

NORTHEAST ASIA REGIONAL ENVIRONMENTAL SECURITY FORUM



ULAANBAATAR, MONGOLIA
18-21 SEPTEMBER 2018

Northeast Asia Regional Environmental Security Forum After Action Report

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FORWARD

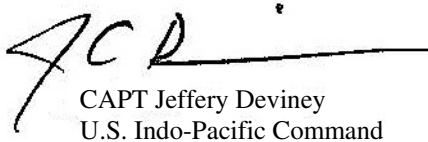
On behalf of the U.S. Indo-Pacific Command (USINDOPACOM), I would like to thank you for attending the 2018 Northeast Asia Regional Environmental Security Forum (RESF) held in Ulaanbaatar, Mongolia from 18-21 September. The RESF advanced environmental security partnerships in Northeast Asia, through dialogue and action. I am grateful that I was able to be a part of it, and even more thankful to have had the opportunity to work with you.

In partnership with the Mongolia Ministry of Defense, the RESF was able to establish a habit of environmental security dialogue with the various countries in attendance, learn about food, water and energy challenges in Mongolia, discover how environmental security is a critical aspect of contingency operations, and identify future environmental security partnership opportunities.

The RESF planning team has compiled the presentations, after-action report, and other support documentation for the event at <http://pesforum.org>. Please explore and download when you get a chance. The web site also provides updates on the USINDOPACOM environmental security program throughout the year, so feel free to visit the web site often.

To conclude, USINDOPACOM will continue to advance environmental security understanding and readiness throughout the Indo-Pacific region. USINDOPACOM will do this by co-hosting the Pacific Environmental Security Forum in 2019 with the New Zealand Ministry of Foreign Affairs & Trade, and executing environmental security cooperation projects throughout the region. I am hopeful that you will continue to be engaged in environmental security matters, and that you will attend a future Forum.

Thanks again for attending the 2018 Northeast Asia RESF. I wish you all the best in the future.



CAPT Jeffery Deviney
U.S. Indo-Pacific Command

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EXECUTIVE SUMMARY

Discussion

The eighth annual RESF was completed on 21 September 2018 with over 60 participants attending from Australia, China, Japan, Korea, Mongolia, New Zealand and the United States. The four day event featured USINDOPACOM leadership on days 1 and 4, Mongolia leading day 2, and Australia leading day 3. USINDOPACOM themes focused on establishing and maintaining a habit of environmental security dialogue. Each NE Asia country presented on current environmental security strategies and issues, and then time was allotted for in-depth bilateral discussions. USINDOPACOM, in partnership with each country, identified future environmental security partnership opportunities. Australia expressed its support to advance the Pacific Environmental Security Organization (PESO) initiative, and suggested USINDOPACOM and the ADF talk on a quarterly basis to advance the organization proposal. China would like to hold a series of bilateral workshops in the future with USINDOPACOM to identify collaboration opportunities and share best practices. Japan recommended USINDOPACOM visit various military bases in its country to see what environmental security efforts are already underway, and speak with representatives to see if future partnership is possible. Korea requested more multilateral opportunities, and indicated it would like to be an early member of the future PESO. Mongolia would like to partner with USINDOPACOM on completing environmental security projects in the country, and suggested starting with the Shar Khad military training area. New Zealand and USINDOPACOM furthered planning for the 2019 PESF, where New

Zealand's Ministry of Foreign Affairs and Trade will host the event in Wellington.

Mongolia utilized day 2 of the RESF to raise awareness on environmental security issues in the country. Mongolia led the Food-Water-Energy Nexus theme, and delivered two subject matter expert presentations on food security, one on energy security, and one on soil contamination issues. Mongolia then hosted a site visit to the Shar Khad training area, which is located on the eastern outskirts of Ulaanbaatar. Shar Khad is adjacent to the Tsagaan Davaa landfill, where a majority of Ulaanbaatar's solid waste is disposed. During heavy rains and wind, trash from the landfill flows down the Uliastai River and impacts the training area. Shar Khad also has internal wastewater and solid waste management issues. For example, the latrines currently do not flush waste, and as a result, soil contamination is an issue.

Day 3 was led by the ADF, and the theme was Environmental Security in Contingency Operations. ADF delivered three presentations, and the United Nations Environment Programme (UNEP) also spoke on environmental peacebuilding. The ADF presentations focused on environmental security has a cause of instability, protection and preservation and heritage, and the use of international standards to assist with contingency operation planning. ADF also organized an exercise where participants divided into groups and had to work together to determine priority actions to overcome environmental security challenges such as biosecurity concerns, protection of heritage, and waste management issues.

The event concluded with Mongolia sharing environmental security project proposals, and New Zealand explaining its concept for the 2019 Pacific Environmental Security Forum (PESF). Mongolia's Vice Minister of Defense and USINDOPACOM's J44 closed the 2018 event.

A summary of the event can be reviewed at:

<https://mn.usembassy.gov/2018-habit-of-environmental-security-dialogue/>

or

<http://www.pacom.mil/Media/News/News-Article-View/Article/1646108/establishing-a-habit-of-environmental-security-dialogue/>

Way Ahead

USINDOPACOM will work several assignments to move various environmental security initiatives forward. USINDOPACOM will continue to plan and coordinate with the New Zealand Ministry of Foreign Affairs & Trade and Ministry of Defence to prepare for the 2019 PESF in Wellington tentatively scheduled for 21-24 May 2019. USINDOPACOM and New Zealand environmental security stakeholders will conduct the PESF Final Site Survey tentatively 12-14 February 2019. Meanwhile, USINDOPACOM will work with the Office of Defense Cooperation (ODC) in Wellington to start venue contracting and procurement. 2019 PESF themes will focus on resiliency, transformation, and climate change adaptation. New Zealand will explore Somes Island as a potential site visit location.

USINDOPACOM J44 will work with J45, J9, and the Office of the Secretary of Defense (OSD) to identify funding to support Mongolia's Shar Khad project proposal. USINDOPACOM will coordinate with the Alaska National Guard (AKNG), U.S. Army Corps of Engineers (USACE), and others to determine project leadership and execution method. USINDOPACOM will also work the Unexploded Ordinance (UXO) education project for Mongolia, which is already approved in the Overseas Humanitarian Assistance Shared Information System (OHASIS). Additionally, USINDOPACOM will submit a minimal cost request to send a heritage protection and preservation subject matter expert to Mongolia's National Defense University (NDU) to assist with curriculum development.

USINDOPACOM will follow up with all participating NE Asia RESF countries to take action on habit of dialogue bilateral discussions. This includes conducting quarterly teleconferences with Australia, identifying workshop opportunities with China, coordinating with Japan's Ministry of Foreign Affairs and Self Defense Forces, looping Korea into PESO development, planning and executing environmental security projects in Mongolia, and planning the 2019 PESF in partnership with New Zealand.

Finally, USINDOPACOM will re-evaluate the <http://pesforum.org> web site to determine how to make it more navigable and informative in the future.

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AFTER-ACTION REVIEW

1. **EVENT DATES:** 18-21 September 2018
2. **EVENT LOCATION:** National Defense University, Ulaanbaatar, Mongolia
3. **BACKGROUND:** Environmental security can be broadly defined as countering vulnerabilities caused by the abundance or scarcity of environmental resources and/or degradation. Increasingly, environmental factors—extreme and frequent weather and climate events, water resources, food security and environmental disasters—can affect national and regional security by exacerbating hunger, poverty, instability and conflict. Environmental factors often have cross-border impacts. Sharing lessons-learned and encouraging militaries and governments to plan, operate, and execute in an environmentally sustainable manner that supports regional cooperation will improve security for all.

The PESF and regional meetings (RESFs) are the cornerstones of U.S. Indo-Pacific Command's (USINDOPACOM) Environmental Security Program, which seeks to 1) increase understanding environmental stewardship obligations among militaries in the Indo-Pacific region, and 2) design and fund civ-mil projects with partner nations that develop mutual capabilities, interoperability and resiliency to environmental security challenges. USINDOPACOM and its partners collaborate on multiple efforts to tackle and overcome environmental security threats. This includes holding an annual PESF, where civilian and military representatives gather to

discuss and share environmental security best practices and lessons-learned. It also means being a community of action to conduct regular environmental security projects that couple unique military capability with civilian expertise, deliver tangible and efficient results, and advance security in the region. Environmental security projects and cooperation are platforms for relationship building, opening doors for dialogue on other subjects too.

Ultimately, USINDOPACOM is dedicated to promoting environmental security awareness and sustainable environmental operations, and will continue to partner with civilian and military agencies in order to achieve environmental security objectives.

The 2018 forum is the eighth annual event. The event has been previously held in Hawaii (2011), Indonesia (2012), Australia (2013), Maldives (2014), Thailand (2015), Fiji (2016) and Alaska (2017). On odd number years, the event involves all of the Indo-Pacific. In even numbered years, the event is regional. The 2018 event is the first time the RESF has been held in Northeast Asia. Previous regional events have focused on Southeast Asia, South Asia, and Oceania.

4. MISSION: To execute the Northeast Asia RESF in partnership with the Mongolia MOD.
5. PURPOSE: To advance environmental security in the Northeast Asia region, while sharing environmental best practices and lessons learned, shaping bilateral and multilateral cooperation, identifying

future environmental security projects in Mongolia, and transforming the RESF from an event to an alliance.

6. VISION: To systematically characterize environmental security threats, and take collective action towards sustainable solutions.
7. OBJECTIVES: The following objectives were set for the 2018 RESF:
 - Advance environmental security dialogue among militaries in the Northeast Asia region;
 - Broaden civil-military environmental security cooperation in the Northeast Asia region;
 - Strengthen environmental security coordination between and among
 - U.S. Indo-Pacific Command and Northeast Asia partners;
 - Increase awareness of environmental security issues, best practices and lessons-learned; and
 - Enhance Mongolia's fundamental environmental security capability.
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11. DAILY SUMMARY: The details found in the section below summarize the RESF's daily activities. They were recorded on the day, and reflect the current status at the time.

a. 18 September 2018

The RESF officially commenced today with participants from Australia, China, Japan, Korea, Mongolia, New Zealand and the United States in attendance. The event started with a formal opening ceremony, which featured speeches from the U.S. Embassy, Mongolia Ministry of Environment and Tourism, and the Mongolia Ministry of Defense. Following the opening ceremony, a group photo was taken outside the National Defense University hall.

Next, a series of presentations were delivered emphasizing how military's from Northeast Asia are engaged in environmental security matters. Presentations were delivered by the Alaska National Guard, USINDOPACOM, Mongolia Ministry of Environment and Tourism, China People's Liberation Army (PLA), and Korea Ministry of National Defense. Each presentation highlighted common issues faced in Northeast Asia, as well as solutions that are being implemented. For example, the PLA presentation

showcased how the Chinese military uses sustainable green development to construct new buildings on its military bases. Korea explained its environmental policies, and how these policies help shape action and measure in the field. For example, the Korea Ministry of National Defense has implemented a series of environmental security policies that take accountability for military action. Korea is actively managing noise, water and air pollution in all of its military activities. Fine dust management was of particular interest to the other parties in attendance.

At the conclusion of the presentations, USINDOPACOM moderated a panel session that featured all of the morning speakers. The follow dialogue was recorded.

1. A question was raised to the PLA regarding sustainable green infrastructure development and Leadership in Energy and Environmental Design (LEED) standards. PLA mentioned that it worked collaboratively with USINDOPACOM in 2007 to start the sustainable development initiative, and that it is following Chinese environmental standards.
2. The next question was directed to the Korea Ministry of National Defense regarding fine dust management. Participants wanted to know more about the policy that had been enacted and the management of the pollutant. Korea explained how the problem set was defined and the initial policy language was developed.

3. Next, Mongolia was asked how it plans to tackle environmental security issues in the future. Mongolia responded that it plans to use a multi-sectorial approach to solving all issues it faces.
4. Korea stated environmental security is a national defense issue. This is why the Korea Ministry of National Defense is involved.
5. Lastly, Mongolia stated that when implementing environmental security policy, it is important to raise public awareness, involve all parties, and ensure there is a budget in place to act upon policy once enacted.

After lunch, the Habit of Environmental Security Dialogue session kicked off. USINDOPACOM sat down with Australia, China, Japan, Korea, Mongolia and New Zealand in separate rooms to initialize bilateral environmental security discussions. The sessions were designed to identify bilateral priorities and partnership opportunities. Each conversation focused on specific topics. For example, the US-Mongolia discussion focused on collaborative environmental security projects, while the US-China discussion was more related on how expertise can be shared to help a third party. The US-Japan discussion identified opportunities to de-conflict similar environmental security projects in the field. The Korea-US conversation focused on bilateral issues, for example, how to close old military bases in Korea so they can be used for other purposes. The US-Australia conversation focused advancing the development of a Pacific Environmental Security Organization, and the

US-New Zealand conversation was all about the 2019 Forum and the next steps to successfully executing the event.

At the conclusion of the Habit of Dialogue session, participants returned to the hotel. Later in the evening, the Vice Minister of Defense hosted all RESF participants at the Soyombo Hall for an ice breaker.

b. 19 September 2018

The second day of the RESF was led by the Mongolia MOD. The Chief of Security and Defense Policy Studies at the Mongolia National Defense University (NDU) served as the Food-Water-Energy Nexus theme leader. He started the proceedings by explaining how Mongolia is experiencing the impacts of climate change, including water shortages, forest fires and trans-boundary pollution. He also explained who the speakers will be for the day, and what topics they will cover.

Next, a series of Mongolian subject matter experts presented on food, water, and energy issues. Mongolian speakers highlighted major communicable diseases in livestock and dietary reference intakes to explain food security challenges. Mongolia is dependent on its vast herds of livestock, and when harsh winters or disease impacts the livestock, it is a major food security issue for the country. It also requires Border Security to be involved to limit disease spread. The major livestock diseases are foot and mouth disease, goat and sheep pox, and cattle and pork measles.

Mongolia also delivered presentations on the ecological perspective of former Russian military sites, as well as its state policy on energy sector. The Ministry of Defense led the presentation on the former military sites, which explained various soil contamination investigations that have been performed, and preliminary methods for cleanup. The energy presentation explained Mongolia's current energy grid, as well as future plans. Mongolia does have capacity challenges, which pose a risk to national security. However, it is working towards sustainable and diverse solutions to advance its current capacity.

Next, a panel session was held with all morning speakers. The session was moderated by the NDU theme leader. The following discussion was recorded:

- Mongolia is interested in privatizing its energy system, but it will take time and there may not be financial incentive.
- Mongolia has several unexploded ordinance sites that are generating soil contamination. Mongolia would like help researching the problem, as well as cleaning up sites.
- Mongolia's current energy system is connected to Russia and China. As a result, any change in the system will require coordination with neighboring countries.

- Mongolia's rural areas are connecting to the national grid. Therefore, assistance with micro grids is not a current priority.
- Food waste is a major problem for civilian and military populations in Mongolia.

In the afternoon, participants rode in buses from the NDU to the Shar Khad military training range east of Ulaanbaatar. The National Defense University spokesmen moderated a tour of the site, which featured soil contamination, wastewater issues, and solid waste challenges. The first stop was at the entrance of the Shar Khad training area, where Mongolia MOD explained how an adjacent landfill results in trash washing down the valley into the Uliastai River as well as the training area. The second stop was a vantage point of the Tsagaan Davaa landfill. Participants were able to get a full perspective of the size of the landfill and how the trash washes down the hillside towards the training. The final stop was at the wash facility at the Shar Khad training headquarters. Mongolia MOD explained how the wastewater flows directly into the Uliastai River.

At the conclusion of the site visit, participants returned to the hotel for the evening.

c. 20 September 2018

Day 3 of the RESF focused on environmental security in contingency operations. The theme was led by the Australian Defence Force (ADF). BG Craig Dobson, the ADF's Director General Support (J1/J4) kicked off the day by providing an overview of the day's presentation agenda, and highlighting historical preservation and protection damages in war that could have been avoided. BG Dobson quizzed participants on the location of the heritage destruction, and distributed environmental security playing cards to those that correctly identified the example. After the introduction, the ADF and the United Nations Environment Programme (UNEP) delivered presentations on environmental considerations during contingency operations.

The first presentation focused on environmental security as a cause/threat to instability. ADF provided historical and modern examples of environmental security challenges in contingency locations. ADF emphasized that 1) environmental change has been a driver of conflict for centuries; 2) the environment should be considered as a threat to individual, national, or global security, and it has created a new dimension of security studies; and 3) the increasing scope of environmental security now includes environmental degradation, global warming, and climate change.

The UNEP delivered the next presentation on environmental peacebuilding. UNEP explained that environmental

peacebuilding integrates natural resource management in conflict mitigation, resolution, and recovery to build resilience in communities affected by conflict.

Environmental peacebuilding also provides a framework for understanding the different positive and negative roles that natural resources and the environment can play throughout the different parts of the conflict lifecycle.

ADF delivered two more presentations to round out the morning session. The presentations focused on protection and preservation of heritage and the benefits of incorporating international standards into contingency operations planning. The heritage presentation emphasized the importance of preservation planning so that known locations are not damaged, and extra security is provided to protect the sites from being destroyed. These presentations were followed by a panel session featuring all of the morning speakers. The following points were discussed:

- UNEP defines resiliency is the ability to anticipate and recover from shocks and stresses.
- Human, social, and ecosystem characteristics and security are all linked.
- Militaries in the Asia-Pacific region are in good position to contribute to resiliency due to their ability to plan.

- All militaries should be considering environmental sustainability and protection in their training.
- It is difficult to mandate and fulfill environmental security performance as it is a new and complex topic.
- Military planners should identify natural resource mission experts to help them with environmental security planning and execution before, during and after contingency operations. Commanders should be trained to consider environmental security considerations.
- Commanders need to understand rules of engagement, and where the environment falls into those priorities.
- Climate change awareness and adaptation should be included into peacekeeping operations.

In the afternoon, participants divided into five groups to complete a contingency operations exercise. The exercise was led by ADF, and included two sessions. The scenario revolved around an escalating regional destabilization, where the UN authorized a Multinational Force to take “such action by air, sea and land to restore international peace and security” in Trinder Island. Groups had to analyze environment and heritage considerations, and prioritize actions. Each group worked through a series of

simultaneous issues that required resolution. Groups had to make tough decisions on planning, force laydown, sequence of actions, heritage protection, biosecurity awareness, and environmental sustainability.

d. 21 September 2018

The final theme of the 2018 RESF was, “Maintaining an Environmental Security Habit of Dialogue.” The theme commenced with USINDOPACOM explaining how it identifies, evaluates, and selects environmental security projects for action in the field. USINDOPACOM J9 explained the all-hazards line of effort, and how environmental security supports this initiative. USINDOPACOM J9 also described how environmental security project submittals compete with other humanitarian assistance project proposals to be selected and executed in the field. The USINDOPACOM J9 concluded his presentation by showing past examples of successful security cooperation projects in Mongolia.

The Mongolia Ministry of Defense then presented on two environmental security projects it is proposing to collaborate upon with USINDOPACOM in the future. The first project proposal is to build a barrier around portions of the Shar Khad training area to keep solid waste and pollutants from entering the Uliastai River. The project would also include the construction of latrines, showers, and a septic tank to manage internal military waste. The second project proposal is to develop a civil-military pollution management team to

perform detailed pollution surveys of former Russian military sites in Mongolia. The pollution surveys would focus on soil contamination issues.

Next, the “Habit of Environmental Security Dialogue” session took place between USINDOPACOM and Australia, China, Japan, Korea, Mongolia and New Zealand. This was a final opportunity for USINDOPACOM to reconvene with each country individually to finalize its bilateral discussions and prepare presentation materials for the plenary.

At the conclusion of the Habit of Dialogue session, each country briefed one slide to the plenary that summarized the week’s discussions and progress.

- Australia

The primary discussion topics were the Pacific Environmental Security Organization (PESO), funding contribution, and Oceania engagement. USINDOPACOM and Australia Joint Operation Command would like to operationalize environmental security in the future, by continuing to collaboratively support the PESO, advance whole-of-government coordination, and conduct quarterly updates. Australia funding contributions will continue to be limited to salaries and travel. Australia is willing to work with USINDOPACOM to identify regional projects in Oceania for joint collaboration.

- China

USINDOPACOM and China can start environmental security coordination by conducting a series of bilateral workshops (one in USA, and one in China) where ideas can be shared a third country collaboration project can be identified. China is interested in the PESO, and would consider becoming a standing member if the organization comes to fruition.

- Japan

USINDOPACOM and Japan primarily discussed bilateral coordination on environmental security. Japan recommends USINDOPACOM and USAID arrange a high-level meeting with the Japan Ministry of Foreign Affairs to discuss USG-GOJ communication on environmental security. Japan also recommends USINDOPACOM have senior leaders add this to their agenda with the Japanese Self Defense Forces. Finally, USINDOPACOM should visit Japanese training areas to see ongoing environmental security efforts in Japan.

- Korea

The Republic of Korea (ROK) Ministry of Defense is interested in becoming an early member of the PESO. ROK Ministry of Defense believes it can partner with USINDOPACOM on oil spill response, soil contamination issues, fine dust particulate information

sharing, and waste management. ROK Ministry of Defense would like to be invited to the 2019 PESF in New Zealand.

- Mongolia

The USINDOPACOM-Mongolia discussion focused on environmental security projects. The main discussion topics were related to soil and water pollution, unexploded ordinance detection and education, and air pollution. Mongolia's priority project is the waste issues at the Shar Khad military training area. Mongolia is also interested in developing de-mining capability, and establishing a multilateral working group with USINDOPACOM, ROK, Mongolia and Japan on pollution issues.

- New Zealand

USINDOPACOM and New Zealand primarily discussed plans for the 2019 PESF in Wellington. New Zealand confirmed that Wellington is the preferred location, and 21-24 May 2019 dates are desired. New Zealand would like to emphasize climate change, climate migration, biosecurity, invasive species management, IUU fishing, and resource protection at the 2019 event. New Zealand is interested in the future PESO and potentially becoming a member.

After lunch, New Zealand delivered its 2019 Pacific Environmental Security Forum proposal. New Zealand's Ministry of Foreign Affairs & Trade and Ministry of Defence has agreed to host the 2019 event. New Zealand emphasized the theme of building resiliency in the Pacific as its main objective. This theme recognizes the unique vulnerabilities of many countries in this region to destabilizing global environmental factors. The theme will enable collaborative discussions amongst civilian and military colleagues from the Asia Pacific region on practical initiatives for building resilience against the impacts climate change, natural disasters, pollution, and invasive species. It provides a platform to consider how the region can better support coastal planning and environmental governance.

To conclude the day's activities, USINDOPACOM held a RESF After-Action session to record each country's perspective on the event and how to advance it in the future. Countries were satisfied with the event themes, site visit, venue, logistics, and opportunities for dialogue. Some countries suggested the PESF web site be advanced in the future to be more a knowledge portal, as well as more countries be invited in the future.

A closing ceremony finalized the RESF, with speeches delivered by the Mongolia Vice Minister of Defense and USINDOPACOM's J44. USINDOPACOM reiterated the reasons why we meet to discuss environmental security, primarily because the military can play a vital role in education, networking, policy and mitigation efforts. The

Mongolia Vice Minister of Defense thanked everyone for their attendance, and stated that the Mongolia Ministry of Defense looks forward to working with all countries in the future on environmental security issues.

The day concluded with the distribution of certificates and group photos.

12. **PARTICIPANT EVALUATION SUMMARY:** At the conclusion of the RESF, participant evaluation forms were disseminated to everyone to gain feedback on the event. Each statement/question was ranked from 1 to 5, with 5 being the highest and 1 the lowest. The percentages, and/or grades, were calculated by assigning the following values/weights:

- 1 = 0
- 2 = 25
- 3 = 50
- 4 = 75
- 5 = 100

The value that is highlighted indicates the majority vote by the participants.

1) Did the Day 1 presentations made by each country broaden your understanding of environmental security issues in Northeast Asia?
85.0% (This question was not asked last year)

1	2	3	4.4	5
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2) Were the Day 1 and 4 dialog discussions effective in establishing new potential environmental security partnerships and opportunities?

90.0% (↑ **5.0%** increase from last year's group activities)

1	2	3	4.6	5
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3) Was the Day 2 theme, "Food-Water-Energy Nexus," an appropriate subject for environmental security considerations in Northeast Asia?

80.8% (*This question was not asked last year*)

1	2	3	4.2	5
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4) Did the Day 2 site visit increase your knowledge of environmental security concerns in Mongolia?

88.8% (↑ **1.6%** increase from last year's Day 1 activity)

1	2	3	4.6	5
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5) Were the contingency operation presentations delivered on Day 3 informative?

89.2% (*This question was not asked last year*)

1	2	3	4.6	5
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6) Has the Day 3 contingency operation exercise better prepared you to manage potential environmental issues?

83.0% (↑ **9.0%** increase from last year's site visit)

1 2 3 **4.3** **5**

7) Did the RESF identify a clear path forward for future environmental security partnership opportunities with the U.S. Indo-Pacific Command?

82.5% (*This question was not asked last year*)

1 2 3 **4.3** 5

8) Did you receive enough advanced material to effectively participate in the RESF?

77.5% (*This question was not asked last year*)

1 2 3 **4.1** **5**

9) Do you feel you were given an adequate amount of time to discuss your viewpoints on environmental security?

86.2% (↑ **6.5%** increase from last year's site visit)

1 2 3 **4.4** 5

10) Do you think the length of the forum was appropriate?

87.5% (↑ **6.4% increase from last year's event**)

1	2	3	4.5	5
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11) Do you believe that the event was prepared and delivered in a professional and worthwhile manner?

94.2% (↑ **0.9% increase from last year's event**)

1	2	3	4.8	5
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12) Were there adequate recesses between sessions so you could interact with all other participants you wished to meet?

94.2% (↑ **7.7% increase from last year's event**)

1	2	3	4.8	5
---	---	---	-----	---

Additional) Can you please list the primary environmental Point of Contact for your organization so RESF event planners can continue to work with your country?

- a. Australia = LCDR Andrea Argirides, Archeologist Advisor, Headquarters, Joint Operation Command, andrea.argirides@defence.gov.au, +61 61285038
- b. Alaska National Guard = Rafael Pacheco, State Partnership Program Coordinator, Rafael.pacheco.mil@mail.mil, +1-907-428-6817

- c. China = CAPT Wen Baihua, Professor, National Defense University, winitier@outlook.com
- d. Korea = Mr. SUNG Gil Soo, Director, Environmental Cooperation Team, Ministry of National Defence, gssunga@hanmail.net, +82 5571-4140
- e. Korea = Mr. NAM Hoon, Deputy Director, Ministry of National Defense, namhoon@korea.kr, +82 2 748-5868
- f. New Zealand = Ms. Jane Neilson, Climate Change Policy Analyst, Ministry of Defence, jane.neilson@defence.govt.nz, +64 2102903518

Additional Comments)

- Include all State Partnership Program directors for participating countries.
- These four days, the people, the presentations, the conversations...I do not have enough praise in either English or Korean. Thank you kindly. Thank you for all of your effort, and thank you for making the world a safer and better place. I look forward to any and all opportunities in which I may be of help.
- If PACOM wants more participation from regional countries, paying for accommodations and trips for participants can be considered because many regional countries are poor with very limited budgets for international interaction.

- Overall, an excellent forum for dialogue, networking and increasing an understanding of environmental security issues. I very much appreciate the opportunity.
- Please ensure State Partnership Program briefers present information on Day 3 (not the first day)
- Define roles and responsibilities between the State Department, USINDOPACOM, and SPPs.
- Provide an overview of the SPP before individual states give their presentations (for the 2019 PESF)
- Exceptional forum from start to finish.
- Even though I did not understand the concept of environmental security, after the Forum, I could understand the definition and importance of environmental security.
- Possible contact points for Japanese side were identified for future cooperation with the USINDOPACOM.
- Great Forum. Very much look forward to next year's PESF in New Zealand.
- Very informative and interesting conference. Speakers and participants were high quality, the site visit was relevant and demonstrated well aspects of Mongolia's environmental security concerns.

- Additional country representation (wider Asia Pacific region) would have been beneficial, and would have supported an even wider array of viewpoints. Similarly, additional NGO/civil society organisations/academic institutions would have provided another layer of information/analysis.
- The RESF was very well organised, and ran very smoothly. Thank you!
- Thank you for your good organization! Wish you all the best!

The overall participant results can be found in the below table. The column highlighted in yellow represents the majority vote. The highest possible score is 100%.

	1	2	3	4	5	6	7	8	9	10	11	12	Total
1								1					1
2			1			1		1					3
3	1	1	4	1	1	2	3	5		1			19
4	16	10	12	11	11	12	15	10	16	13	7	7	140
5	13	19	13	17	18	13	12	13	13	16	23	23	193
	30	30	30	29	30	28	30	30	29	30	30	30	
	85.0	90.0	80.8	88.8	89.2	83.0	82.5	77.5	86.2	87.5	94.2	94.2	86.6%

Overall, this year's event was rated 3.2% higher than last year, and 0.4% lower than two years ago.

13. COUNTRY EVALUATION SUMMARY

1. Australia

SUSTAIN

1. Comprehensive dialogue
2. Robust knowledge sharing
3. Facilitator training
4. Site visit (practical issues)
5. Icebreaker (cultural performance)

IMPROVE

1. Enhance communication during the event by e-mailing alternative addresses (cannot access government e-mail on the road)
2. Develop <http://pesforum.org> to be a knowledge portal

2. China

SUSTAIN

1. Bilateral discussions
2. Site visit
3. Knowledge sharing

IMPROVE

1. More information on the PESO
2. Invite more countries to attend

3. Shorten the forum (remove panel sessions)
4. Increase site visit time

3. Japan

SUSTAIN

1. International cooperation on environmental security
2. Civil-military coordination on environmental security

IMPROVE

1. Participation from mainland Japan
2. Mongolia needs to do more to resolve the waste issues at the Shar Khad site

4. Korea

SUSTAIN

1. Opportunity to share Korea issues with others
2. Relationship building / breaks (informal discussions)
3. Opportunity to learn about issues in other countries

IMPROVE

1. Increase time for small group discussions
2. Receive bilateral discussion POC and topics in advance
3. Provide more briefing guidance to ensure the right topic is presented to the plenary
4. Provide an opportunity for multilateral discussions, not just bilateral

5. Mongolia

SUSTAIN

1. Practical activities
2. Promotion of civil-military relationships
3. Enhanced regional cooperation between neighboring countries

IMPROVE

1. Invite more civilian participants (GOV, IOs, NGOs, etc.)
2. Hold further forums in a multi-language format

6. New Zealand

SUSTAIN

1. Broad range of presentation topics
2. Learning about host nation issues
3. Break time for dialogue with all participants
4. Information sharing
5. Logistics

IMPROVE

1. Increase representation of regional participants
2. Diversify speakers (more civ-mil)

7. United States

SUSTAIN

1. Venue, read-ahead material, and handouts
2. Facilitator training
3. Mixture of briefs and activities
4. Site visit
5. Support from Office of Defense Cooperation and host nation

IMPROVE

1. Provide rank equivalency chart in administrative guidance
2. Increase habit of dialogue discussion time
3. Web site (<http://pesforum.org>) organization
4. The State Partnership Program (SPP) briefing was not in the right order
5. Reduce acronyms in all documents

14. HABIT OF DIALOGUE SUMMARY

Australia

1. Discussion Topics:
 - Pacific Environmental Security Organisation
 - Funding Contribution
 - Oceania Engagement
2. Priority Outcomes:
 - Operationalise INDOPACOM - JOC Australia ES
 - LOO-1 Progress ESF establishment through Defence Stakeholders
 - LOO-2 Progress whole of Government line for ESF establishment
 - Quarterly updates: Charter, other structures, technical updates
 - Funding – salaries and travel at this stage
 - Oceania outreach
 - Assess regional projects for environmental security opportunities and collaboration

China

- Bilateral Workshops
 - One in China and one in U.S. – one per year
 - Share ideas on how to work together
 - Potential to work with a third country on a project
- PESO (Pacific Environmental Security Organization)

- RESF Delegates believe this is a good idea
- Standing members help continuity & accelerate progress
- Opportunity for multi-lateral dialogue
- Contacts to continue progress
 - China: Col Sun, CAPT Wen
 - US: Chris Sholes, Col Matheis

Japan

1. Discussion Topics:
 - Bilateral coordination on environmental security
2. Priority Outcomes:
 - Try to arrange a high-level meeting between USAID and the Japanese Ministry of Foreign Affairs (MOFA) to discuss USG-GOJ communication on environmental security.
 - Perhaps have INDOPACOM senior leaders include environmental security on the agenda during their next meeting on bilateral cooperation with the Japanese Self-Defense Forces (JSDF).
 - The JSDF is doing a lot regarding environmental security domestically. INDOPACOM should try to schedule staff visit to Japanese training areas and camps to see their efforts. While there, promote the importance of environmental security.

Korea

1. Discussion Topics:
 - Potential Fields of Cooperation
 - Including ROK as an early partner in the organization of RESF
2. Priority Outcomes:
 - Oil Spill Response Expertise Exchange
 - Soil Contamination on former Military Bases Case Sharing
 - Fine Dust Particulate as a continuous agenda in RESF
 - Waste Management Expertise Sharing
 - Continuing dialogue in 2019 NZ PESF
 - MND as a focal point for further communications with other ROK ministries

Mongolia

1. Discussion Topics:
 - Soil and Water Pollution
 - Unexploded Ordinance (UXO) Detection and Education
 - Air Pollution
2. Priority Outcomes:
 - Develop a working group to tackle issues of water and soil pollution. Start with Shar Khad to work projects to help remediate and address problems
 - Look to Alaska National Guard for information on what rural villages in Alaska use for

compartmentalized water and sewer treatment systems

- Construct net/fence to capture nearby landfill waste
- Construct perimeter fence for Shar Khad Training Camp
- Develop a project where de-mining can be executed; could provide assistance/training to locate/dispose of UXO as well as provide necessary medical treatment. Program could be taught to Military and Civilian technicians. Phase 2 would provide modern equipment for technician use.
- Develop a quadra-lateral working group between US, South Korea, Mongolia, and Japan. Involve Mongolians who are already involved in the Fine Dust/Air Pollution Reduction Program and the group formed by the vice ministers.

New Zealand

1. Discussion Topics:

- PESF 2019: Logistics, agenda, approach
- Policy priorities: climate change, climate migration, biosecurity, and invasive species management, IUU fishing and resource protection.

2. Priority Outcomes:

- Outcome #1 – PESF logistics: who, what, where, when, site visit.
- Outcome #2 – Draft agenda topics: climate change resilience and migration policy (table top exercise);

biosecurity; promoting Civ-Mil cooperation, interoperability, and interagency collaboration; writing climate change security policy

- Outcome #3 – PESF and Pacific Environmental Security Organisation: Consultation process, socialising and awareness building.

