee to identify how to increase membership and representation in government sector government and in other areas (NGOs, women, minorities) using retrospective data and prospective approaches (e.g., educate political level employees in government of the benefits of SETAC membership and participation for their scientists; engage recent retirees – Randy Wenstel, Tony Maciorowski)

12. Continue/initiate strategic interactions and alliances with other scientific societies, and invite their officers to SNA Annual Meeting. Jointly sponsored sessions at annual meeting and shared workshops targeting TWS, AFS, HHRA, SOT, SRA, ESA to which SETAC brings international depth. Develop a template for inter-society interactions identifying what has worked well and what has not worked well with the overall objective of growing membership and broadening of scientific offerings (refer to Membership Committee, handled by subcommittee)
13. Focus on interdisciplinary sessions at SNA Annual Meeting rather than traditional sessions (already occurring in regulatory and policy sessions; engage advisory groups to assist)
14. Engage non-SETAC members in workshops and focus topic meetings (being done)

Goal – Increase scientific input into decision making processes

15. Public pronouncements, state of science and even positions can be espoused by SETAC using approved guidelines and procedures

Goal - Promote the development of principles and practices for sustainable environments

16. Provide more information on sustainability to SNA membership (demonstrate practicality)

Some other items to consider:

17. Expansion of our scope while sustaining our traditional areas of work and interest
18. Advocating sound science without being an advocacy group (technical issue versus position statement?)
19. Workshops - uniqueness, impact, and timeliness (years to plan and disseminate findings)
20. How do we grow SETAC North America and what disciplines need enhancement?
21. Review of the criteria, credentials, and evaluation process for membership in SETAC
22. Update and enhance our ability to track expertise of our membership so that we may be nimble in responding to information requests, peer-review, student and career mentoring, and guidance on environmental issues
23. More thoroughly engage the membership of Regional Chapters with the Board of SETAC North America, and in some instances engage SETAC members with their Regional Chapters. Attempt to foster stronger representation, activity and commitment from some chapters (e.g., Mexico Regional Chapter)
24. Formal term limits for Committee and Advisory Group Chairs
25. Affordability of our annual meetings for students, recent graduates and new professionals