

SUMMER 2015

# NESDI NEWS

## *Highlights & Happenings*



### IN THIS ISSUE:



### Welcome!

This quarterly update provides you with the latest information about program operations, significant accomplishments, and future focus areas for the Navy Environmental Sustainability Development to Integration (NESDI) program. We hope you will find these insights useful and that they encourage you to participate (or increase your involvement) in the program over the coming months.

### Who We Are

The NESDI program is the Navy's environmental research and development demonstration and validation (6.4) program, sponsored by the Chief of Naval Operations Energy and Environmental Readiness Division (OPNAV N45) and managed by the Naval Facilities Engineering Command (NAVFAC) out of the Engineering and Expeditionary Warfare Center in Port Hueneme, California. The mission of the program is to provide solutions by demonstrating, validating, and integrating innovative technologies, processes, materials, and by filling knowledge gaps to minimize operational environmental risks, constraints, and costs while ensuring Fleet readiness.

[www.nesdi.navy.mil](http://www.nesdi.navy.mil)

The NESDI Program: Integrating Green Technologies Into the Fleet



## From the Program Manager's Desk

Welcome to the summer 2015 issue of *NESDI News*: Highlights & Happenings—part of our ongoing effort to keep you informed about the NESDI program.



**Ken Kaempffe**  
Program Manager

In an effort to identify collaboration opportunities with other research and development organizations and programs, Cindy Webber, Bruce McCaffrey and I visited the Washington, DC area earlier this month. The purpose of this trip was to meet with a number of people

from a variety of organizations to identify potential areas of collaboration and resource leveraging with the NESDI program. Among the people and organizations we visited during this trip are the Marine Corps headquarters environmental director and staff, personnel from the National Defense Center for Energy and Environment/U.S. Army Research, Development and Engineering Command, research scientists and a senior executive from the Naval Research Laboratory, a senior manager at NAVFAC Headquarters, several managers from the headquarters component of the Naval Sea Systems Command, as well as a number of managers and staff people from the Engineer Research and Development Center, U.S. Army Corps of Engineers.

I'm confident that these face-to-face sessions will benefit the NESDI program as we continue to struggle with limited financial resources and an ever-increasing demand for the demonstration and validation services that we provide. We're already scheduling follow-up

sessions to focus on shared environmental requirements including the elimination of the use of hexavalent chromium and other toxic substances.

The next major milestone on our schedule is the execution of our needs solicitation process for FY16. Although you can submit a need at any time, our formal needs collection process runs from 1 June until 3 August this year. (See our "Program Schedule" in this issue of *NESDI News* for more insights.) So if you want to submit a need for consideration as part of our FY16 solicitation, you'll have to hurry.

For the NESDI program, a "need" defines a requirement to eliminate or reduce an environmental constraint that:

1. Addresses a Fleet operational challenge
2. Identifies an existing gap in knowledge, technology, and/or capability
3. Is associated with an environmental constraint or regulatory driver

When submitting a need, I encourage you to provide as much information as you can about your issue. What is the problem? How big is it? What's the basis of the problem? Is it due to a current or impending regulatory requirement that now makes your job more difficult? Is it a technology gap? Is it a fleet operational challenge? Is the problem unique to your facility or is it applicable across the Navy?

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For more information about submitting a need, read the "Using Our Web Site" section in this issue of *NESDI News*, visit our web site at [www.nesdi.navy.mil](http://www.nesdi.navy.mil), or contact your TDWG representative.

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## Using Our Web Site

To submit your need, visit the “Environmental Needs” section on the NESDI web site (at [www.nesdi.navy.mil/Needs.aspx](http://www.nesdi.navy.mil/Needs.aspx)) then click on the “Submit Your Need Now” button. This will take you to the “NESDI Environmental Needs Submission Form.”

Navy Environmental Sustainability Development to Integration (NESDI) Program

HOME PROGRAM DETAILS NEEDS PRE-PROPOSALS PROJECTS NESDI NEWS LOGIN

Integrating Green Technologies into the Fleet

### Environmental Needs

All NESDI program decisions are based on environmental needs. An environmental need meets the following conditions:

- Addresses a Fleet operational challenge,
- Impacts a shoreside function such as platform maintenance, facility, and range issues,
- Identifies an existing gap in knowledge, technology, and/or capability,
- Is associated with an environmental constraint or regulatory driver,
- The requirement can be categorized under one of the program's [investment areas](#).

For example, a requirement/need to mitigate risks associated with platform maintenance through the minimization of targeted hazardous materials such as hexavalent chrome.

The need format is defined by the following [\(details\)](#):

- Contact information for the need submitter,
- Title of the need,
- Detailed description of the need,
- Explanation of the ramifications if the need is not met,
- Key Navy policy and regulatory drivers, and
- Suggested solutions to the need

**How to Submit A Need**

Anyone may submit their operational challenges (or needs) for consideration by the NESDI program. All needs must be submitted through the NESDI website via the [Need Submission Form](#). A Microsoft Word [template](#) is available to facilitate offline preparation of needs prior to website submission. When using the template, please consider that special characters and formatting in Word, such as tables and bullets, will be lost when cut, pasted, and submitted to the website.

**Submission Schedule:** To have your need considered in this year's evaluation cycle, it must be submitted by 03 Aug 2015. Needs submitted after this date will be retained and considered in the following year's evaluation cycle.

[Submit Your Need Now](#)

Once a need is submitted, it is [evaluated](#) by subject matter experts assembled by program management. See our [reference guide](#) to learn more about the submission and evaluation process. The program's primary focus is to invest resources in projects that adequately address valid needs resulting in support to overall environmental readiness of the Fleet and the Navy's acquisition communities.

Navy Environmental Sustainability Development to Integration (NESDI) Program

HOME PROGRAM DETAILS NEEDS PRE-PROPOSALS PROJECTS NESDI NEWS LOGIN

### Needs Submission Form [Entry/Descriptions](#)

Your Contact Information (all fields required)

Name:  E-mail:

Address:  Command:

Activity:

Phone:    Ext

Need Description and Context (all fields required)

Title (150 Characters Max)

Description of Need

Explain the ramification(s) if this need is not met (fines, penalties etc.)

Key Policy or Regulatory Drivers

Use this on-line form to tell us everything you can about your need. Then click on the “Submit Need” button to complete the process.

Once you submit your need, technical experts assembled by NESDI program management will assess, validate, and rank it. You will be notified about the ultimate status of your need once this ranking process is complete. If you submitted a need in a previous year and it is still a valid need, please resubmit it via our web site and provide any updated information you may have.

# [www.nesdi.navy.mil](http://www.nesdi.navy.mil)

For more information, download our *Reference Guide: Submitting and Evaluating Needs* by visiting the NESDI web site at [www.nesdi.mil](http://www.nesdi.mil) then clicking on the “Environmental Needs” button. Any other questions about the use of our web site can be directed to Eric Rasmussen, our webmaster, at 732-323-7481 and [eric.rasmussen@navy.mil](mailto:eric.rasmussen@navy.mil).



## New Projects Being Queued Up for FY16 & Beyond

The results of our FY15 needs collection and proposal review processes are in and the program is preparing to invest in a number of new demonstration and validation projects. These 19 projects range from developing a conceptual site model that managers can use to assess the presence of perfluorochemicals at Navy sites to the validation of a method for the rapid and continuous dewatering of sediment. A complete list of the projects that the program will consider funding in FY16 follows:

No.	Full Proposal	Title	Description
1.	160	Initiation Decision Report (IDR) Passive Sampling for Stormwater technologies.	In an effort to improve accuracy and reduce costs of stormwater sampling, this report will assess state-of-the-art sampling
2.	159	Evaluation of Alternative Groundwater Supply Sources from a Safe Drinking Water Act Viewpoint	This project will address the current status of groundwater supply sources for Navy installations that are most at-risk from climate change issues, the risks that are likely to develop, and potential mitigation techniques.
3.	158	Treatment of Stormwater Runoff Using Floating Treatment Wetlands	To improve National Pollutant Discharge Elimination System permit compliance, this project will demonstrate a manmade wetland capable of adsorbing dissolved metals.
4.	157	Structure-Function Relationship & Environmental Behavior of Perfluorochemicals (PFC) from Aqueous Film-Forming Foams (AFFF) at Department of Defense Sites for Conceptual Site Model Development	PFCs found in substances such as AFFF, are an emerging contaminant; and this project plans to construct a conceptual site model that managers can use to assess the presence of PFCs at Navy sites.
5.	156	Technology Evaluation and Sampling for Treatment of PFCs	This project proposes to produce a decision document to evaluate the effectiveness of various remediation technologies on PFC distribution.
6.	155	Analysis of Shipboard and Shoreside Regulated Garbage Management Processes to Ensure Efficient Compliance with United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) Regulations	To ensure compliance with USDA APHIS requirements, this project plans to research shipboard regulated garbage management processes with the goal of creating standard operating procedures.
7.	154	Improved Dewatering of Dredged Sediment	This project seeks to demonstrate and validate a method for rapid and continuous dewatering of sediment, thus accelerating the slowest step in the dredging process and lowering the total cost of dredging.
8.	153	X-ray Inspection System to Demilitarize Targets	This effort proposes to demonstrate and validate a portable X-ray machine that will find tracer rounds which become lodged in Navy boat targets during the demilitarization process.
9.	152	Non-Isocyanate Polyurethane-Free Coatings	Due to the health risks associated with isocyanate formulations for aircraft and support equipment, this project is seeking the qualification, approval and transition of two polysiloxane topcoats which will result in a 50 percent reduction in Volatile Organic Compounds at Naval Air Systems Command maintenance sites.
10.	151	Innovative Hydrant Flushing	This team will demonstrate and validate a truck-mounted flushing system capable of removing biofilm and nitrates from the drinking water supply with minimal potable water waste.
11.	147	Integrated Diagnostic Stormwater Monitoring with Passive Sampling	This project will demonstrate the value of incorporating passive sampling devices into integrative stormwater monitoring to improve accuracy and maintain compliance.



One of the FY16 “new start” projects under consideration by the NESDI program is a report to assess state-of-the-art sampling technologies to improve the accuracy and reduce the costs of stormwater sampling.



Another NESDI project under consideration for funding in FY16 and beyond is an effort to demonstrate and validate a portable X-ray machine that will find tracer rounds which become lodged in Navy boat targets during the demilitarization process. U.S. Navy photo by Mass Communication Specialist 2nd Class Antonio Turreto



Under another potential NESDI FY16 “new start” project is the demonstration of a rapid, cost-effective methodology for the diver-less deployment of currently used, in-situ passive sediment samplers. U.S. Navy photo by Mass Communication Specialist 2nd Class Patrick A. Ratcliff

No.	Full Proposal	Title	Description
12.	146	Demonstration of New Strategies for Enhanced Monitored Natural Recovery at Navy Sediment Sites	The objective of this project is to demonstrate and validate the performance and cost-effectiveness of using uncontaminated sediments, potentially obtained through dredging, to improve the natural recovery of contaminated sediments.
13.	145	Autonomous Benthic Ecology System	This project plans to leverage a sensor-based stabilized remote operated vehicle to conduct close, high resolution monitoring of threatened and endangered species within coral reef and other benthic ecosystems as required by environmental directives.
14.	144	Diver-less Deployment System for In-Situ Sediment Samplers	Using available technologies, this team will demonstrate a rapid, cost-effective methodology for diver-less deployment of currently used, in-situ passive sediment samplers.
15.	143	Quantification of Polychlorinated Biphenyls (PCB) Paint Volatilization	This project seeks to investigate the volatilization (vaporization) rate of paints containing PCBs, and to generate an environmentally and fiscally responsible work process for the removal of these paints.
16.	142	Multi-Functional Surface Preparation Technology for Maintenance Painting	The goal of the proposed project is to create a surface preparation gel that will contain and encapsulate stripped paint and etched metal, thereby greatly reducing the waste stream as well as other related costs.
17.	141	Analysis of the Long-Term Fate of Munitions Constituents from Unexploded Ordnance (UXO) and Discarded Military Munitions (DMM) on Terrestrial Sites	The objective of this proposed effort is to research, and summarize current knowledge about the fate, transport, and toxicity characteristics of munitions constituents from UXO and DMM found at Navy munitions response sites.
18.	140	Management Tools for Radiological Compounds in Environmental Media	This project team proposes to produce an IDR to help remedial program managers develop effective and streamlined approaches to managing radiological compounds at their sites.
19.	139	Understanding the Impact of Low Water Flows on Sewer Systems and Wastewater Treatment Plants	The objective of this project is to identify if there are currently adverse impacts from low flows in Navy operated wastewater collection and treatment systems—and if so, to identify best management practices to address the identified problems.



## Dates Set for 2016 Program IPRs

At the conclusion of the 2015 IPRs, the TDWG established the schedule for the 2016 IPR. So mark your calendars accordingly.

What	When	Where
West Coast IPR	7-11 March 2016	China Lake, CA
East Coast IPR	2-6 May 2016	Washington Navy Yard, DC

A program schedule for the next year is provided in the “Program Schedule” section in this issue of *NESDI News*.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>March 2016</b>						
		1	2	3	4	5
6	7 China Lake, California	8 China Lake, California	9 China Lake, California	10 China Lake, California	11 China Lake, California	
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>May 2016</b>						
1	2 Washington Navy Yard, DC	3 Washington Navy Yard, DC	4 Washington Navy Yard, DC	5 Washington Navy Yard, DC	6 Washington Navy Yard, DC	
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

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As always, space for our IPRs is limited. To request a seat or for more information including a draft agenda and dial-in information, contact Cindy Webber at [cynthia.webber@navy.mil](mailto:cynthia.webber@navy.mil) or 760-939-2060.

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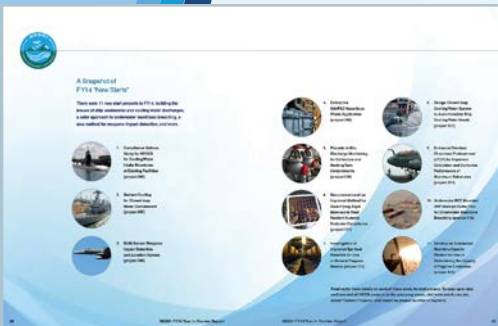
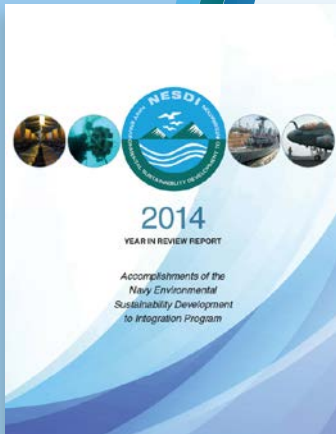


## Program Releases FY14 Year in Review Report: Annual Report Highlights Program Successes & Ongoing Challenges

The NESDI program has released its most recent annual report. The report profiles “new starts” for FY14 and discusses projects that were particularly successful over the course of the year in demonstrating the use of an innovative technology or integrating critical information to stakeholders across the Navy. Some notable project accomplishments in FY14 include:

- Project 440: Surface Cleaning of Drydock Floors.** This project developed a method and vehicle for removing hazardous wastes from drydock floors.
- Project 455: Modeling Tool for Navy Facilities to Quantify Sources, Loads, and Mitigation Actions of Metals in Stormwater Discharges.** This team developed a modeling tool to help site managers develop and implement control practices to reduce metal concentrations in stormwater runoff.
- Project 458: Advanced Non-Chromate Primers and Coatings.** In an effort to remove hexavalent chromium from the waste stream, this team demonstrated and validated a new, state-of-the-art non-chromate primer and drafted an authorization letter to allow seven aircraft platforms to use it.

- Project 459: Demonstration and Validation of Sediment Ecotoxicity Assessment Ring Technology for Improved Assessment of Ecological Exposure and Effects.** The team conducted a successful field stormwater demonstration of an integrated in situ bioassessment tool, the Sediment Ecotoxicity Assessment Ring, developed under a SERDP project.
- Project 464: Tertiary Treatment and Recycling of Waste Water.** This project team demonstrated a manmade wetland for reclamation and reuse of wastewater. In FY14, the team received a permit allowing its use for subterranean irrigation at Marine Corps Recruit Depot San Diego.
- Project 469: Validation of a Low Tech Stormwater Procedural Best Management Practice.** This team validated that power vacuuming and high-pressure washing of impervious surfaces reduced average loading of copper and zinc on three San Diego piers by 75 percent and 40 percent, respectively.



For a hard copy of the NESDI program’s FY14 and other Year in Review reports, please contact Lorraine Wass at 207-384-5249 or [ljwass@outlook.com](mailto:ljwass@outlook.com). An electronic (pdf) version of the report can also be downloaded from the program’s web site at [www.nesdi.navy.mil](http://www.nesdi.navy.mil).



## The Latest Project Fact Sheets On-line

ID	Project Title	Status	Objective	More Information
S16	Develop an Automated Real-time Opacity Monitor for Use in Determining the Opacity of Fugitive Emissions	Active Project	To secure and demonstrate technology which can provide real-time measurement of emissions opacity during ship dismantling operations.	<a href="#">Fact Sheet</a>
S15	Underwater Remotely Operated Vehicle (ROV) Mounted Ultra-High Pressure (UHP) Waterjet Cutter Tool for Underwater Munitions Breaching	Active Project	To create a remotely operated waterjet cutter system for breaching underwater munitions in shallow water environments.	<a href="#">Fact Sheet</a>
S14	Enhanced Trivalent Chromium Pretreatment for Improved Coloration and Corrosion Performance of aluminum Substrates	Active Project	This effort will identify and optimize an enhanced trivalent chromium pretreatment (ETCP) with color additive that provides a uniform color change to aluminum substrates following conversion coating.	<a href="#">Fact Sheet</a>
S13	Design of Closed-Loop Cooling Water System to Accommodate Ship Cooling Water Needs	Active Project	The purpose of this project is to address the challenges of cooling water discharges at Navy drydocks by compiling an Initial Decision Report (IDR). This report will provide the Navy a comprehensive strategy to guide investments and compliance decisions on these issues.	<a href="#">Fact Sheet</a>
S12	Investigation of Improved Epi-seal Materials for Use in General Purpose Bombs	Active Project	To analyze the properties of the bomb sealant known as Epi-Seal and to determine which properties to alter in order to reduce instances of leakage in general-purpose bombs.	<a href="#">Fact Sheet</a>
S11	Demonstration of an Improved Method for Quantifying Algal Biomass to Meet Inherent, Project Numeric Endpoint Compliance	Active Project	To aid compliance at naval facilities by demonstrating and validating an accurate, cost-effective method for measuring subtidal benthic algal biomass.	<a href="#">Fact Sheet</a>
S10	Wastewater In-situ Discharge Monitoring for Collection and Holding Tank Contaminants	Active Project	To select, demonstrate and validate a technology that will identify whether ships are discharging oil, saltwater, or foam constituents that could harm a downstream wastewater treatment plant.	<a href="#">Fact Sheet</a>
S09	Enterprise NAVFAC Hazardous Waste	Active Project	The project will develop a secure, web-enabled hazardous	<a href="#">Fact Sheet</a>

Want more insights into our projects? One-page fact sheet summaries of our projects are available on our web site and no username or password is required. Visit [www.nesdi.navy.mil](http://www.nesdi.navy.mil) then select “Projects.” You’ll see a list of projects with our most recent efforts

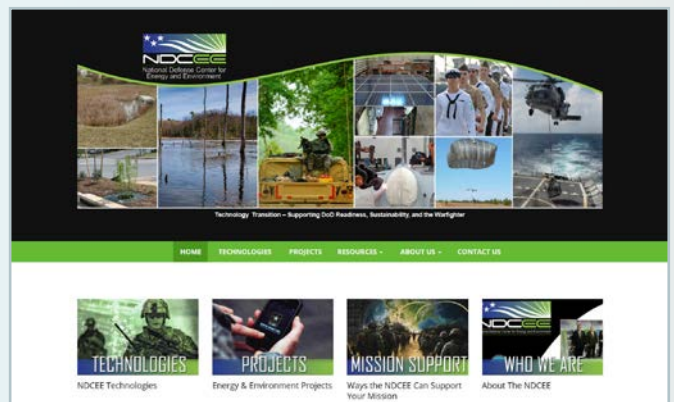
at the top of the list. Click on the “Fact Sheet” link in the “More Information” column for more details. The “More Information” can also be used to display those projects with posted final reports, videos and *Currents* articles.

## NDCEE Launches New Web Site

The National Defense Center for Energy and Environmental (NDCEE) has just launched a new and improved web site to promote the program and their project successes. The NDCEE was established to help Department of Defense (DoD) installations, ranges, weapon systems, and the warfighter achieve performance advantages, enhance efficiency and cost effectiveness, and comply with regulations. Their mission is to transition technology solutions in support of the DoD as it strives to maintain readiness, meet sustainability goals, and support warfighters at home and abroad.

In support of their NDCEE mission, they conduct the following RDT&E activities:

- Provide a joint framework for defining and identifying common environmental, safety, occupational health, and energy requirements across the DoD.
- Make available a proven contractual tool to:
- Conduct assessments, provide technology development expertise, and execute unbiased testing efforts of potential alternative solutions.
- Demonstrate, validate, and transition technologies to DoD and industry, ensuring solutions are systematically considered for the widest possible application.
- Provide train-the-trainer services that support the fielding of new, validated technologies.



For more information about NDCEE, visit their new web site at <http://ndcee.army.mil>.





## Program Schedule

From now through the end of the summer, the program will concentrate its efforts on collecting and screening needs received via our FY16 solicitation. A complete program schedule is provided below.

No.	What	When
1.	<b>Announce FY16 “New Start” Projects</b>	<b>30 July 2015</b>
2.	<b>Close FY16 Needs Collection Process</b>	<b>3 August 2015</b>
3.	<b>Screen Needs</b>	<b>10-14 August 2015</b>
4.	<b>Evaluate &amp; Rank Needs</b>	<b>14-18 September 2015</b>
5.	<b>Obtain Sponsor Review &amp; Approval of Needs</b>	<b>21 September - 8 October 2015</b>
6.	Request Pre-proposals	14 October 2015
7.	Conduct OPNAV N45 Programmatic Review	October 2015
8.	Pre-proposals DUE	18 November 2015
9.	Make Pre-proposals Assignments to FWGs	1 December 2015
10.	TDWG & FWG Comments on Pre-proposals DUE	16 December 2015
11.	Evaluate Pre-proposals	11-15 January 2016
12.	Request Full Proposals	20 January 2016
13.	Conduct West Coast In-Progress Review (China Lake, CA)	7-11 March 2016
14.	Full Proposals DUE	16 March 2016
15.	FWG & TDWG Comments on Full Proposals DUE	1 April 2016
16.	Screen Full Proposals	4-8 April 2016
17.	Conduct East Coast In-Progress Review (Washington Navy Yard, DC)	2-6 May 2016
18.	Principal Investigator Answers to Full Proposal Screening Questions DUE	2 May 2016
19.	Evaluate Full Proposals	9-13 May 2016
20.	Announce FY17 Needs Solicitation	1 June 2016
21.	Obtain Sponsor Review & Approval of Full Proposals	10 June 2016
22.	Announce FY17 New Starts	29 July 2016
23.	Close FY17 Needs Solicitation	1 August 2016
24.	Quarterly Status Reports Due (all Mondays)	5 October 2015 4 January 2016 4 April 2016 5 July 2016

Check out our web site ([www.nesdi.navy.mil](http://www.nesdi.navy.mil)) for the latest version of our program schedule.



## Getting on Our Mailing List

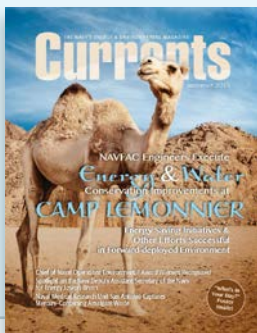
If you're not already on our mailing list and want to subscribe to *NESDI News*, please send your email address to Lorraine Wass at 207-384-5249 or [ljwass@outlook.com](mailto:ljwass@outlook.com).

## Contact Your TDWG Member

For more information about the operation of the NESDI program, contact Ken Kaempffe, the NESDI program manager, or members of the TDWG.

No.	Name	Command	Phone	Email
1.	Kaempffe, Ken (Chair)	NAVFAC	805-982-4893	<a href="mailto:ken.kaempffe@navy.mil">ken.kaempffe@navy.mil</a>
2.	Bendick, John	NAVSUP	717-605-9144	<a href="mailto:john.bendick@navy.mil">john.bendick@navy.mil</a>
3.	Bixler, Christy	NAVFAC/CNIC	202-685-9313	<a href="mailto:christy.bixler@navy.mil">christy.bixler@navy.mil</a>
4.	Earley, Pat	SPAWAR	619-553-2768	<a href="mailto:patrick.earley@navy.mil">patrick.earley@navy.mil</a>
5.	Hertel, Bill	NAVSEA	301-227-5259	<a href="mailto:william.hertel@navy.mil">william.hertel@navy.mil</a>
6.	McCaffrey, Bruce	Consultant	773-376-6200	<a href="mailto:bruceccaffrey@sbcglobal.net">bruceccaffrey@sbcglobal.net</a>
7.	Rasmussen, Eric	NAVAIR	732-323-7481	<a href="mailto:eric.rasmussen@navy.mil">eric.rasmussen@navy.mil</a>
8.	Sugiyama, Barbara	NAVFAC	805-982-1668	<a href="mailto:barbara.sugiyama@navy.mil">barbara.sugiyama@navy.mil</a>
9.	Venable, Bill	NAVFAC	805-982-1674	<a href="mailto:william.venable@navy.mil">william.venable@navy.mil</a>
10.	Webber, Cindy	NAVAIR	760-939-2060	<a href="mailto:cynthia.webber@navy.mil">cynthia.webber@navy.mil</a>
11.	Youngers, Luzmarie	NAVAIR	904-790-6396	<a href="mailto:luzmarie.youngers@navy.mil">luzmarie.youngers@navy.mil</a>

## In the Next Issue of *NESDI News*



There is a lot more information coming your way in the next issue of *NESDI News: Highlights & Happenings*. We'll provide you with additional insights into our FY16 "new start" projects and the results of our FY16 needs solicitation process. Until then, look for an article about one of our FY15 "new start" projects (project no. 489)—"Carderock Testing New Oil Boom Fouling Release Material: New Material Reduces Biofouling, Simplifies Cleaning"—in the summer 2015 issue of *Currents*—the Navy's award winning energy and environmental magazine.



You can browse the *Currents* archives at the Department of the Navy's Energy, Environment and Climate Change web site at <http://greenfleet.dodlive.mil/currents-magazine>.