



WINTER 2019

INSIDE THIS ISSUE:

FY19 Needs Approved
by Program Sponsor 3

Full Proposals Solicited
for Priority Needs. 4

Mark Your Calendar
for 2019 In-Progress
Reviews 6



NESDI News

Highlights & Happenings

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) from the Engineering and Expeditionary Warfare Center (EXWC) in Port Hueneme, CA.

The mission of the program is to provide solutions by demonstrating, validating and integrating innovative technologies, processes and materials and by filling knowledge gaps to minimize operational environmental risks, constraints and costs while ensuring Navy readiness.



**The NESDI Program:
Integrating Green Technologies Into the Fleet**



WINTER 2019

From the Program Manager's Desk



Ken Kaempffe

Welcome to the winter 2019 issue of *NESDI News: Highlights & Happenings*—part of our ongoing effort to keep you informed about the NESDI program.

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.

Since our last newsletter, we have completed our needs solicitation process as our resource sponsor OPNAV N45 has approved a total of 20 needs for potential new start projects. This compilation of needs includes seven needs that were collected during our fiscal year (FY) 2018 solicitation. But due to significant reductions in our FY18 and FY19 budgets, we were unable to solicit for pre-proposals

to address those seven needs in FY18. The resources are now in place to solicit pre-and full proposals to address the seven FY18 needs as well as the 13 needs that we collected via our FY19 solicitation—making a total of 20 needs for which we are soliciting proposals. More information about the results of our FY18 and FY19 needs solicitation can be found in the “FY19 Needs Approved by Program Sponsor” section of this issue of *NESDI News*.

Take a quick read through this newsletter and contact me should you have any questions or ideas about improving the program.

Ken Kaempffe
ken.kaempffe@navy.mil



WINTER 2019

FY19 Needs Approved by Program Sponsor

A total of 69 unique needs were collected via our FY19 needs solicitation process. Once our Technology Development Working Group (TDWG) completed its screening and prioritization of these needs, a ranked list was forwarded to OPNAV N45's subject matter experts (SME) for their final review and approval. Ultimately, we solicited pre-proposals to address the seven needs that were carried over from our FY18 solicitation as well as the 13 new needs (lines 8 through 20 in the table below) that resulted from our solicitation in FY19. The following 20 needs were ultimately reviewed and approved by SMEs at our sponsoring organization:

No.	Title	Need No.	Submitter	Priority
1.	Electromagnetic Interference Shielding Tape	N-1220-18	Peter Sheridan (NAVAIR)	HIGH
2.	Demonstration/Validation of Air Filtration for Indoor Air Quality	N-1187-18	Mike Singletary (NAVFAC)	HIGH
3.	Replacement of Cadmium in Ground Support Equipment Avionics Applications	N-1234-18	Dane Hanson (NAVAIR)	MEDIUM
4.	Under Pier Sediment Pile Assessment Tools	N-1196-18	Len Sinfield (NAVFAC)	MEDIUM
5.	Stormwater Piping-Based Pollutant Best Management Practice	N-1194-18	Len Sinfield (NAVFAC)	MEDIUM
6.	Improving Site Closure Decision-Making with Time-Integrated Groundwater Samples	N-1188-18	Kendra Leibman (NAVFAC)	MEDIUM
7.	Cost Effective Main Charge Remediation of Insensitive Munitions for Range Clearance	N-1179-18	Lesley Wilhelm (NAVSEA)	MEDIUM
8.	Development of New Technologies for PFAS Source Remediation and Containment	N-1240-19	Jason Speicher (NAVFAC)	HIGH
9.	Handheld Storm Water Pollutant Mapper	N-1241-19	Len Sinfield (NAVFAC)	MEDIUM
10.	Nutrient Compliance Issues at Navy Shipyards	N-1244-19	Jamie Evans (NAVSEA)	MEDIUM
11.	Evaluation of Alternative Instruments for On-Site Analysis of Vapor Intrusion	N-1245-19	Karen Campbell (NAVFAC)	MEDIUM
12.	Elimination of Hexavalent Chromium from Conversion Coating Processes for Electronic Applications at Fleet Readiness Centers	N-1248-19	Felicia Johnson (SPAWAR)	LOW
13.	General-Purpose Oceanic Organic Mycelium Biodegradable Apparatus (GOOMBA)	N-1253-19	Kimberly Schrock (NAVAIR)	LOW
14.	Low-VOC and Fast Drying Solvent-borne Aerospace Primers	N-1278-19	Jack Benfer (NAVAIR)	LOW
15.	Addressing Data Gaps in the Fate, Transport and Transformation of Insensitive and Legacy Munitions	N-1279-19	Malcom Gander (NAVFAC)	MEDIUM
16.	Reduction of Sealant Waste for Fleet/Depot-Level Operations	N-1285-19	Richard Lee (NAVAIR)	MEDIUM
17.	Validate Adsorptive Amendments for In Situ Treatment of PFAS	N-1288-19	Mike Singletary (NAVFAC)	HIGH
18.	In-situ Biodegradation of 1,4-Dioxane and Chlorinated Solvent Mixtures in Dilute Plumes	N-1290-19	Mike Singletary (NAVFAC)	MEDIUM
19.	Study Temporary Cooling Water Total Recoverable Copper Levels During Dry Docking Availabilities	N-1299-19	Trevor Richardson (NAVSEA)	MEDIUM
20.	Update Environmental Monitoring Equipment for Regulatory Compliance	N-1302-19	Devin Takara (NAVSEA)	HIGH



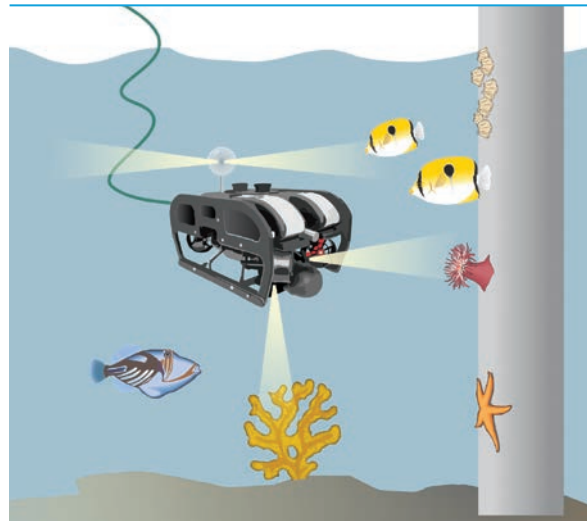
WINTER 2019

Full Proposals Solicited for Priority Needs

In early winter 2019, members of the TDWG reviewed and evaluated the 30 pre-proposals it received and then requested full proposals for the efforts highlighted in the following 16 pre-proposals:

No.	ID	Title	Name	Command
1.	336	Innovative Activated Carbon Filters to Address Vapor Intrusion Within Commercial/Industrial Buildings	Travis Lewis	NAVFAC
2.	338	In-Well Headspace Samplers for Long-Term Groundwater Chlorinated Hydrocarbon Monitoring	Thomas Boyd	NRL
3.	335	Improve Cost Effectiveness of Groundwater Monitoring with Long Duration Time-Integrated Groundwater Samplers	Travis Lewis	NAVFAC
4.	351	In-Pipe Stormwater BMP Treatment System	Brandon Swope	SPAWAR
5.	349	Flexible Under Pier Sediment Assessment	Jessica Carilli	SPAWAR
6.	331	Cold Spray as a Replacement for Brush Plating on F/A-18 Door Sills	Haley London	NAVAIR
7.	361	Assessment of Cadmium Alternatives for Connector Applications	Dane Hanson	NAVAIR
8.	359	Demonstrating the Use of a Novel, Hybrid Polyelectrolyte/Hydrophilic Polymer for In Situ PFAS Treatment Applications	Jovan Popovic	NAVFAC
9.	347	Contaminant Monitoring and Mapping for Informing Stormwater Best Management Practices	Patrick Sims	SPAWAR
10.	353	Developing Lines of Evidence to Support Nutrient Compliance	Eric Winchell	SPAWAR
11.	334	Evaluation of Various Real-Time Monitors to Accelerate On-Site Analysis for Vapor Intrusion	Travis Lewis	NAVFAC
12.	344	Development and Implementation of Methods to Reduce Sealant Waste in Fleet/Depot Level Operations	Alan Grieve	NAVAIR
13.	350	Mesocosm Field Testing of In-Situ PFAS Treatment Trains	Nicholas Hayman	SPAWAR
14.	340	Field Demonstration of Colloidal Activated Carbon for In Situ Sequestration of Per- and Polyfluoroalkyl Substances	Tony Danko	NAVFAC
15.	341	In-Situ Biodegradation of 1,4-Dioxane and Chlorinated Solvent Mixtures in Dilute Plumes	Tony Danko	NAVFAC
16.	343	Sensor Interface and Infrastructure for Monitoring (SIIM)	Lewis Hsu	SPAWAR

PROJECT NO. 521:



This NESDI project (no. 521) developed and tested an Automated Benthic Ecology System (ABES) for the purpose of monitoring coral reef and benthic communities on vertical structures residing at Navy at-sea ranges, vessel homeports and weapons test and evaluation centers.



WINTER 2019

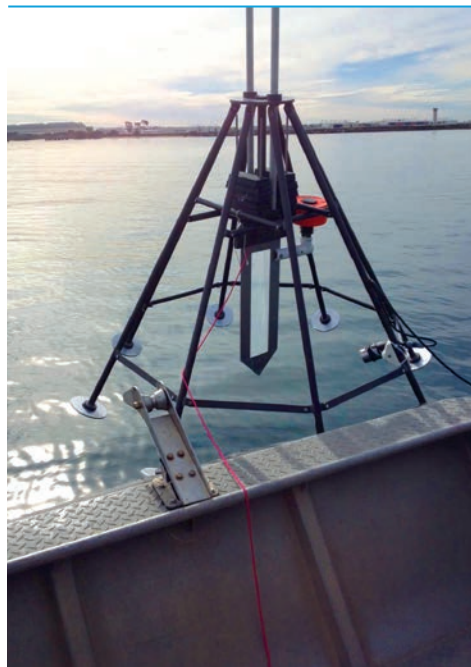
Mark Your Calendar for 2019 In-Progress Reviews

The dates have been set for the NESDI program's 2019 In-Progress Reviews (IPR). Our east coast IPR will be held the week of 29 April – 2 May 2019 at the Admiral Gooding Center onboard the Washington Navy Yard. We will hold our west coast IPR the week of 10-14 June 2019 at the Naval Information Warfare Center (NIWC) Pacific complex (formerly the SPAWAR Systems Center Pacific complex) in San Diego. Look for additional details as they become available in future issues of *NESDI News*.

EAST COAST IPR
29 April – 2 May 2019
Admiral Gooding Center
Washington Navy Yard

WEST COAST IPR
10-14 June 2019
Naval Information
Warfare Center Pacific

PROJECT NO. 529:



This NESDI project (no. 529) adapted available technologies and demonstrated a rapid, cost-effective system and methodology for cost effective deployment and retrieval of in-situ passive sediment samplers at contaminated sediment sites without putting divers in the water. Photo Credit: Jessica Carilli

PROJECT NO. 539:



Using a Forward Looking Infrared (FLIR) camera, this NESDI project (no. 539) will provide a fast and accurate means of characterizing pier-side discharges and incorporate results into existing hydro-dynamic models. Photo Credit: Brandon Swope

PROJECT NO. 563:



This truck is among the targeted pieces of ground support equipment for the low-volatile organic compound primers being demonstrated under NESDI project no. 563. Photo Credit: Michael Brindza



WINTER 2019

Program Schedule

For the beginning of 2019 into the spring, the program will concentrate its efforts on reviewing and ranking full proposals and conducting the first of its two IPRs for this fiscal year.

What	When
Full Proposals DUE	14 March 2019
Screen Full Proposals	5 April 2019
Conduct First FY19 In-Progress Review	29 April – 2 May 2019 (Washington Navy Yard, DC)
FWG & TDWG Comments on Full Proposals DUE	24 May 2019
Principal Investigator Answers to Full Proposal Screening Questions DUE	24 May 2019
Announce FY20 Needs Solicitation	3 June 2019
Complete Evaluation of Full Proposals	4 June 2019
Obtain Sponsor Review & Approval of Full Proposals	6-28 June 2019
Conduct Second FY19 In-Progress Review	10-14 June 2019 (San Diego, CA)
Announce FY20 New Starts	26 July 2019
Close FY20 Needs Solicitation	1 August 2019
Screen FY20 Needs	12-15 August 2019
Evaluate & Rank Needs	9 -13 September 2019
Obtain Sponsor Review & Approval of Needs	16 September - 11 October 2019
Request Pre-proposals	14 October 2019
Pre-proposals DUE	20 November 2019
Make Pre-proposals Assignments to FWGs	11 December 2019
TDWG & FWG Comments on Pre-proposals DUE	6 January 2020
Evaluate Pre-proposals	6-10 January 2020
Conduct OPNAV N45 Programmatic Review	January 2020
Request Full Proposals	14 January 2020
Quarterly Status Reports Due	1 April 2019 1 July 2019 7 October 2019 6 January 2020



Check out our website at <https://epl.navfac.navy.mil/nesdi/Schedule.aspx> for the latest version of our program schedule.



WINTER 2019

NESDI News

Highlights & Happenings

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 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.

Kaempffe, Ken (Chair)
NAVFAC
805-982-4893
ken.kaempffe@navy.mil

Hertel, Bill
NAVSEA
301-227-5259
william.hertel@navy.mil

Rasmussen, Eric
NAVAIR
732-323-7481
eric.rasmussen@navy.mil

Bixler, Christy
NAVFAC/ CNIC
202-685-9313
christy.bixler@navy.mil

Kopack, David
NAVSEA
202-781-3247
david.kopack@navy.mil

Sugiyama, Barbara
NAVFAC
805-982-1668
barbara.sugiyama@navy.mil

Earley, Pat
NIWC
619-553-2768
earl@spawar.navy.mil

McCaffrey, Bruce
Consultant
773-376-6200
brucemccaffrey@sbcglobal.net

Webber, Cindy
NAVAIR
760-939-2060
cynthia.webber@navy.mil

Harre, Karla
NAVFAC
805-982-2636
karla.harre@navy.mil

Mukherjee, Sandi
NAVSUP
717-605-6854
sandi.mukherjee@navy.mil

Youngers, Luzmarie
NAVAIR
904-790-6382
luzmarie.youngers@navy.mil

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*. In our spring 2019 issue, we will provide you with insights into the final results of our full proposal solicitation and ranking as well as plans for the first of our 2019 IPRs to be held at the Washington Navy Yard during the week of 29 April – 2 May 2019.

