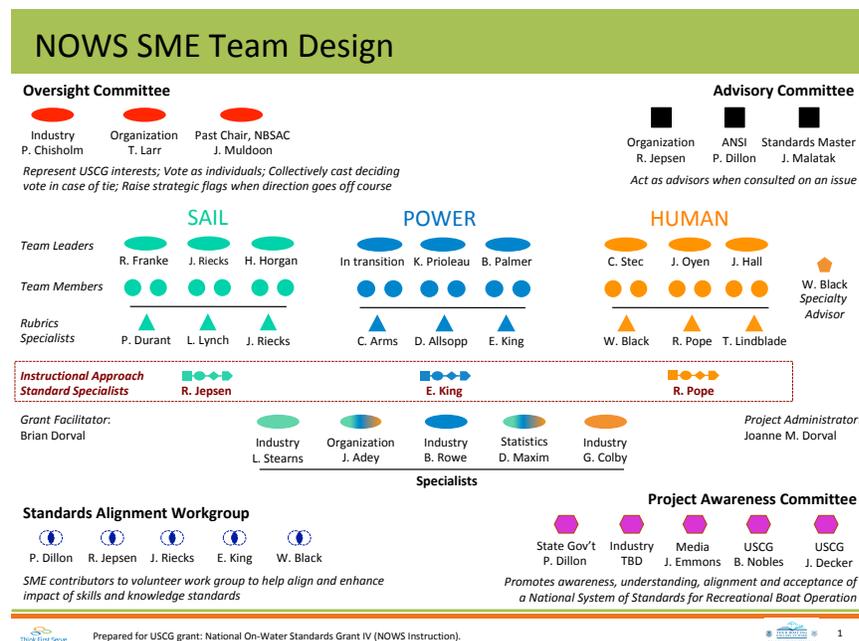


The following provides a detailed review of the activities as of September 2017 that have taken place since the start up of the National On-Water Standards Program in August 2011.

Program Activity Summary

- Long term, it is the United States Coast Guard (USCG) supports the vision of a *National System of Standards for Recreational Boat Operation* that incorporates On-Water experienced-based instruction and classroom knowledge/theory-based teaching (i.e. skill standards, knowledge standards, instructional standards, environmental standards, etc.). This system of standards will contain components that should be incorporated in any recreational boating education program and will be available to anyone who would like to design and deliver a program that is consistent with the highest quality standards for developing skilled, knowledgeable and safe boaters.
- The USCG awarded US Sailing a grant to identify and reach national consensus on a system of On-Water standards for recreational boat operators. US Sailing’s role is to design and manage the process by which a diverse group of Subject Matter Experts (SMEs) in the recreational boating community identify and recommend to the USCG the standards to include in a nationally recognized system of standards.
- The first year On-Water grant focused on identifying the On-Water entry-level, skills-based standards that recreational boat operators will be able to demonstrate as a result of entry-level On-Water instruction in three domains – SAIL, POWER and PADDLE (eventually changed to HUMAN).
- The primary emphasis of year one was directed toward developing On-Water entry-level, skills-based standards for recreational POWER boat operators given that is where the Coast Guard identified the largest need for safety. Subsequent years have focused on developing Standards and Rubrics for HUMAN and SAIL domains as well. A secondary goal is to identify common (core) On-Water entry-level, skills-based standards that cut across all three domains (SAIL, POWER and HUMAN).



The Team

- The On-Water Grant Management team has assembled 43 Subject Matter Experts (SMEs) from multiple nationally recognized boating education organizations using the ANSI process to implement this standards grant. The SMEs

are from industry, professional schools, community, non-government/non-profit, federal and state, as well as the public sector. A professional facilitator has been brought in to help design and manage the process, as well as to facilitate the teams in action.

- The team includes: a three-person Grant Oversight Committee (to ensure strategic alignment and direction); a three-person Advisory Committee (to provide input and guidance); nine SME Team Leaders - three each from SAIL, POWER, HUMAN domains (to develop the standards); three team specialists (to provide unique knowledge support to the domain SMEs) and eighteen SME team members (to work with Team Leaders to develop standards) (see graphic).
- Three-person *Rubrics Specialist* Committees composed of people with Master Trainer experience have been assembled as members of the Team to lead work on developing the rubrics that will be used to assess performance on the On-Water Standards developed for each domain.
- A 5-person *Project Awareness Committee* was also empanelled as non-voting members of the Team to provide official communication on grant progress and align the Team's On-Water work with NASBLA's National Boating Education Standards Panel On-Land (classroom) standards work.
- *The Specialty Advisor's role* was added to advise on matters associated with ensuring domain-specific Standards and Rubrics are inclusive of boating activities across the full domain, with special considerations germane to the Special Advisor's expertise.
- *The Instructional Approach Standard Specialist Team* was
- *The process used to create national standards for recreational boat operation involves developing four versions of the Standards.* This process is designed to help obtain the broad consensus needed to develop a national set of standards, as well as to apply the unique and deep knowledge, expertise and experience from SMEs within the domains of SAIL POWER and HUMAN in formatting high quality and effective standards that fit within the *National System of Standards for Recreational Boat Operation*. Standards Versions 1 and 2 are standards identified on paper. Standards Versions 3 and 4, along with the Rubrics used to assess them are field-tested (on-water) to ensure readiness for use on a national scale.

General Activity and Timeline

The following identifies the specific activities and the time frames associated with each that have taken place since the program was initiated in 2011.

2011

- *Developed set of skill-based standards language structures, definitions of terms and frameworks (August, 2011).* These are the main elements of the approach that would be used to create common national standards across the SAIL, POWER and PADDLE domains.
- *Designed the overall grant implementation process plan to be consistent with ANSI Essential Requirements standards and procedures.*
- *Confirmed standards development approach with John Malatak of the USCG (September, 2011).* The goal was to ensure grant implementation approach developed was strategically aligned with the original purpose and intent of the On-water Standards grant.

- *Held a one-day Summit I (October 15, 2011)* with 18 SMEs where we: oriented the group to the grant purpose and desired outcomes, the plan for its implementation and their role and responsibilities associated with it. Trained the SMEs in how to identify and structure skill-based standards and calibrated their thinking as to an effective standard.

2012

- *Had SME teams work together to develop draft lists of standards within their domain (October, 2011 – February, 2012).* These draft lists were shared with SME Team Leaders from other domains and with committee members for input and feedback. The final drafts were brought into Summit II.
- *Confirmed the list of POWER standards at Summit II in San Diego, California (March 7 & 8, 2012).* We reconvened the 18 SMEs to review the draft lists of standards developed since Summit I. The outcomes of the Summit were an agreed upon list of 37 On-Water skill-based standards for recreational powerboat operators, and a set of 27 standards identified that are in common across the domains of SAIL, POWER and PADDLE.
- *Conducted a content validation of the POWER Standards (April/May, 2012).* The content validation study on the On-Water POWER standards was conducted using a design based on input received from Dr. Stephen Silverman, Professor and Chair, Department of Biobehavioral Sciences, Teachers College, Columbia University. The list of On-Water POWER standards was shared with a larger audience of SMEs around the country to elicit input and feedback. This was done through the use of an on-line survey tool called Survey Monkey. The feedback was collected, analyzed and shared with the POWER Team leaders who developed a recommendation for how best to respond to the results of the survey. The recommendation was accepted by the SME Team and the Oversight Committee and resulted in an updated list of standards - POWER Standards Version 2.
- *Held a 2-day Rubrics Development Workshop to initiate development of the POWER Rubrics (June 6-7, 2012).* The goal was to prepare the 3-person *Rubrics Specialists* Committee with POWER Master Trainer experience, for developing the rubrics that would be used to assess performance on the On-Water POWER Standards. An advisor, one of the POWER domain Team Leaders involved in the development of Version I and 2 of the On-Water POWER Standards, supported the team.
- *Engaged in the development of POWER Rubrics Version 1 (June-September, 2012).* This involved the Rubrics Specialist Committee members, POWER advisor and Grant facilitator engaging in a series of conference calls to develop the draft list. The list was shared with POWER SMEs from the overall team of SME for feedback and guidance. The decision was made to involve only the SMEs with expertise in the POWER domain in this process given the advanced knowledge and experience it would take to get to the level of detail needed to effectively describe the detailed behaviors associated with operating a power boat. The result was POWER Rubrics Version 1. Condition was made to develop and included in the next phase a Standards and Rubrics Glossary that people could use to ensure understanding of how the terms have been defined and operationalized.
- *Held Summit III to confirm SAIL and PADDLE domain standards Versions 1 (November 28-30, 2013).* Two Fast Tract Grants were awarded to move forward on original work conducted on SAIL and PADDLE standards domains. To gain synergy, the two grants were brought together to create one Summit that would engage the full SME Team in the confirmation of both Version 1 sets of standards. Also resulted in updated version of the POWER Standards and Rubrics.

2013

- *Conducted a National Content Validation of the POWER Rubrics (December, 2012 – February, 2013).* POWER Rubrics Specialists reviewed the results of the survey and developed a recommendation for how best to respond. In final stages of confirmation and development of Version 2.
- *Changed domain name from PADDLE to HUMAN (January 19, 2013).* The goal was to better reflect consistent (all inclusive) levels of abstraction across the three domains of recreational boating (POWER, SAIL, HUMAN). This was also in direct response to conversations held during Summit III in November 2012). Also initiated new role on SME team called *Special Advisor Role* with the purpose of ensuring that the standards developed in each domain on inclusive to cover the full spectrum of boats within the respective domain.
- *Held planning meeting to initiate the POWER Standards and Rubrics National Validation Program planning and preparation (January 23-25, 2013).* Meeting took place in Clearwater FL with the newly established National Validation Program Design Team to develop the approach, tools and timeframe for conducting the BETA test and 6 National Testing Sessions that would take place around the country.
- *Conducted a National Content Validation project on SAIL Standards Version 1 (February-March, 2013).* The focus was to check the work done on the SAIL Standards with a larger group of SMEs from around the country. The results are being prepared for analysis and sharing with the SME Team Leaders from the SAIL Domain to develop a recommendation for how best to respond.
- *Oversight Committee approved strategy for broadening SME Team membership to include Specialty Advisors (March 27, 2013).* The role of these advisors is to help ensure that standards developed are inclusive of any specialty sub group within a specific domain.
- *Conducted On-Water Standards DEMO at 17th annual IBWSS conference in San Antonio, TX. (March 26, 2013).* Provide recreational boating safety community with a demonstration of how the POWER Standards and Rubrics would be validated in a series on field-testing session taking place around the country as part of a National POWER Standards Validation Program.
- *Developed the process, tools and protocol needed to conduct a National Validation program for the POWER Standards & Rubrics.* The core tools included:
 - Test Session Protocol and Administrative Support – contains the detailed structure and support materials used to administer the testing sessions. Materials include the script Lead Evaluators will use to ensure standardization across testing sessions.
 - POWER Standards & Rubrics Checklist – 44 page checklist structured in the following way:
 - 7 Boat Operations... divided into:
 - 38 POWER Standards & Rubrics... divided into:
 - 114 proficiency descriptions (3 each)... divided into:
 - 234 proficiency dimensions... divided into:
 - 537 specific boat operation behaviors.
 - Boat Operation Visuals – set of 18 visuals depicting the overall floatplan and specific boat operations involved in the testing sessions.
 - Evaluator and Team Orientation Session. Designed the on-site training session that will be used to prepare Evaluators for taking on their role during the BETA Test.
- *Conducted POWER Standards and Rubrics BETA at Annapolis Sailing School, Annapolis, MD (April 5-6, 2013).* Tested the process, tools and protocol that will be used to conduct the National Validation Program for the POWER Standards and Rubrics. Responded to the feedback from the BETA test and updated all process, tools and protocols to reflect insights and recommendations.
- *Confirmed Version 3 of the POWER Rubrics (April 24, 2013).* Oversight Committee review many sources of input into the two remaining issues associated with the development of the POWER Rubrics. Decisions were

made on the two outstanding issues with the result being the development of POWER Standards and Rubrics Version 3. This updated Version 3 will be used in the National Validation Program for the POWER Standards and Rubrics.

- *Conducted National Evaluation Program Testing Session #1 on POWER Standards and Rubrics (Version 3) at Edison Sailing Center, FT. Myers, FL (April 26-28, 2013).* This was the first of six National Validation Program Testing Sessions that will be used to field test the POWER Standards and Rubrics.
- *Conducted National Evaluation Program Testing Session #2 on POWER Standards and Rubrics (Version 3) at Annapolis Sailing School, Annapolis, MD (May 3-4, 2013).* This was the second of six National Validation Program Testing Sessions that will be used to field test the POWER Standards and Rubrics.
- *Conducted National Evaluation Program Testing Session #3 on POWER Standards and Rubrics (Version 3) at SUNY Maritime College, Bronx, NY (May 21-23, 2013).* This was the third of six National Validation Program Testing Sessions that will be used to field test the POWER Standards and Rubrics.
- *Conducted National Evaluation Program Testing Session #4 on POWER Standards and Rubrics (Version 3) at Mentor Harbor Yachting Club, Mentor, OH (May 31-June 2, 2013).* This was the fourth of six National Validation Program Testing Sessions that will be used to field test the POWER Standards and Rubrics.
- *Conducted National Evaluation Program Testing Session #5 on POWER Standards and Rubrics (Version 3) at the Capital Yacht Club/partnering with DC Sail - Washington, DC (June 21-23, 2013).* This was the fifth of six National Validation Program Testing Sessions that will be used to field test the POWER Standards and Rubrics.
- *Conducted National Evaluation Program Testing Session #6 on POWER Standards and Rubrics (Version 3) at the Coronado Yacht Club – Coronado, CA (July 12-14, 2013).* This was the last of six National Validation Program Testing Sessions that will be used to field test the POWER Standards and Rubrics.
- *Conducted SME Team formal vote for how to respond to recommendation developed as a result of a SAIL Standards National Content Validation project (July, 2013).* The result of the vote was the unanimous decision to accept the recommendation and resulted in the approval of SAIL Standards Version 2. This version will be used to develop SAIL Rubrics and prepared for National Validation.
- *Updated HUMAN Standards to be more inclusive of rowing (July, 2013).* Involved the newly appointed Specialty Advisor (Willie Black – USRowing Coaching Education Manager) to the HUMAN domain SME Team. HUMAN Standards Version 1A is now being used to conduct a National Content Validation, the results of which will product Version 2.
- *Conducted a National Content Validation project on HUMAN Standards Version 1a (September, 2013).* The focus was to check the work done on the HUMAN Standards with a larger group of SMEs from around the country. Recommendations for how to respond to the over 1,360 participants in the survey were developed and shared with the SME Team.
- *Conducted SME Team formal vote for how to respond to recommendation developed as a result of a HUMAN Standards National Content Validation project (October, 2013).* The result of the vote was the unanimous decision to accept the recommendation and resulted in the approval of HUMAN Standards Version 2. This version will be used to develop HUMAN Rubrics and prepared for National Validation.
- *Empanelled a 3-member team of Rubrics Specialists for the SAIL Domain (September/October, 2013).* This team, along with one SAIL Team Leader who will act in role of Advisor, will draft the SAIL Rubrics used to assess performance on the SAIL Standards during the validation and subsequent use as National Standards.

- *Empanelled a 3-member team of Rubrics Specialists for the HUMAN Domain (September/October, 2013).* This team, along with one HUMAN Team Leader who will act in role of Advisor, will draft the HUMAN Rubrics used to assess performance on the HUMAN Standards during the Validation and subsequent use as National Standards.
- *Developed short video documenting the POWER National Validation Program (August/September, 2013).* The focus of the video was to create a record of the study, in particular to highlight the process by which the data was collected, so that we had a resource to use in promoting project awareness.
- *Created a comprehensive Survey Monkey database of the information collected during the POWER Standards & Rubrics National Validation Program (July-September, 2013).* The purpose of this database was to organize the information collected so that it could be prepared for analysis.
- *Initiated an Evaluator Survey Monkey (August, 2013).* The purpose of this survey was to collect more detailed information about the people who participated in the POWER Standards & Rubrics National Validation Program as Evaluators in order to investigate potential impact of the Evaluator's level experience on the outcomes of the evaluation of the standards and rubrics.
- *Developed and implemented comprehensive recognition program for involvement in the POWER Standards and Rubrics National Validation Program (September, 2013).* A core strategy in the development of a National System of Standards is to acknowledge all the volunteers who have been involved in and made possible the national validation of the POWER Standards and Rubrics. This recognition program is designed for that intent, as well as to help stimulate good will, positive excitement and buy-in of the standards once completed.
- *Conducted two presentations at the NASBLA's conference in Boise, ID (September, 2013).* The focus of the breakout session was to share information about the POWER Standards & Rubrics National Validation Program, the process used to collect the data and some preliminary results. The general session presentation was delivered jointly with NASBLA to provide an update on the current status of the Standards work.
- *Held a 3-day Rubrics Development Workshop to initiate development of the SAIL and HUMAN Rubrics (November 8-10, 2013).* The goal was to prepare 3-person teams of *Rubrics Specialists* for the SAIL and HUMAN domains, for developing the rubrics that would be used to assess performance on the On-Water HUMAN and SAIL Standards. An advisor, one of the HUMAN domain Team Leaders and one of the SAIL domain Team Leaders involved in the development of Version 1 and 2 of the On-Water Standards, supported each Specialist team.
- *Conducted presentation at the America Outdoors Association 2013 annual conference (December 9-10, 2013).* The focus of the presentation was to share current status of the On-Water Standards project with members of the HUMAN domain. The presentation was in response to a request by David Brown, Executive Director of the America Outdoors Association, to share information about the On-Water Standards work with the HUMAN propelled boating community in order to answer their questions about the role and function of the HUMAN standards under development.
- *Formally announced relationship with ABYC to work with the On-Water Standards Project for the purposes of developing ANSI approval of the POWER Standards (December, 2013).* After months of planning, ABYC has taken on the role of working with the On-Water Standards Team to put the POWER Standards and Rubrics into the formal ANSI approval and maintenance process.
- *Conducted a formal vote of the POWER SME team members on how to respond to the report from the national validation program (December, 2013).* A comprehensive report on the results of the POWER Standards National Validation Program was shared with the SME team who then voted to accept all the recommendations in the report. The result was formal acceptance of the POWER Standards and Rubrics as Version 4.

2014

- *Conducted formal vote to accept the working draft of HUMAN Rubrics as Version 1 (January, 2014).* The HUMAN Rubrics Specialists team completed its working draft of the first version of the HUMAN Rubrics. The draft was shared for comments, and then a formal vote was requested. A No with Comment vote resulted in an extension of the voting process to consider a change to one of the recommendation. The result was an updated statement of definition for the Water/Wind conditions for the HUMAN domain and a change to one of the standards. This process concluded with consensus on HUMAN Rubrics Version 1 and an updated Version 2a of the HUMAN Standards.
- *Developed and initiated a National Content Validation of the HUMAN Rubrics (January, 2014).* A Survey Monkey was prepared with the HUMAN Rubrics Version 1 and sent out to the HUMAN domain recreational boating community for input and feedback. The results of this survey are being analyzed and shared with the HUMAN Rubrics Specialists Team for interpretation and recommendations. These will be shared with the HUMAN SME Team members for a formal vote, the result of which is designed to create HUMAN Rubrics Version 2.
- *Developing working drafts of the SAIL Rubrics Version 1 (January-February, 2014).* The SAIL Rubrics Specialists Team has developed a working draft version 1 of the SAIL Rubrics that is preparing for a formal vote by the SAIL SME Team members.
- *Held series of phone meetings with other groups and organizations for discussions on possible next steps to advance collaboration activities that help ensure On-Water Standards application by the recreational boating community (February - March, 2014).* Meetings involved sharing a draft collaboration concept document outlining a high-level approach to begin exploring ways members of the recreational boating community will be able use the National On-Water Standards within the USCG's vision of a National System of Standards. First meeting took place between the On-Water Standards Grant Management team members and Chris Edmonston of NSBC/BoatUS to explore the concept. The second took place between members of the On-Water Standards Grant Management Team and representative of NASBLA to explore collaboration. The purpose of the meeting was to share an On-Water Standards concept document with Pam Dillon of the On-Water Project Awareness Committee and representatives of NASBLA. A third took place between Pam Dillon and Brian Dorval (On-Water Standards Facilitator) to continue collaboration conversations.
- *Recommending changes to the SAIL Standards (March-April, 2014).* During process of drafting, SAIL Rubrics Specialists recommended changes be made to 11 of the SAIL Standards. These 11 recommended changes are currently under review and being formally voted upon by the SAIL SME Team members on whether to accept or reject the changes. With the results of the formal vote in hand, the SAIL Rubrics Specialists will complete the Rubrics drafting process and prepare them for a formal vote.
- *On-Water POWER Standards and Rubrics were formally shared for Comment as part of the ANSI approval process (March, 2014).* This activity involved working with ABYC to develop a comprehensive extensive database of name and email contact information of people who will be materially affected by the standards and rubrics to invite them to provide comments on the POWER Standards & Rubrics. The comment period will close on May 18, 2014. Upon closing the comment period, each comment will be addressed and a decision made for how best to proceed. Any modifications to the POWER Standards & Rubrics that result will need to be put out for formal vote.
- *Designed and implemented the On-Water Standards portion of the 2014 IBWSS Day on the Water event (April, 2014).* The SME Team was invited by Emily King to help design and deliver part of the Day on the Water Event. The purpose was to design an opportunity for participants to actually go out on the water in POWER, SAIL and HUMAN propelled boats to experience first-hand the specific skill-based standards are being developed in this project. Our goal was to allow participants to actually perform these standards on the water so as boating liaisons with their local and state communities, they will have first-hand experience with the On-Water

standards included within the Coast Guard's National System of Standards for Recreational Boat Operation. Participants will receive a certificate acknowledging their participation. Approximately 65 participants experienced the standards from the SAIL, POWER, and HUMAN domains, a briefing session about the On-Water Standards Project, and an experiential activity to help them understand the unique challenges associated with developing skill-based standards as different from knowledge-based standards. The delivery team itself consisted of 25 SME experts and administration team members. It was the largest demonstration of the On-Water Standards under development as of yet.

- *HUMAN Rubrics V1 National Content Validation Results under review and formal vote process. (June, 2014)* HUMAN SME Team is currently reviewing the results of the National Content Validation and recommendation by the HUMAN Rubrics Specialist Team for how to respond to the results.
- *Approval of changes to the SAIL Standards (June, 2014).* SAIL Rubrics Specialists recommended the SME Team approved changes to 11 of the SAIL Standards. The 11 updated Standards are currently being used by the SAIL Rubrics Specialists Team to complete the Rubrics drafting process and to prepare them for a formal vote to accept them as SAIL Rubrics Version 1.
- *Awarded grant to complete development of SAIL, POWER and HUMAN On-Water Standards (June, 2014).* The USCG approved a grant from US SAILING to complete the SME Team's development of entry-level, skill-based standards (core competencies) in both the SAIL and HUMAN propelled domains; and b) to advance the standards of all three domains (SAIL, POWER and HUMAN) into the ANSI approval and maintenance process. The secondary goal of the grant is to help advance the US Coast Guard's desire to have one comprehensive, consensus-driven National System of Standards for Recreational Boat Operation that complements, aligns and integrates previous and new standards work. Productivity of the SME Team was instrumental in the USCG's decision on how to move forward on this year's grants. As part of the USCG's 2014 grant requirements, all grantees have been directed to collaborate with each other to bring the recreational boating community together to better serve the boating public (USCG Standards Collaboration Initiative). The Grant Management team continues to look for different ways to raise collaboration across the recreational boating community.
- *Approved HUMAN Standards and Rubrics Version 2 (July, 2014).* The HUMAN SME Team members approved Version 2 of the HUMAN Standards and Rubrics. The number of HUMAN Standards remains at 29. 6 HUMAN Rubrics and 1 HUMAN Standard elements were updated as a result of the National Content Validation Project. Six comments provided by SMEs during the vote resulted in a request by the Oversight Committee to implement the changes identified in the comments during the process of developing Version 3, which is planned to take place during the spring and summer of 2015.
- *Conducted formal vote to accept the working draft of SAIL Rubrics as Version 1 (July, 2014).* The SAIL Rubrics Specialists team completed its working draft of the first version of the SAIL Rubrics based on the integration of the updated SAIL Standards approved by vote of the SAIL SME Team members. The updated draft was shared for comments and is currently in the process of a formal vote by the SAIL SME Team. The process resulted in the formal acceptance of the SAIL Rubrics as Version 1. These are now being prepared for a National Content Validation Project.
- *Formally began process of converting the SME to the PTC for ANSI process (July, 2014).* Members of the On-Water Standards SME Team were invited to continue their role as part of the Project Technical Committee (PTC) that would be working to complete the process of moving the POWER Standards & Rubrics (Version 4) through the ANSI approval process and their standing as an American National Standard. The newly formed POWER PTC held its first WebEx meeting to agree upon approaches it would take to respond to comments provided on the POWER Standards & Rubrics document put out for public comment. A follow up WebEx meeting is being schedule to complete the process and put the document up for a formal vote by the POWER PTC. If consensus of the POWER PTC is reached, the updated POWER Standards & Rubrics will be sent to ANSI for approval.

- *Developed and initiated a National Content Validation of the SAIL Rubrics (August, 2014).* A Survey Monkey was prepared with the SAIL Rubrics Version 1 and sent out to the SAIL domain recreational boating community for input and feedback. The results of this survey have been analyzed and shared with the SAIL Rubrics Specialists Team for interpretation and recommendations. These will be shared with the SAIL SME Team members for a formal vote, the result of which is designed to create SAIL Rubrics Version 2 and prepared for use in a National Validation Field-Testing Program.
- *Conducted two Webinars with POWER PTC to develop resolutions for Comments provided on POWER Standards & Rubrics Document (July 17, 2014 and August 5, 2014).* The purpose of the webinars was to determine the approach to resolving the comments that were provided on the POWER Standards & Rubrics document during its Public Review and Comment period. The result was a recommended approach for all 38 comments provided and preparation of the document for final review and balloting. The name of the document was also changed to *POWER Standard and Rubrics*.
- *Developed a website for the On-Water Standards Initiative (August, 2014).* Developed a working draft of a comprehensive website for the On-Water Standards Initiative the purpose of which is to function as a clearinghouse for information about the On-Waters Standards development initiative including access to the most current versions of all the Standards & Rubrics under development. The website has been sent to the Coast Guard for review and approval for publication.
- *Opened POWER Standard & Rubrics document for Consensus Ballot and Public Review (August 15, 2014).* The POWER Standard & Rubrics document was opened for final review, comments and balloting by the POWER PTC and the general public (only PTC members will cast a ballot). The document will be open until September 28, 2014. If there is consensus from the Consensus Body, the document will be forward to ANSI for review and publication.
- *Developed high-level design and plan for the Standards Collaboration Initiative (August/September, 2014).* The purpose of the design Overview was to create a shared understanding within the leadership team about the process approach that will be taken to help design and implement the desired level and kind of collaboration the US Coast Guard has asked for as a result of setting in motion the Collaboration Initiative during its June, 2014 meeting of the Non-Profit Grantees. The detail plan provides the framework and approach that will be used to implement the development of collaboration activities across the leadership team organizations and beyond.
- *Conducted formal vote to accept the working draft of SAIL Rubrics as Version 2 (October, 2014).* The SAIL Rubrics Specialists team completed its review of the results from the National Validation Project and made recommendation for how to respond to the feedback. A vote was called of the SAIL SME Team members and resulted in the acceptance of the updated draft as SAIL Rubrics Version 2. Changes to the document included updating 16 SAIL Rubrics and 8 SAIL Standard elements.
- *Briefing provided to NASBLA's ESP on the current status of On-Water Standards Initiative (October 14, 2014).* Along with the current status, the presentation also provided members of the panel with information about the structure of standards contained within the National System of Standards and its implications for where the On-Water Skill-based standards and the on-land Knowledge-based standards fit within the overall system of standards.
- *Held a two-hour USCG Standards Collaboration Initiative Leadership Team meeting (October 15, 2014).* A two-hour meeting took place as part of the USCG Standards Collaboration Initiative. Members of the initiative Leadership Team gathered to confirm the Coast Guard's vision of the future with respect to Skill and Knowledge Standards and explore the process needed to reach the vision. A follow up impromptu meeting

with Captain Burton, resulted in the concept of developing Side-by-Side Matrices for the SAIL, POWER, and HUMAN domains to help organize the Knowledge and Skill Standards within each domain.

- *Formally initiated the project to develop Standards Side-by-Side matrices that explore current level of alignment across Knowledge and Skill Standards (October, 2014).* Standards Collaboration Task Team members were identified and began the work of collaborating on the development of matrices for POWER and HUMAN domains that lined up the elements with the Knowledge and Skill Standards side-by-side in order to determine potential conflicts, overlaps and gaps. No changes are being made to the standards at this point.
- *Launched On-Water Standards Initiative website (October 20, 2014).* An On-Water Standards Initiative website was formally launched. The purpose of the website is to function as a clearinghouse of information about the On-Water Standards Project and all the materials that have been developed during the project. The general public is now able to freely access information about the project including the current versions of all the Standards and Rubrics.
- *The POWER PTC met to review the three comments received on the updated POWER Standard and Rubrics document (November 4, 2014).* The PTC agreed on resolutions for all three comments. The POWER Standard and Rubrics document continues to be moved through the ANSI process under the governance of ABYC.
- *Held a 2-day Summit IV (November 20-21, 2014).* Summit IV was held in Arlington, VA in which 22 members of the On-Water SME/POWER PTC teams got together to continue making progress on the development of the Standards & Rubrics for the POWER, SAIL, and HUMAN domains of recreational boat operation. The primary outcomes of Summit included the following:
 - Formalized Standard Version 5 within the Standards Development Process. The work focused on taking Version 4 of the Standards and moving them through the ANSI approval process was formally integrated within the Standards Development process as Version 5. The unique aspect of Version 5 is that the process is managed through a partnership with ABYC.
 - Clarified the partnership with ABYC, and the roles and responsibilities associated with being a member of the POWER PTC in addition to an SME Team member.
 - Changed the language used to refer to the On-Water Standards. For example, rather than referring to 38 On-Water POWER Standards, the terminology now indicates we have 1 POWER Standard with 38 POWER Standard Elements. The same concept applies to the SAIL and HUMAN Standards.
 - Announced formation of a new Standards Alignment Specialists Committee that will be added to the SME Team. The purpose of this committee is to gather data about potential conflicts, gaps and overlaps between Skill-based (On-Water) and Knowledge-based (in-Classroom/on-line) Standards, in order to explore how best to align both sets of standards, so that we enhance application and impact of using the full menu of standards in the field.
 - Developed working norms for the POWER PTC/SME Team. Given the formation of the POWER PTC, a set of working norms for the SME/POWER PTC was developed to help ensure continued productive collaboration with members of the newly formed group.
- *Held a one-day November Standards Collaboration Initiative meeting (November 22, 2014).* This meeting included an expanded Collaboration Initiative Leadership Team working to move forward on the need for collaboration identified by Capt. Burton: *Finish the Standards... Organize them... and Distribute/Use them.* With that focus in mind, the outcomes of the meeting included:
 - The Side-by-side Matrices development teams trained in how to complete the matrices, and a process/plan for completing the work.
 - A plan in place for members of NASBLA's ESP and the On-Water Standards SME Team to collaborate in the development of NASBLA's SAIL Knowledge Standard.
 - A plan in place for members of NASBLA to join the On-Water Standards HUMAN domain Standards National Validation Program as an opportunity to more fully understand the relationship between the current HUMAN Knowledge and HUMAN Skill standards.

- A plan in place for capitalizing on NMMA/Discover Boating's current website work to help develop a common portal for providing common positioning of the recreational boating organizations within the recreational boating marketplace.

NOTE: The POWER and HUMAN Side-by-side Matrices were recently completed—and the outcome deliverables/reports are attached to this December 31, 2014 progress report.

- *Initiated planning the HUMAN National Validation Program Beta Test (November, 2014).* The University of South Florida St Petersburg was identified as the host of the National Validation Program Beta Test scheduled for January 30-February 1, 2015.
- *Initiated proposal to separate the POWER Standard from the POWER Rubrics (December, 2014).* Based on best practices for the structure and use of an American National Standard shared by ABYC, a proposal was put forth by the Oversight Committee to separate the POWER Standard and POWER Rubrics into two separate documents. The proposal was in response to PTC members' interest in modifying and structuring the POWER Standard & Rubrics document for more user-friendly application. The POWER Standard would contain the 38 POWER Standard Elements and be published by ABYC as an American National Standard (approval by ANSI). The POWER Rubrics would be included in a Technical Support Document that accompanies the POWER Standard. This document would also contain key information about the productive application of the POWER Standard and Rubrics and serve as the official source of guidelines for how to use the POWER Standard. The proposal is currently under consideration by the POWER PTC.

2015

- *Provided keynote address at the National Sailing Programs Symposium (NSPS) (January 22, 2015).* Support was provided to Capt. Burton during his keynote address updating the community of instructors, program managers and practitioners participating in the NSPS. Conference participants received a strategic update from the Coast Guard and a project update on the On-Water Standards Initiative. Support of the keynote was part of the Project Awareness strategy for preparing the community to use the outcomes of the On-Water Standards Project.
- *Implemented the BETA Test of the HUMAN Standard National Validation Program (January 30-February 1, 2015).* The University of South Florida St. Petersburg hosted the BETA test used to pilot the HUMAN Standard National Validation Program protocol and tools. The implemented team included 12 Standard Evaluators from the HUMAN domain of recreational craft operation and involved 12 beginner level craft operators. The results of the test were analyzed to identify and recommend changes to the HUMAN Standard, the Rubrics used to assess performance on the Standard, and the protocol and tools used to collect data on the HUMAN Standard.
- *Initiated formal review and vote of POWER PTC on the document that contains the POWER Standard separated from the Rubrics.* The updated POWER Standard Document was posted on ABYC's website for review and a vote by the POWER PTC. The PTC is voting on whether to accept the updated document as the version to put forward to ANSI for approval. The review and Ballot period ended March 22, 2015. The votes and comments will be collected analyzed and shared with the POWER PTC to develop responses for addressing any potential changes recommended to the document.
- *Approved HUMAN Standard and Rubrics Version 3.* The HUMAN SME Team members approved Version 3 of the HUMAN Standard and Rubrics. Although a number of the Standard elements and Rubrics were updated, the number of HUMAN Standard Elements and Rubrics remains the same at 29. The recommended changes, along with changes resulting from comments provided by SMEs during the vote, resulted in the updated document, and that the HUMAN Standard (Version 3) be used in the National Validation Program being used to develop Version 4. This Validation project is planned to be implemented from March 2015 through July 2015.

- *Delivered the first of 6 HUMAN Standard National Validation Program test sessions in Charleston, SC. (March 13-15, 2015).* The National Validation Program for the HUMAN Standard continued in March with the delivery of the first of 6 testing sessions designed to collect data on the effectiveness of the HUMAN Standard at differentiating safe from unsafe HUMAN-propelled recreational craft operation. Josh Hall, HUMAN domain Team Leader and Outdoor Program Manager for the **Charleston County Park and Recreation Commission** in Charleston, SC hosted this first session at **James Island County Park**.
- *Attended mandatory presentation of On-Water Standards Grant at IBWSS 2015 in Sandestin, FL. (March 2015)* Designed summary presentation for On-Water Standards grant and attended a one-hour time slot at a grantee shared exhibit booth during IBWSS to answer questions about the grant.
- *Designed and facilitated March Standards Collaboration Initiative Leadership Team meeting during IBWSS 2015 (March 30, 2015).* This meeting included the expanded Collaboration Initiative Leadership Team and focused on conducting a status update on the priority collaboration projects underway and identification of collaboration plans moving forward.
- *Hosted Grantee Networking & Information Sharing Reception (March 30, 2015).* Designed, planned, arranged funding for, marketed and hosted a Recreational Boating Safety Grantee Networking & Information Sharing reception during the Collaboration Meeting to engage others in conversations about potential collaboration across grants. Collaboration Leadership Team attended the reception.
- *Continued Leadership of the Standards Collaboration Initiative.* Our continued leadership of the Collaboration Initiative with designing, planning, facilitation and support of the initiative has resulted in the following developments in 4 months:
 - Two comprehensive Matrices that align Knowledge and Skills-based standards side- by-side along with an analysis of potential conflicts, gaps, and overlaps. Members of NASBLA's ESP and the On-Water Standards Project SME Team worked together to develop the matrices, one for POWER the Standard and one for the HUMAN Standard.
 - Validation data collected on the HUMAN Standard Alignment matrix through the invitation and involvement of a NASBLA BLA in observations of the HUMAN National Validation Program.
 - A process designed and implemented for aligning On-Water Skills and Classroom Knowledge Standards through the use of the On-Water Skills focused HUMAN National Validation Program to collect Knowledge test data.
 - First draft of new format and design structure proposed for NASBLA's SAIL Knowledge Standard Design through facilitation and process design input. Exploration of a potential portal to recreational boating community concept explored using NMMA/Discover boating website.
- *Developed and presented a proposed solution to the OUPV license issue to the MLA (April 30, 2015).* The solution works within the USCG National System of Standards for Recreational Boat Operation and involves implementing a USCG National Recognition System for boating education entities that comply with high quality training standards, follow best practices and instruct using ANS standards. Plans are underway by the MLA to investigate the legality of such an OUPV licensing umbrella concept that would be implemented in conjunction with the National System of Standards for Recreational Boat Operation.
- *Completed HUMAN Standard National Validation Program Data Collection Session 2 of 6 (May 1-3, 2015).* The New Orleans Yacht Club hosted the session in New Orleans, LA. On-site contact was Ed Huntsman, Eighth Coast Guard District, US Coast Guard, Recreational Boating Safety Specialist; with participation from the New Orleans Fire Department, the Louisiana Department of Wildlife and Fisheries, and the New Orleans Power Squadron; as well as individuals with a variety of different organizational affiliations.
- *Held a POWER PTC WebEx meeting to review POWER Standard document comments (May 5, 2015).* The POWER PTC reviewed 39 comments received during the Public Comment and Ballot period and approved the approach to resolve each comment. PTC consensus approval of the POWER Standard document was

maintained with the POWER Standard document now currently under its 45-day review period with ABYC's Technical Board. If the Technical Board review results in no comments preventing publication, the POWER Standard document will be submitted to ANSI for approval as an American National Standard (ANS).

- *Completed HUMAN Standard National Validation Program Data Collection Session 3 of 6 (May 27-28, 2015).* The Thompson Boat Center hosted the session in Washington, DC. A team of 8 experts in the role of Data Collectors observed 9 beginner-level recreational craft operators from a variety of affiliations. A team of 4 local Power Squadrons members provided safety support as Chase boat operators.
- *Planned and conducted a Data Collection protocol demonstration for members of the National Boating Safety Advisory Council (May 28, 2015).* During the Washington, DC Data Collection session, the research team involved at the venue provided a demonstration of the National Validation Program data collection protocol to NBSAC members and members of the public who were attending the NBSAC meeting taking place in the Washington, DC area that week. The purpose of the activity was to provide NBSAC members with a short briefing on the On-Water Standards Project and a first-hand demonstration of the structured and detailed process being used to help validate the national On-Water Standards being developed. The Chesapeake Bay Foundation and the Harbor Patrol Tactical Division, Metropolitan Police Department supported the event.
- *Completed HUMAN Standard National Validation Program Data Collection Session 4 of 6 (June 5-7, 2015).* The Hirsch Conservation Education Area and Biscuit Tank Pond, Ben Avery Shooting Facility hosted the session in Phoenix, AZ. On-site contact was Kim Jackson, Boating & OHV Safety Education Program Manager, Arizona Game and Fish Department Education Branch with the team including experts with a variety of organizational affiliations.

NOTE: To date, 50 Craft Operators have participated in the data collection process thus far. Plans are underway to implement the final two data collection sessions that will take place on July 10-12 in New Haven, CT.

- *Multiple planning meetings have been held to design and prepare the SAIL Standard National Validation Program (March-June, 2015).* Key decisions about the data collection protocol regarding types of representative sail boats and data collection roles have been defined for the unique situation of collecting data on sailboats. The data collection program is anticipated to run from September 2015 to the Spring/Summer of 2016 (requiring a request for extension of the grant award timeline). These validation data collection sessions will be take slightly longer than those in the POWER and HUMAN domains given the nature of sailboats and the number of SAIL Standard elements being validated.
- *Developed first draft of the Technical Support Document (TSD) that will accompany the On-Water Standard Documents (June, 2015).* The three TSDs under development will accompany the National Standards documents for the POWER, SAIL, and HUMAN domains. Their purpose is to function as 'How to...' manuals to guide course developers and trainers in the application of the National On-Water Standards in the design and implementation on On-Water skills-based instruction. This phase of the work is to develop the generic information that will be included within the three TSDs. Once confirmed the unique content for each TSD will be developed. The TSD design structure, along with a comprehensive list of topics to include within the TSD was developed and sent to the SME/PTC for review and input. Once input is received, the TSD Development Team will begin drafting detailed content.
- *Continued Leadership of the Standards Collaboration Initiative (June, 2015).* Our leadership of the Collaboration Initiative continues with design, planning, and facilitation support activities. Plans are underway for the July Collaboration Leadership Team check in meeting along with the September meeting planned to take place before the NASBLA conference. We are also exploring joint presentations at national conferences to create awareness of the collaborative efforts being taken to develop On-Water Skills-based standards alongside Knowledge standards. HUMAN propelled craft Knowledge data continues to be collected as part of

the On- Water HUMAN domain National Validation Program to explore the links between the skills and knowledge-base standards.

- *Conducted final HUMAN domain National Validation Program Data Collection Session at Lighthouse Point Park in New Haven, CT (July 11-12, 2015).* The **City of New Haven Department of Parks, Recreation & Trees** hosted the session. We concluded the data collection with 62 Craft Operators observed by 37 Standard Evaluators. The data is now being compiled and analyzed.
- *Conducted an exploratory SAIL NVP protocol session at the Buffalo Yacht Club, Buffalo, NY (July 21, 2015).* The goal of the half-session was to begin exploring the design of the approach that would be used to validate the SAIL Standard and Rubrics.
- *Launched National On-Water Standards Standard Evaluator Recognition Program (August 5, 2015).* The purpose of the program is to make available individuals with detailed knowledge and experience with the On-Water Standards as coaches who can advise people and organizations on the use of the On-Water Standards in their instructional programming.
- *Conducted SAIL ALPHA test at Buffalo Yacht Club, Buffalo, NY (August 24, 2015).* The focus of this event was to test some of the design concepts and tools that were planned for use within the SAIL NVP protocol. The event involved 2 Standard Evaluators, 1 powerboat driver, 2 grant administration team members, and 2 intermediate sailboat operators.
- *Made a change to the process of review by SME Team members (September, 2015).* A slight change in the process of reviewing results of the HUMAN National Validation program was implemented. The new approach provides the entire SME Team an opportunity to review the results of the work done within a particular domain in order to be updated on progress, as well as to provide input and comments before going to formal vote by the domain specific members of the SME.
- *Implemented the BETA Test of the SAIL Standard National Validation Program (September 24-26, 2015).* **BaySail on the Chesapeake**, at the **Tidewater Marina** in Havre de Grace, MD hosted the BETA test used to pilot the SAIL Standard National Validation Program protocol and tools. The implementation team included 5 Standard Evaluators from the SAIL domain of recreational boat operation, 3 powerboat drivers, 3 beginner level sailboat operators and 2 grant administration team members. The results of the test are being analyzed to identify and recommend changes to the SAIL Standard, the Rubrics used to assess performance on the Standard, and the protocol and tools used to collect data on the SAIL Standard.
- *Continued Leadership of the Standards Collaboration Initiative (April-September, 2015).*
 - Designed and facilitated Leadership Team Status Check-in conference call (July 17, 2015). This meeting included the expanded Collaboration Initiative Leadership Team and focused on conducting a status update on the priority collaboration projects underway and explored the need for a September planning meeting of the Leadership Team. The decision was to hold the September meeting.
 - Designed and facilitated the September Leadership Team meeting taking place before the NASBLA Annual Conference in Wichita, KS (September 12, 2015). This meeting included the expanded Collaboration Initiative Leadership Team and focused on identifying the next wave of priority collaboration projects for the Leadership Team. The meeting resulted in agreement to continue collaboration initiative (beyond Coast Guards original request) and the identification of 4 to 5 potential projects to take on.
 - Co-designed and co-delivered presentation on Knowledge and Skills alignment work at NASBLA's Annual Conference in Wichita, KS (September 14, 2015). The presentation updated participants on the current status of work to align the Knowledge and Skills Standards being developed.

- Co-designed and co-delivered presentation on NASBLA's conformity assessment program (September 15, 2015). The presentation informed participants about NASBLA's new grant initiative to develop a conformity assessment program for the On- Water Skills standards. It also shared information about how the National On-Water Standards Standard Evaluator Recognition program would be involved.
- *Approved HUMAN Standard and Rubrics Version 4 (October, 2015)*. The HUMAN SME Team members approved Version 4 of the HUMAN Standard and Rubrics. The Standard elements and Rubrics were updated, with number of HUMAN Standard Elements and Rubrics now at 27 fundamental skills (two elements were removed as they were originally repeated in the standard for emphasis). The recommended changes to the document, along with changes resulting from comments provided during the vote, now represent Version 4. The HUMAN Standard document is will now be introduced within an ANSI-approved process to approve their use as an American National Standard and engage in their continuous improvement through the ANSI maintenance process.
- *Held grant management meeting to plan Summit V (October 11, 2015)*. Conducted all- day grant management team meeting to design details of Summit V, confirm key messages and prepare for a presentation by John Adey of ABYC on the role of American National Standards.
- *Co-designed and co-delivered presentation on Knowledge and Skills alignment work at the American Canoe Association's Annual Instructor Trainer Conference in Charleston, SC (October 14, 2015)*. The presentation updated participants on the current status of work to align the Knowledge and Skills Standards being developed.
- *Co-delivered Webinar on Knowledge and Skills alignment work (October 29, 2015)*. The webinar updated participants on the current status of work to align the Knowledge and Skills Standards being developed.
- ***Approval of the On-Water POWER Standard as American National Standard (November 12, 2015)***. EDU-1 On-Water Power Standard was approved by the American National Standards Institute as the first of three proposed skills-based American National Standards (ANS) for On-Water instruction in recreational boating safety. The event marks the accomplishments of the first of three main deliverables of the On- Water Standards Initiative; 4 years and 1 month after the work began.
- *Approved SAIL Standard and Rubrics Version 3 (November, 2015)*. The SAIL SME Team members approved Version 3 of the SAIL Standard and Rubrics. The key changes to the draft standard included a reduction in the number of elements and rubrics from 44 to 37. The recommended changes, along with changes resulting from comments provided by SMEs during the vote, resulted in the updated document, and that the SAIL Standard (Version 3) be used in the National Validation Program being used to develop Version 4. This Validation project is planned for implementation from November 2015 through June 2016.
- *Delivered the first of 6 SAIL Standard National Validation Program data-collection events in Newport Beach, CA (November 8-13, 2015)*. The National Validation Program for the SAIL Standard continued this month with the delivery of the first of 6 testing sessions designed to collect data on the effectiveness of the SAIL Standard at differentiating safe from unsafe recreational sailboat operation. The event was hosted by The School of Sailing & Seamanship, Orange Coast College and involved a team of 40 people including 16 certified sailing instructors, 10 powerboat drivers and 14 beginner-level sailors. Dr. Risto Marttinen, member of the On-Water Standards Research Team, also joined the team for one day of the event to experience first-hand the process used to collect data and to educate the team on the implications of that process on their role and responsibilities.
- *Developed draft concept for self-certification conformity assessment (November 2015)*. The draft concept included a recommended approach on how people and organizations can engage in a self-certification conformity assessment of the On-Water Standards. This concept reflects the US Coast Guard's strategy of

enabling self- certification of the On-Water American National Standards to facilitate the wide distribution and compliance with the On-Water Standards.

- *Developed updated design and draft of the Technical Support Documents (TSD) that will accompany On-Water American National Standards (November 2015).* The draft included feedback from the SME Team on core content, the recommended approach for self-certification conformity assessment of the On-Water Standards, and the addition of a chapter focused on bringing the Standards to life. These sections are designed to increase the likelihood of individuals and organizations using the On-Water Standards within their work.
- *Updated On-Water Standards Project website and social media campaign via Twitter (November 2015).* Updated the design of the Project website and Twitter feed to include more information about current activities of the project, and access to current drafts of the standard (including the newly approved On-Water POWER American National Standard).
- *Held a 2-day On-Water Standards Summit V (November 19-20, 2015).* Summit V was held in Annapolis, MD in which members of the On-Water SME/POWER Project Technical Committee (PTC) teams met to continue making progress on the development of the Standards & Rubrics for the POWER, SAIL, and HUMAN domains of recreational boat operation. The primary outcomes of Summit included the following:
 - PTC members aware of the current status of the On-Water Standards development PTC team aware of the draft approach for using an American National Standard (ANS)
 - PTC feedback on plans for enabling self-certification of the On-Water ANS
 - PTC feedback on the draft marketing approach being planned to create awareness of the On-Water ANS
 - Key messages that might be included within the marketing approach for the On- Water ANSs
 - Established new TSD development sub-team to develop the TSD 1-Pagers for each domain
 - Completed drafts of the 1-pagers that will be included within the TSDs under development
 - A plan for completing the remaining TSD 1-Pagers
- *Designed and facilitated the November Collaboration Leadership Team meeting taking place after the On-Water Standards Summit V in Annapolis, MD (November 20, 2015).* This meeting included the expanded Collaboration Initiative Leadership Team and focused on defining and confirming the next wave of priority collaboration projects for the Leadership Team. Main topics of discussion included:
 - Conformity Assessment and Marketing
 - SAIL Standards National Validation Program – Interaction of Knowledge and Skills
 - Incentivizing Existing Groups to Use the Standards

Additionally, the Leadership Team agreed to pursue the two main actions below. The next meeting of the Collaboration Leadership Team has been scheduled during IBWSS on Monday, March 7, 2016 from 5:30 pm – 8:00 pm.

1. Use the On-Water Standard Evaluators in late January for Verification Mark activities (Pam Dillon, Jeff Riecks, Rich Jepsen, Joanne Dorval).
 2. Develop a framework for standards board concept (Chris Edmonston, Tom Knighten, Rich Jepsen, Joanne Dorval)
- *Co-delivered Webinar on NASBLA's conformity assessment program (December 1, 2015).* The webinar informed participants about NASBLA's new grant initiative to develop a conformity assessment program for the On-Water Skills standards. It also shared information about how the National On-Water Standards Standard Evaluator Recognition program would be involved.
 - *Confirmed five remaining sites for the SAIL National Validation Program (NVP) (December 2015).* Confirmed timeframe, locations and commitments for the five remaining SAIL NVP Venues that will host the field-testing

and data collection on the effectiveness of the draft On-Water SAIL Standard to differentiate safe from unsafe entry-level recreational sailboat operators.

- *Provided input into the content and structure of the National RBS Program Strategic Plan under development (November 29; December 5, 13, 2015).* Provided multiple rounds of coaching and feedback designed to help ensure the components of the plan's content and design were complete, comprehensive and effective for functioning as a strategic plan.

2016

- *Conducted Buffalo Planning Meeting (January 1-2, 2016).* The primary focus of the meeting was planning and preparation for the upcoming strategic planning work group meeting for NBSAC. The goal was to ensure clear and focused feedback could be provided on the current draft of the Strategic Plan.
- *Represented On-Water Standards Content during the Strategic Planning Work Group Meeting (January 4-5, 2016).* The purpose of the meeting was to advance drafting of the 2017-2021 Strategic Plan of the USCG's Office of Auxiliary and Boating Safety. Joanne M. Dorval, On-Water Standards Project Administrator attended to provide expertise on the plan approach as a whole and offer content guidance, in consort with Pam Dillon of the Education Standards Panel, on the Education, Training and Outreach initiative within the draft plan.
- *Conducted Buffalo, NY Planning Meeting (February 5-7, 2016).* The focus of the meeting was planning the next wave of developments for the On-Water Standards Project. Included in the work was developing an outline for an article on the *National System of Standards for Recreational Boat Operation* to be included in the US Coast Guard's *Proceedings* magazine and mapping out the next layer of detail for the 2016 US Coast Guard grants submission.
- *Conducted a Washington, DC Planning Meeting (February 24-25 2016).* The focus of the meeting was to detail the design of the collaboration concept to be included in a Coast Guard grant application as a way to formalize the recreational boating leadership collaboration initiative going forward. During the meeting, a concept for the next phase of the On-Water Standards Project was developed to be included within a Coast Guard separate grant submission.
- *Planned, designed and delivered Standards Leadership Collaboration Team Meeting (March 6-8, 2016).* The Standards Collaboration Leadership team continued its work to create synergy across each other's grant activities. The meeting took place during IBWSS 2016. Along with work continued on existing projects, the meeting involved exploration of a new concept to formalize the collaboration initiative going forward.
- *Delivered the second SAIL Standard National Validation Program data-collection event (March 13-19, 2016).* The in-field validation event took place at Shake-A-Leg – Miami, FL with a team including 11 certified sailing instructors or instructor level individuals, 12 powerboat drivers, and 13 beginner-level sailors, operating a sailing dinghy or keelboat.
- *Initiated HUMAN Standard ABYC ANSI-approved process (March 21, 2016).* The HUMAN Standard entered the final stage of completion as an American National Standard (ANS). The draft standard is currently out for public review and comment; the comment period will close on May 6. The On-Water Project Technical Committee (PTC) will then convene to review comments and design how best to respond.
- *Wrote and submitted a draft article on the National System of Standards for Recreational Boat Operation for publication in the US Coast Guard's Proceedings magazine (March 22, 2016).* The purpose of the article is to describe the use of the *National System of Standards* as an organizing framework for developing a powerful constituency that will stimulate a culture shift toward safety and enjoyment in recreational boat operation.

- *Wrote and submitted a joint US Coast Guard grant in partnership with NASBLA (March 24, 2016).* The grant management team wrote and submitted a grant to formalize the establishment of a recreational boating collaboration initiative, using process guidance and strategic intent to advance this boating safety culture shift by implementing a *National System of Standards for Recreational Boat Operation (NSS)*. The grant objectives are to enable Standards Configuration Management, Constituency Building, Channel Development, and Standards Marketing for Nationwide Application.
- *Delivered the third SAIL Standard National Validation Program (NVP) data-collection event (April 3-9, 2016).* The third SAIL NVP program event took place at **YMCA Camp Seafarer**, in Arapahoe, NC. The team included 17 certified sailing instructors or instructor level people, 7 powerboat drivers, and 10 beginner-level sailors, operating a sailing dinghy or keelboat.
- *Developed Knowledge and Skills standards harmonization position paper (April 4, 2016).* NASBLA's Education Standards Panel (ESP) raised questions about the intentions of the On-Water Standards Project with respect to development and use of the Knowledge Standards. A short paper was developed to answer their questions in order to promote a shared understanding of the purpose and focus of the On-Water Standards Project and SME Team with respect to the Knowledge and Skills Standards.
- *Prepared and implemented SAIL Knowledge Standard observation Collaboration Initiative activity at the CAMP Seafarer SAIL NVP event (April 4-8).* As part of the Standards Collaboration Initiative, the observation of Sail Knowledge was conducted during the SAIL NVP that took place at YMCA Camp Seafarer. A follow up phone meeting took place with the SAIL Knowledge observers to identify insights about the capacity to observe SAIL knowledge during a SAIL skills demonstration.
- *Participated in an Office of Boating Safety Strategic Planning Workgroup meeting (April 20, 2016).* Joanne Dorval, On-Water Standards Project Administrator, participated in the Office of Boating Safety Strategic Planning group meeting as a member of the team developing the draft next iteration of the Recreational Boating Safety (RBS) Strategic Plan to be published in January 2017.
- *Designed and delivered a National On-Water Standards Project update presentation at the 95th meeting of NBSAC (April 21, 2016).* The goal of the presentation was to provide members of NBSAC with a comprehensive update on the current status of the On-Water Standards Project and what remains to be completed to accomplish the overall goals and objectives of the project.
- *Conducted Buffalo Planning Meeting (April 23-24, 2016).* The focus of the meeting was to plan for the SAIL NVP to take place at the Buffalo Yacht Club (BYC) from June 20-24, 2016. In particular, a framework and plan of action was developed for the milestone celebration that will take place at the close of the event to mark the completion of the final National Validation Program as part of the On-Water Standard Project. The event was to be conducted through sponsor support.
- *Delivered the fourth SAIL Standard National Validation Program data-collection event (May 10-15, 2016).* The in-field validation event took place at the Annapolis Yacht Club with a team including 20 certified sailing instructors or instructor-level people, 7 powerboat drivers, and 16 beginner-level sailors, operating a keelboat. The Standards Collaboration Initiative activity focused on exploring the direct observation of sail knowledge during sailing skills-based demonstration continued at this event.
- *Moved the HUMAN Standard into the final phase of the ABYC ANSI-approved process (June 8, 2016).* The HUMAN Standard entered the last part of the work to gain consensus on its readiness to be published as an American National Standard (ANS). The draft standard is currently out for Consensus Ballot and Public Review; the comment period will close on August 8, 2016. The On-Water Project Technical Committee (PTC) will then convene to review comments and design how best to respond.

- *Delivered the fifth and final SAIL Standard National Validation Program data-collection event (June 20-24, 2016).* The in-field validation event took place at the Buffalo Yacht Club with a team including 13 certified sailing instructors or instructor-level people, 6 powerboat drivers, and 9 beginner-level sailors, operating a sailing dinghy. The Standards Collaboration Initiative activity focused on exploring the direct observation of sail knowledge during sailing skills-based demonstration continued at this event. This event also concluded the SAIL National Validation Program and the last of the field-testing events for the entire National On-Water Standards Project. As part of the event, a milestone celebration was held funded through sponsor support.
- *Processed all the data collected during the SAIL National Validation Program (NVP) (June 2016).* The data was prepared/analyzed and a report on the results and recommendations was shared with the SME Team. The report and recommendations are currently under review by the SME Team.
- *Refreshed the National On-Water Standards Website. (July 2016).* Made extensive updates to the website documentation, design and structure to provide access to more updated information about the project. Additionally, documentation from the Standards Collaboration Initiative was added to the site.
- *Completed HUMAN National Validation Program Data Collection participation acknowledgement.* Sent six venues acknowledgment for their role in the National Validation Program for the HUMAN Standard.
- *Approved SAIL Standard and Rubrics Version 4 (August 2016).* The SAIL SME Team members approved Version 4 of the SAIL Standard and Rubrics. The Standard elements and Rubrics were updated, with number of SAIL Standard Elements and Rubrics now at 37 fundamental skills (two elements were removed as they were originally repeated in the standard for emphasis). The recommended changes to the document, along with changes resulting from comments provided during the vote, now represent Version 4. The SAIL Standard document is will now be introduced within an ANSI-approved process to approve their use as an American National Standard and engage in their continuous improvement through the ANSI maintenance process.
- *Provided coaching to Jeff Riecks and Chris Edmonston on approach for gaining acceptance for new Knowledge Standard approach (August 2016).* Had a phone meeting with Jeff Riecks (NABLA's ESP member and NOWS SME Team member) and Chris Edmonston (Current Chair of NASBLA's ESP). The purpose of the meeting was to provide input, guidance and coaching on how they can best position an idea to ESP for using NOWS process, structures, concepts and language to reformat and refocus the development of the HUMAN knowledge Standard (and other knowledge domain standards as well). We also provided support and feedback on the written document used to help structure messaging for ESP. This support included the NOWS Project providing permission for Chris and Jeff to use sample pages from the NOWS Project TSD under development within the document.
- *Designed approach for initiating and developing Instructional Approach Standard (IAS) (August 19-20, 2016).* Develop the concept, purpose, deliverables, agenda and prework for Summit VI, the focus of which is to initiate development of the On-Water Instructional Approach Standard with the NOWS SME Core Team. Developed the purpose, scope and framework of the approach that will be used to structure the On-Water Instructional Approach Standard (IAS), including the framework for using the 5-version development process to develop, field test and gain ANS status for the On-Water Instructional Process Standard.
- *Initiated communication with key organizations regarding development of an inclusive approach to maintenance of the On-Water Standards process (August 2016).* Began communications with ABYC, NASBLA and US Sailing about potential involvement in the maintenance program of the National On-Water Standards.
- *Sent 1-pagers for the HUMAN Standard Technical Support Document (TSD) to SME Team for review (August 2016).* The 1-pagers (detailed descriptions related to each element in the standard) for the HUMAN TSD were sent to full SME Team for review and feedback. The feedback will be used to update and send for final review the TSD HUMAN Standard 1 pagers.

- *Provided NOWS Program briefing to the USCG (September 2016).* Provided a 2-hour update meeting on the status of the NOWS Project to Jeff Decker. The purpose of the briefing was to update Jeff as the grant technical manager for the NOWS Program work moving forward.
- *Made arrangements for change in NOWS development process that would have enabled POWER TSD Draft to be shared with NASBLA's Education Standards Panel (September 2016).* As a result of the request of NASBLA's ESP to review the draft POWER TSD, a plan was developed and implemented to get approval of the NOWS SME Core Team to share an incomplete draft of the POWER Technical Support Document (TSD) with the ESP. Doing so required a change in the 5-year development process that has been used to produce standards and out product outputs from the NOWS Program. Approval was given by the NOWS SME team under these conditions: a) If NASBLA's ESP decides to align its TSD with the scope, format or structure, in whole or in part, of the NOWS Program TSD, appropriate credit and reference to the National On-Water Standards (NOWS) Program and its SME Team would need to be made explicit and visible in the Knowledge TSD; and b) If NASBLA's ESP becomes interested in using any of the content of the NOWS Program POWER TSD in its work, it must receive permission from the NOWS Program Management Team prior to doing so. However, these two conditions were not accepted. Therefore, the draft POWER TSD was not shared with the ESP.
- *Cancelled September Collaboration meeting that was to be hosted by NASBLA (September 2016).* The meeting was cancelled and plans initiated for US Sailing to host the next Collaboration Meeting after its Summit in November.
- *Confirmed agreement for continued ABYC/US Sailing partnership to provide ANSI hosting of the On-Water Standards.* ABYC will continue to serve as the ANSI Accredited Standards Developer for the two On-Water ANS Skills-based standards (POWER & HUMAN), will publish two additional standards (SAIL and instructional standards), and will maintain those standards for five years.
- *Approved final draft of an article on the National System of Standards for Recreational Boat Operation for publication in the US Coast Guard's Proceedings Magazine (October 2016).* The purpose of the article is to define and describe the use of the *National System of Standards* as an organizing framework for developing a powerful constituency that will stimulate a culture shift toward safety in recreational boat operation.
- *Designed and delivered a National On-Water Standards Project update presentation at the 95th meeting of NBSAC.* The goal of the NOWS presentation was to provide members of NBSAC with a comprehensive update on the current status of the On-Water Standards Project and what remains to be completed to accomplish the overall goals and objectives of this standards development project.
- *Approval of the On-Water HUMAN-propelled Standard as American National Standard (October 11, 2016).* EDU-2 On-Water Human-propelled Standard was approved by the American National Standards Institute (ANSI) as an American National Standard (ANS) for On-Water instruction in recreational boating safety. The event marks the accomplishments of the second of three main deliverables of the National On-Water Standards Program; 5 years and 2 months after the work began.
- *Initiated Recognized Standard Evaluators Database for SAIL On-Water Standard (November 2016).* The On-Water Skills Standard Evaluator Recognition Program database for the SAIL domain was released as part of the US Coast Guard's priority strategy to finish, organize and ensure use of the National Recreational Boating Knowledge and Skills standards in the field. The database includes information about people specially trained in the use of the SAIL Standard and assessment rubrics who can serve as coaches for designing instructional programming aimed at meeting the SAIL On-Water Standard under development.
- *Prepared and delivered Summit VI (annual meeting of the NOWS SME Team and the On-Water PTC on November 17-18, 2016) [2014 & 2016 grant activity].* The focus of the two-day meeting was to initiate development of the Instructional Approach Standard (IAS) that will be used as a framework to help education

providers with varying levels of experience design and deliver high quality On- Water Instruction. The SME Team was briefed on the updated status of the project and produced a draft set of 35 potential elements to include within the IAS. Plans were put in place to move forward on the draft produced at the Summit.

- *Prepared and facilitated the last scheduled Standards Collaboration Initiative Leadership Team meeting (November 18, 2016).* The purpose of the meeting was to share the status of collaboration projects underway and to get the help of the team in overcoming obstacles needing attention on the projects. The purpose was also to determine if and how to continue the collaboration effort. Since its inception, US Sailing grants from the USCG have been the source of funding for general management and facilitation of the collaboration Initiative. After this meeting, US Sailing would no longer have grant dollars to fund the Process Facilitation/Initiative Manager role that stimulated its productivity (US Sailing provided over 380+ hours of general facilitation/ management support.). All team members present indicated a desire to continue collaboration in some form – but with a mix of responses in how formal. Some wanted to continue using a deliberate managed approach, others said they could go either way and did want to commit to any particular approach. A plan was put in place to explore ways to acquire continued funding to support collaboration.
- *Sent final draft of the POWER Standard Technical Support Document (December 20, 2016) to the Coast Guard for review and approval.* The POWER TSD will serve as a comprehensive How to... guide for education providers interested in developing high quality On-Water Skills-based instruction in recreational powerboat operation. Once approved by the Coast Guard, it will be made freely available to the recreational boating community.
- *Developed first updated draft of the IAS (December 20, 2016) [2014 & 2016 grant activity].* The draft was produced by an SME IAS Sub Team using the outputs from the November 2016 Summit VI and sent to the SME for review and feedback. The current version contains 23 elements consolidated from the 35 elements contained in the version produced at Summit VI.
- *Published POWER Standard Technical Support Document (January 20, 2017) after final review and approval by the Coast Guard.* The POWER TSD will serve as a comprehensive How to... guide for education providers interested in developing high quality On-Water Skills-based instruction in recreational powerboat operation. Once approved by the Coast Guard, it will be made freely available to the recreational boating community.
- *Published HUMAN Standard Technical Support Document (January 27, 2017) after final review and approval by the Coast Guard.* The HUMAN TSD will serve as a comprehensive How to... guide for education providers interested in developing high quality On-Water Skills-based instruction in recreational Human-propelled craft operation.
- *Developed Instructional Approach Standard (IAS) Version 1 (February 3, 2017).* The NOWS SME Team reviewed and approved the updated draft of the IAS document as IAS Version 2. A National Content Validation Program will now be implemented to test the content of the IAS with subject matter experts outside the SME Team.
- *SAIL Standard (Version 4) entered the final of its development within ABYC's ANSI-approved process (February 1, 2017). The document will be out for Consensus Ballot and public review for 45 days. At that time, any comments will be shared with the On-Water Project Technical Committee (PTC).*
- *Conducted National Content Validation program for the Instructional Approach Standard (IAS) (March 2, 2017).* IAS Version 1, produced by an SME was sent out via national survey for review and feedback. Over 100 respondents provided comments. Comments were analyzed and shared with the IAS Sub Team to establish recommended changes to the IAS based on the survey results. The updated document with recommendations was shared with the SME for review and vote.

- *Completed IAS Version 2 (March 3, 2017).* The NOWS SME Team reviewed and approved the updated version of the IAS document as IAS Version 2. This version of the document will now be used for field-testing.
- *Conducted IAS Alpha and Beta test events in the Florida Keys (March 6-10, 2017).* The focus of these events was to test the design concepts and tools that were planned for use within the IAS NVP research protocol. The Alpha test was conducted at *Paddle the Florida Keys*, a Paddle rental facility, and the Beta Test as *Sunshine Coast Adventures Sailing*, a small sailing school. *MiraMar Adventures* hosted the overall event. The event team involved 4 Standard Evaluators, 1 powerboat driver, and 4 grant administration team members. The team's recommended changes to the IAS were analyzed and shared with the IAS Sub Team to confirm recommended changes to the IAS. The updated document with recommendations was shared with the SME for review, input, and a vote.
- *Completed IAS Version 3 (March 25, 2017).* The NOWS SME Team reviewed and approved the updated version of the IAS document as IAS Version 3. This version of the document will now be used for field-testing.
- *Conducted IAS National Validation Program Field Testing test event in Miami FL (April 11-14, 2017).* The focus of these events was to collect data on the effectiveness of the IAS Version 3. Data collection events took place at three different venues: Shake-A-Leg Miami (with review of the Spirit of American program that involved instruction in POWER, SAIL and HUMAN-propelled craft operation), Virginia Key Outdoor Center (a paddle sports rental facility that provided lessons), and Team Paradise Sailing (a small sailing school). Shake-A-Leg Miami and Spirit of America hosted the overall event. The event team included 9 Standard Evaluators, 3 powerboat drivers, and 5 grant administration team members. Team recommended changes are being analyzed and will be used during the next National Validation Program Field Testing test event scheduled for Washington, DC, May 13-15, 2017).
- *Announced to the SME the initiation of the Standards Verification Program (April 19, 2017).* We shared information with the SME about the strategy and approach NOWS would be taking to develop a coordinated approach with NASBLA to make available a three-tiered set of options for engaging in NOWS conformity assessment.
- *Sent promotional information for NASBLA's approach to 3rd-party conformity assessment to the NOWS population of certified instructors (April 21, 2017).* We shared information with the group and encouraged them to participate in NASBLA's work with verification.
- *Supported IAS update presentation provided by Jeff Riecks during NASBLA's ESP meeting on April 20-21, 2017.* As part of the on-going collaboration activities between NOWS and ESP, we provided the support information and materials to update the ESP on our progress with the Instructional Approach Standard as input for their work on developing Knowledge-based standards.
- *Provided a presentation called Changing Culture! Shift happens during the 21st International Boating and Water Safety Summit, Hilton St. Petersburg Bayfront; St. Petersburg, FL (April 24, 2017).* The presentation was designed to present the National System of Standards as a vehicle to stimulate the culture shift in recreational boating that is a central part of the 2017 Strategic Plan.
- *Provided a presentation called National On-Water Standards Program Grant Update during the 21st International Boating and Water Safety Summit, Hilton St. Petersburg Bayfront; St. Petersburg, FL (April 24, 2017).* This presentation was provided by request of the USCG that all grantees share their work during IBWSS.
- *Designed and implemented the NOWS Program's first conference public appearance as a both provider during the 21st International Boating and Water Safety Summit, Hilton St. Petersburg Bayfront; St. Petersburg, FL (April 23-26, 2017).* The three-booth display provided conference participants with information about the

NOWS Program, the standards and tools developed to support the, and coaching on how education providers can use the standards and tools to help develop their skills-based programs.

- *Supported IAS update presentation provided by Cecilia Duer during Spirit of America's annual meeting (May, 2017).* As part of the on-going collaboration activities between NOWS and ESP, we provided the support information and materials to update the ESP on our progress with the Instructional Approach Standard as input for their work on developing Knowledge-based standards.
- *Conducted IAS National Validation Program Field Testing test event in Washington DC (May 13-14, 2017).* The focus of these events was to collect data on the effectiveness of the IAS Version 3. Data collection events took place at two different venues: Key Bridge/Thompson Boathouse on May 13 and DC SAIL on May 14. The event team included 8 Standard Evaluators, 1 powerboat driver, and 3 grant administration team members.
- ***Approval of the On-Water SAIL Standard as American National Standard (May 25, 2017).*** EDU-3 On-Water Sailboat Standard was approved by the American National Standards Institute (ANSI) as an American National Standard (ANS) for On-Water instruction in recreational boating safety. The event marks the accomplishment of the third of three main deliverables of the National On-Water Standards Program. The approved standard is being used to update its accompanying technical support document.
- *Conducted Buffalo Planning Meeting (June 3-4, 2017).* The focus of the meeting was to continue planning for completion of the SAIL TSD, common skill elements across the standards, and the coordinated NOWS Standards Verification program. The work meeting also focused on completing IAS Version 5 and developing the IAS TSD that will accompany it. The third focus was to plan the marketing activities for NOWS and its implications for the design and implementation of the 2017 NOWS SME Summit.
- *Sent final draft of the SAIL Standard Technical Support Document to the Coast Guard for review and approval (June 6, 2017).* The SAIL TSD will serve as a comprehensive How to... guide for education providers interested in developing high quality On-Water Skills-based instruction in recreational sailboat operation. Once approved by the Coast Guard, it will be made freely available to the recreational boating community.
- *Coordinated approach to Standards Verification Toolbox Content (June 2017).* Worked with ABYC to review potential tools for the 1st and 2nd level assessments while ensuring that all three levels of standards verification are aligned. Potential components of that toolbox include:
 - a decision guide – including the pros and cons for each verification level, criteria for a course provider to make a decision about which level to pursue [time, need, cost], etc.
 - A user-friendly process guide to implement conformity assessment at each level
 - Support materials including forms, checklists, other resources etc. that would enable people across the county to implement the verification process they choose.
- *Completed IAS Version 4 (June 20, 2017).* The NOWS SME Team reviewed and voted to approve the recommended changes to the IAS provided by the IAS Sub-team. The resulting document is Version 4 and will be sent to ABYC to enter the final phase of development and approval as an American National Standard.
- *Initiated development of IAS Version 5 (June 22, 2017).* The IAS was sent out for public review and comment as part of the ABYC approach to ANS development. Feedback and comments will be collected and analyzed for potential changes to the IAS. If not significant changes are made, the IAS will be sent out again for Public Review and Consensus Ballot.
- *Published SAIL Standard Technical Support Document (July 7, 2017) after final review and approval by the Coast Guard.* The SAIL TSD will serve as a comprehensive How to... guide for education providers interested in developing high quality On-Water Skills-based instruction in recreational sailboat operation.

- *USCG Auxiliary Update (August, 25, 2017).* Supported Dick Allsopp in preparation of briefing for the USCG Auxiliary on the current status of the NOWS Program.
- *Preparation of USCG NOWS Program Update (August 28, 2017).* Held planning meeting in Washington DC to prepare the design and presentation materials for briefing the USCG on the current status of the NOWS Program.
- *Instructional Approach Standard (IAS) entered the Public Review and Consensus Ballot Stage (August 31, 2017).* The IAS was transition from the Public Review Stage to the Public Review and Consensus Ballot Stage providing the Project Technical Committee (PTC) members the opportunity to cast their vote to reach consensus on the final draft of the IAS.
- *Initiated NOWS Program Summit VII planning (September 2, 2017).* During a Buffalo planning meeting, developed a series of awareness and update presentations that would be used to bring other groups up to speed on the current status of the NOWS Program.
- *Provided NASBLA's Education Standards Panel (ESP) a NOWS Program Update (September 8, 2017).* Brian Dorval provided NASBLA's ESP with an update presentation on the current status of the Instructional Approach Standard (IAS) under development by the NOWS Program at the request of Pam Dillon.
- *Provided National Safe Boating Council (NSBC) NOWS Program Update (September 26, 2017).* Joanne Dorval provided NSBC an update presentation on the current status of the Instructional Approach Standard (IAS) under development by the NOWS Program at the request of Virgil Chambers.
- *Submitted request for a joint presentation to IBWSS (September 15, 2017).* Joanne Dorval of NOWS and Pam Dillon of NASBLA submitted a request for conducting a joint presentation to provide an update on Knowledge and Skills-based American National Standards for Recreational boating Instruction. Waiting to hear if the presentation has been accepted by IBWSS.

Current Status: National On-Water Standards Program

Outcomes thus far: To date, the National On-Water Standards Program has produced the following:

- **POWER Standard Version 5 (FINAL). Approved as an American National Standard on November 12, 2015** (contains 35 entry-level skills for operating recreational powerboat)
- **POWER Rubrics FINAL** (a 3-level set of descriptions used to assess the performance of each Standard element ready for integration within the Technical Support Document (TSD) that will function as a "How to..." guide for course designers interested in using the POWER Standard in their work.
- **POWER Rubrics CHECKLIST (FINAL)** (a tool validated to help sort safe from un-safe powerboat operation)
- **HUMAN Standard Version 5 (FINAL). Approved as an American National Standard on October 11, 2016** (contains 27 entry-level skills for operating recreational HUMAN-propelled craft)
- **HUMAN Rubrics (FINAL)** (a 3-level set of descriptions used to assess the performance of each Standard element ready for integration within the Technical Support Document (TSD) that will function as a "How to..." guide for course designers interested in using the HUMAN domain Standard in their work.
- **SAIL Standard Version 5 (FINAL). Approved as an American National Standard on May 25, 2017** (contains 36 entry-level skills for operating recreational sailboat)
- **SAIL Rubrics Version (FINAL)** (a 3-level set of descriptions used to assess the performance of each Standard element ready for integration within the Technical Support Document (TSD) that will function as a "How to..." guide for course designers interested in using the SAIL Standard in their work.)

- **Set of 26 Common Standard elements Version 2.** These standard elements (Part A: skill) are common across all three domains of SAIL, POWER, and HUMAN-propelled recreational boat operation.
- **Instructional Approach Standard (Version 4 of 5).** In the final stages of approval as an American National Standard. Contains 14 characteristics of an approach to On-Water education in POWER, SAIL or HUMAN-propelled recreational boat operation.

Plans going forward. The graphic below identifies what has been accomplished since 2011 and plans underway to continue development of the National System of Standards.

