

NAVAL Postgraduate School

#### **Thesis Presentation:**

Climate Insecurity and Governance Competition: The Near-Term Geopolitical Consequences of Destructive Climate Events.

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Defense Analysis 698 Class of December 2022

The Nation's Premier Defense Research University

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#### Outline

- 1. The Problem
- 2. Research Question
- 3. The Approach
- 4. The Findings
- 5. Recommendations

#### **The Problem**

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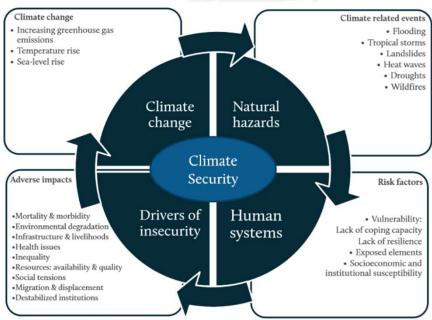


#### **Climate Security**

- 2022 NSS: designates climate change as an existential threat and a transnational shared challenge.
- IPCC: as the world warms, there will be an increase in the intensity and frequency of natural disasters and extreme weather events.
- IPCC: over 3.3 billion people live in areas designated as highly vulnerable to climate change.

#### **Adversarial Competition**

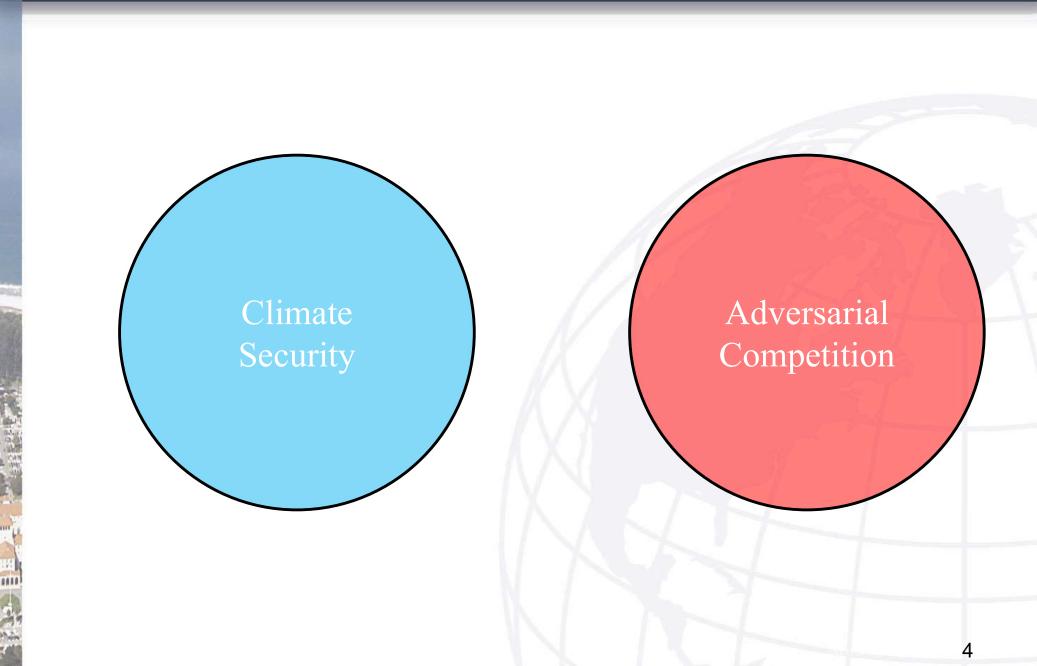
- New and more frequent methods of competition below the threshold of armed conflict are becoming the norm.
  - Economic statecraft
  - Cyber
  - Political warfare
  - Military and humanitarian aid



Source: IMCCS Climate Security Framework



#### **The 2022 NSS Priorities**



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#### DoD CLIMATE ADAPTATION STRATEGIC FRAMEWORK, 2021

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LINES OF EFFORT (with Focus Areas)			ST	RATEGIC OUTCOMES	END STATE		
		ENAE	BLERS		l. l.		
CLIMATE-INFORMED DECISION-MAKING   Climate Intelligence  Strategic, Operational, and Tactical Decision-Making  Business Enterprise Decision-Making			$\bigcap_{i=1}^{n}$		Climate change considerations and impacts included in all relevant and applicable DOD decisions		
TRAIN AND EQUIP A CLIMATE-READY FORCE         • Train Safely in Extreme Conditions         • Assess Current and Future Equipment         • Assess and Adjust Requirements and Acquisition         • Test Equipment for Climate Effects	A ANALYTICS	D INNOVATION		TICE	An agile force, trained and equipped to operate effectively in all anticipated climatic conditions	Ensure the DOD can operate under	
RESILIENT BUILT AND NATURAL INFRASTRUCTURE Installation Resilience Preserve Test and Training Space Ecosystem Services	MONITORING DATA	INCENTIVES TO REWARD	LIMATE LITERACY	RONMENTAL JUST	Built and natural infrastructure necessary for successful mission preparedness, military readiness, and operational success in changing conditions	changing climate conditions, preserving operational capability and enhancing the natural and man-made systems	
SUPPLY CHAIN RESILIENCE AND INNOVATION • Assess Supply Chain Resilience • Harden and Shift to Onshore • Leverage Purchasing Power	CONTINUOUS	ALIGNING INCEN	0	ENVI	Uninterrupted access to key supplies, materials, chemicals, and services	essential to the Department's success	
ENHANCE ADAPTATION AND RESILIENCE THROUGH COLLABORATION   Interagency and Intergovernmental  Partner Nations  Community Resilience					Reduce adaptation costs and build unity of purpose through meaningful engagement with DOD stakeholders		



#### Army CS-IP LOEs

Lines of Effort	Ways and Means	Objectives
1. Installations	<ul> <li>Resilient energy and water supply</li> <li>Carbon free electricity</li> <li>Efficient and sustainable infrastructure</li> <li>Non-tactical fleet electrification</li> <li>Sustainable land management</li> <li>Enhanced planning</li> </ul>	<ul> <li>Infrastructure resilience optimized</li> <li>Infrastructure sustainability enhanced</li> <li>Land management adapted to climate change risks</li> <li>Future access to training and testing lands secured</li> <li>Army GHG emissions mitigated</li> </ul>
2. Acquisition and Logistics	<ul> <li>Deployment of advanced technology</li> <li>Reduced fuel consumption</li> <li>Future contingency basing</li> <li>Clean procurement</li> <li>Resilient supply chains</li> </ul>	<ul> <li>Sustainment demand reduced</li> <li>Operational and contingency basing capability increased</li> <li>Climate resilience strengthened</li> </ul>
3. Training	<ul><li>What the Army trains</li><li>How the Army trains</li></ul>	<ul> <li>Train and educate the Army to operate in a climate-altered world</li> </ul>

ACS-IP LOEs, Themes, and Objectives Army Climate Strategy Implementation Plan FY23-FY27

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**Research Question/Thesis** 

## "How can actors leverage climate insecurity for regional influence?"

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*Climate Security*: the interactions between change in global, regional, or local climate patterns and political, military, economic, and social risks/stresses to peace, security, and stability.

*Governance Competition:* When a third-party actor challenges the legitamacy, authority, and or influence of a governing body over a population by undermining, circumventing, or substituting governing efforts.



#### **Governance Competition Model**

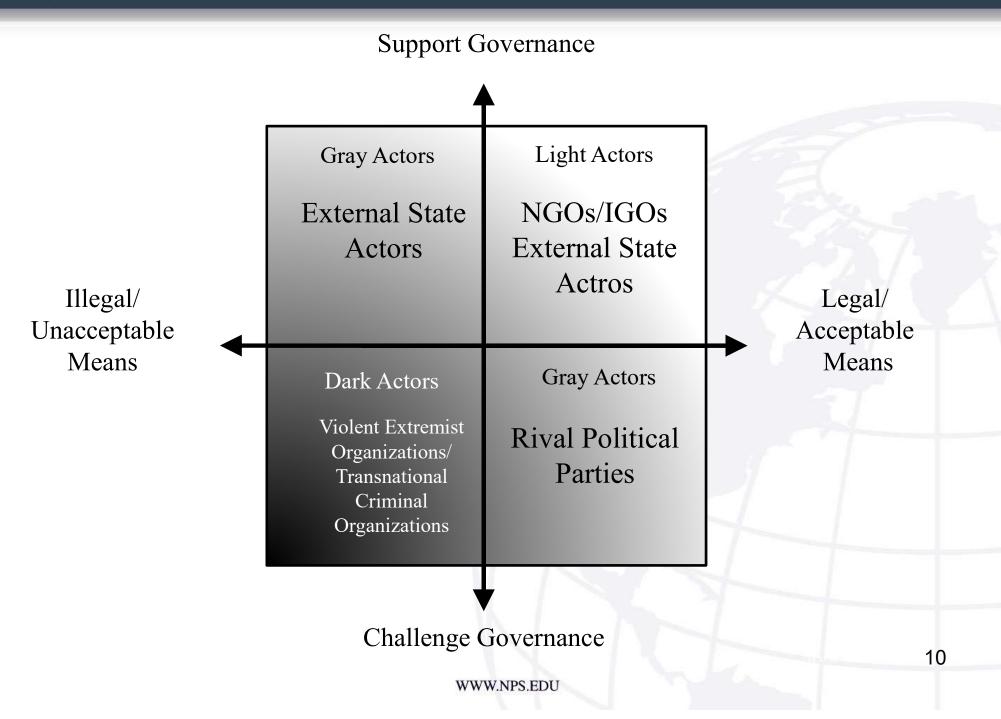


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#### **Actors in Governance Competition**

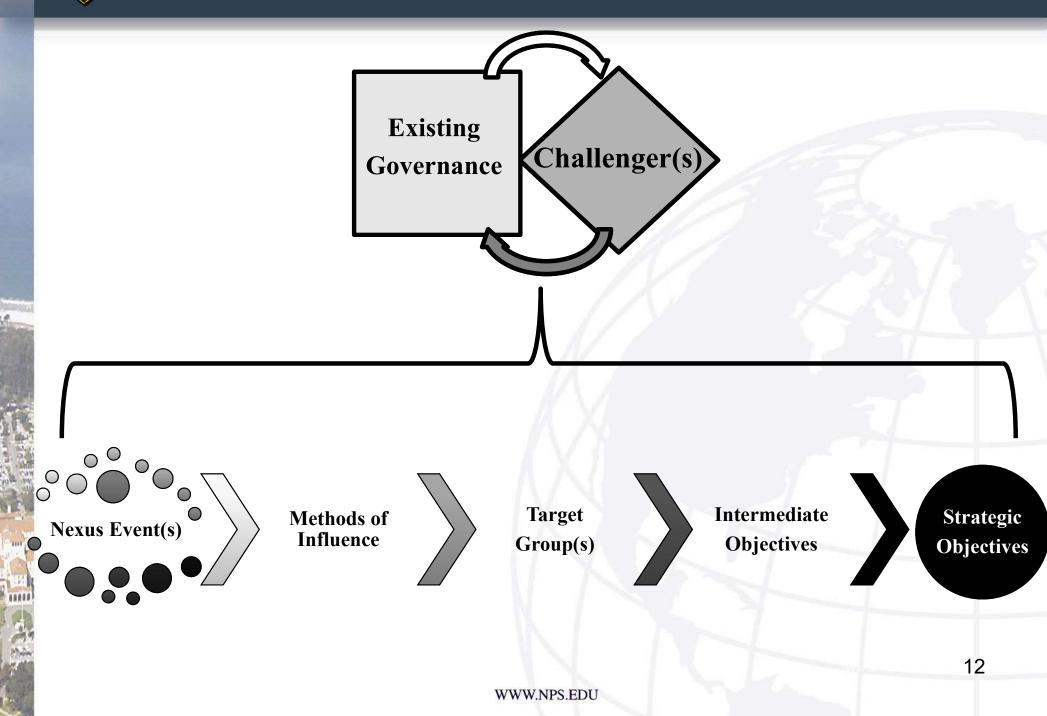




#### **Governance Competition Model**



#### **Governance Competition Model**



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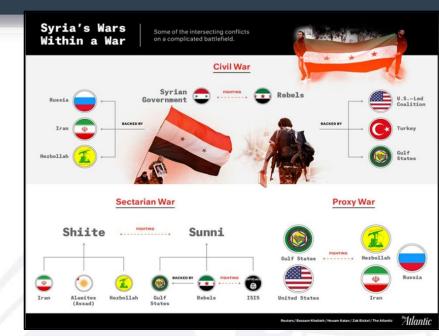


#### **Case Studies**

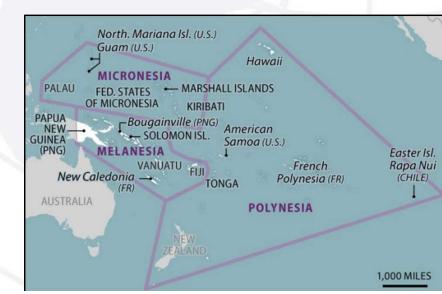
## Syrian Civil War



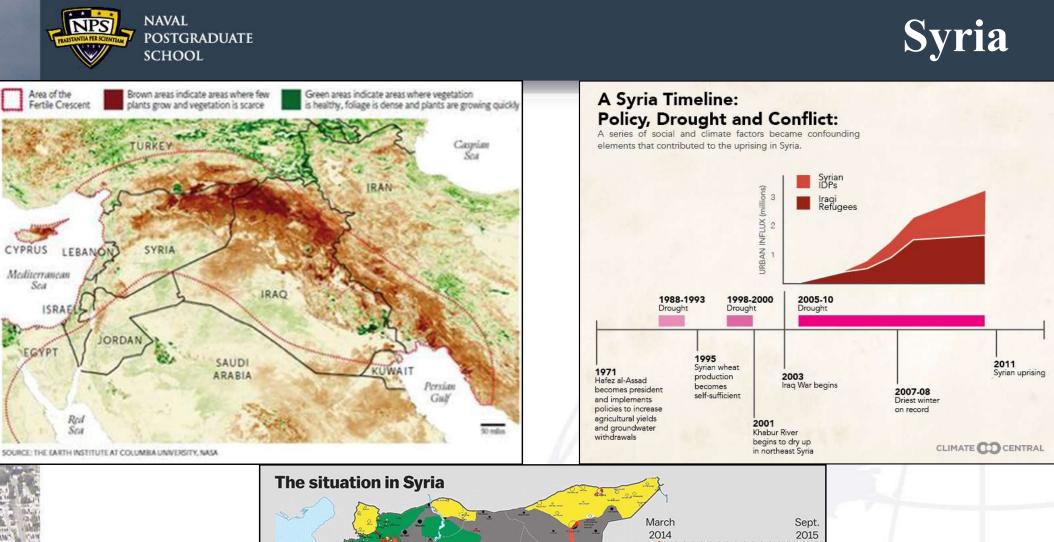
### Pacific Islands



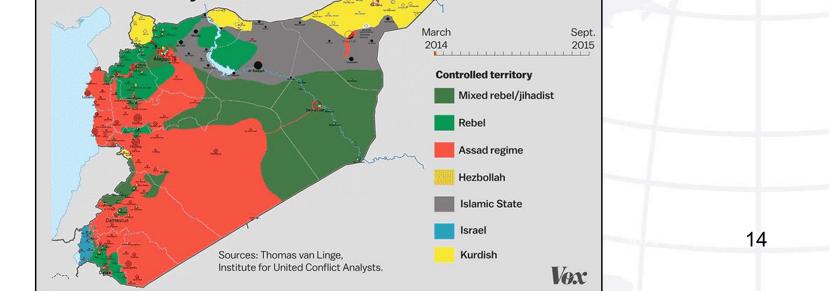
#### Central America



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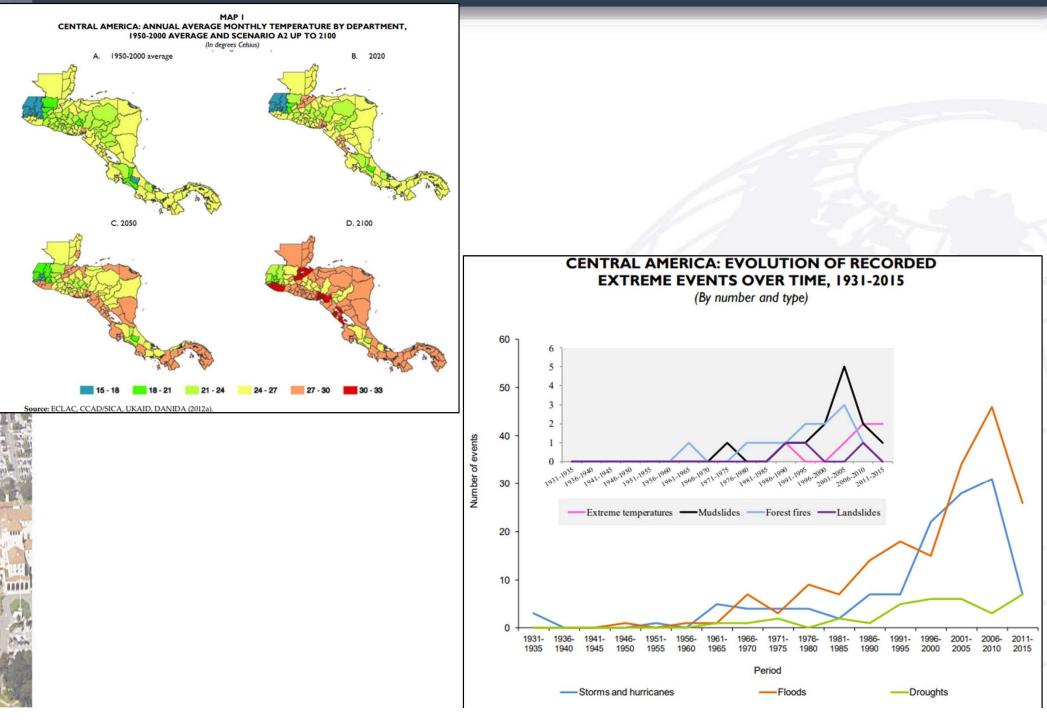
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Governance Competition Model: Syria							
Existing Governance	Challengers	Strategic Objectives	Intermediate Objectives	Target Group(s)	Method of Influence	Nexus Event(s)	
Syrian Government	ISIS	Establishment of an Islamic Caliphate	Fear/ Increase Legitimacy	Civil Population/ Govt Officials	Violence/ Extortion	Drought	
Syrian Government	Russia	Survival of Syrian Government for Regional Economic Access & Influence/ Destruction of ISIS	Foothold in Syria to Use Military Power/ Fear/ Deter Other ESA Actions	Civil Population/ ISIS	Military Power/ Deterrence	Drought	

Syria



#### **Central America**





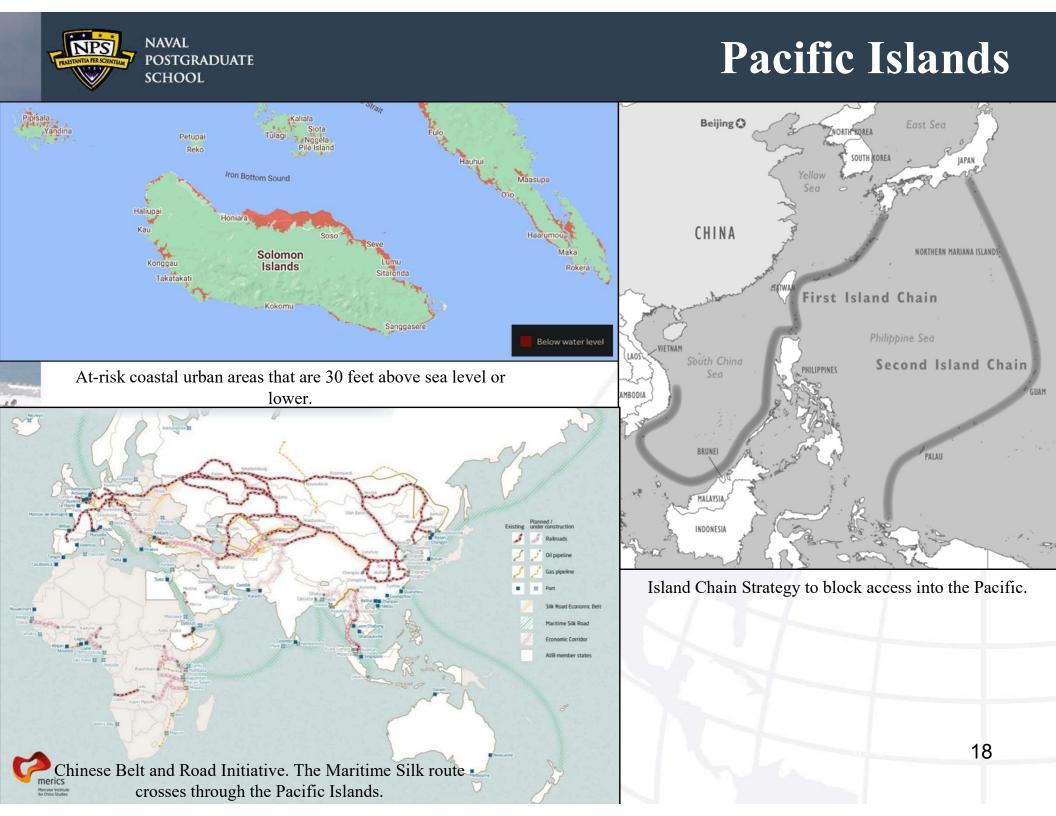
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Central	America

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Governance Competition Model: GHEN							
Existing	Challengers	Strategic	Intermediate	Target	Method of	Nexus	
Governance		Objectives	Objectives	Group(s)	Influence	Event(s)	
GHEN State	MS-13	Freedom of	Fear/	Civil	Violence/	Drought/	
Governments	Mara-18	Maneuver/Finance	Increase	Population/	Extortion	Hurricanes	
	(	1	Legitimacy	Govt	1	1	
				Officials	[]		
State	PRC	Regional	Increase	Civil	Econ State	Drought/	
Governments	1	Economic Access	State	Population/	Craft/Relief	Hurricanes	
	1	& Influence	Partnerships	Govt	1 /	1	
	'			Officials			
Nicaraguan	Russia	Regional Access	Increase	Nicaraguan	Military	Drought/	
Government	(	& Influence	State	Government	Aid/Relief	Hurricanes	
			Partnerships				
Guatemala,	Russia	Threaten US	Coups/	Civil	Unconventional	Drought/	
Honduras,	1	Borders	Destabilize	Population	Warfare	Hurricanes	
El Salvador	'		Region		[]		





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		Governance Corr	petition Mode	l: Pacific Islan	nds	
Existing Governance	Challengers	Strategic Objectives	Intermediate Objectives	Target Group(s)	Method of Influence	Nexus Event(s)
PICs	PRC	International Environment favorable to PRC	Security & Economic Agreements	Civil Population/ Govt Officials	BRI/ Disinformation/ IUUF/ Extortion	Sea Level Rise/ Extreme Weather Events (cyclones)

**Pacific Islands** 



- Destructive climate events can serve as a threat multiplier
- Climate insecurity increase the chances of governance and adversarial competition
- Climate insecurity provides an opportunity that state and or non-state actors can exploit
- Climate insecurity has geopolitical implications in the near term
- Climate security creates a field for the US to advance influence



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# Strategic Adjustment DoD Climate Security LOE Defend Forward

#### 2. Tactical Employment:

#### Special Operations Forces Civil Affairs



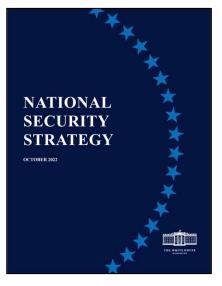
We will defend forward to disrupt or halt malicious cyber activity at its source, including activity that falls below the level of armed conflict. We will strengthen the security and resilience of networks and systems that contribute to current and future US military advantages. We will collaborate with our interagency, industry, and international partners to advance our mutual interests. – US DoD Cyber Strategy 2018



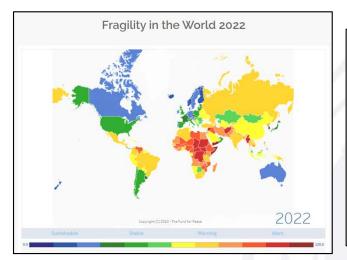
We will defend forward to disrupt or halt malicious <u>Governance Competition</u> at its source, including activity that falls below the level of armed conflict. We will strengthen the security and <u>governance and state resiliency to climate</u> <u>events</u> that contribute to current and future US military advantages. We will collaborate with our interagency, industry, and international partners to advance our mutual interests. – Proposed US DoD CASF LOE



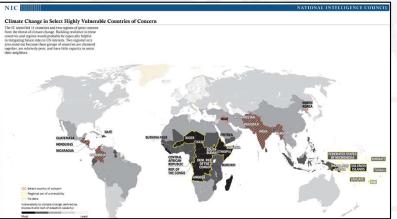
#### Prioritize and Identify Climate Security Named Areas of Interest



Prioritize Regions



Identify Fragile Areas

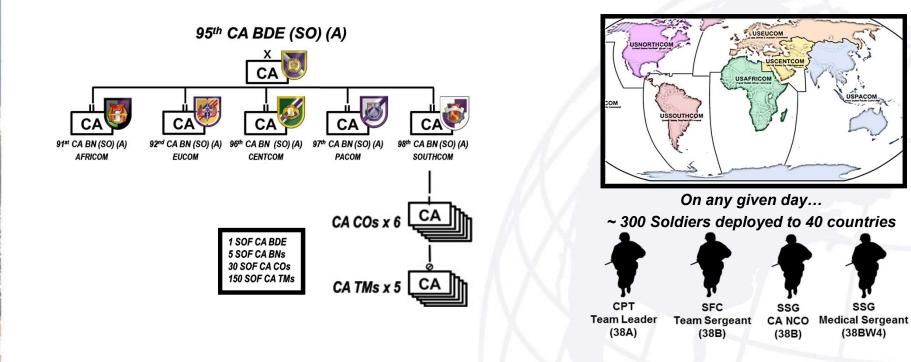


Identify Climate Vulnerable States



#### US Army SOF Civil Affairs

The 95th Civil Affairs Brigade (Special Operations) (Airborne) provides the nation's premier *civil reconnaissance* and *engagement* force to *understand* and *influence* the *human component* of the *land domain* to advance the nation's global priorities.



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<u>Mission</u>: Civil Affairs mission is to <u>Understand</u> and <u>Impact</u> the <u>Civil Domain</u> to support of <u>US objectives</u>

#### **Civil Domain**

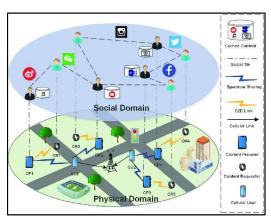
- Physical
- Social
- Information

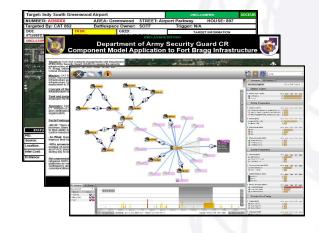
#### Understand

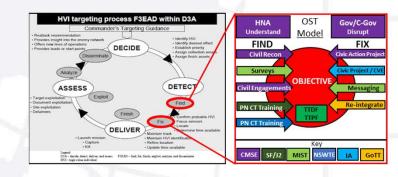
- Open-Source Research/Publicly Available Information
- Civil Reconnaissance
- Civil Engagement
- Civil Information Management
- Human Network Analysis

#### Impact

- Non-Lethal Targeting
- IA/Joint/ Combined Efforts
- Civic Action Projects
- Support Governance
- Support to FID







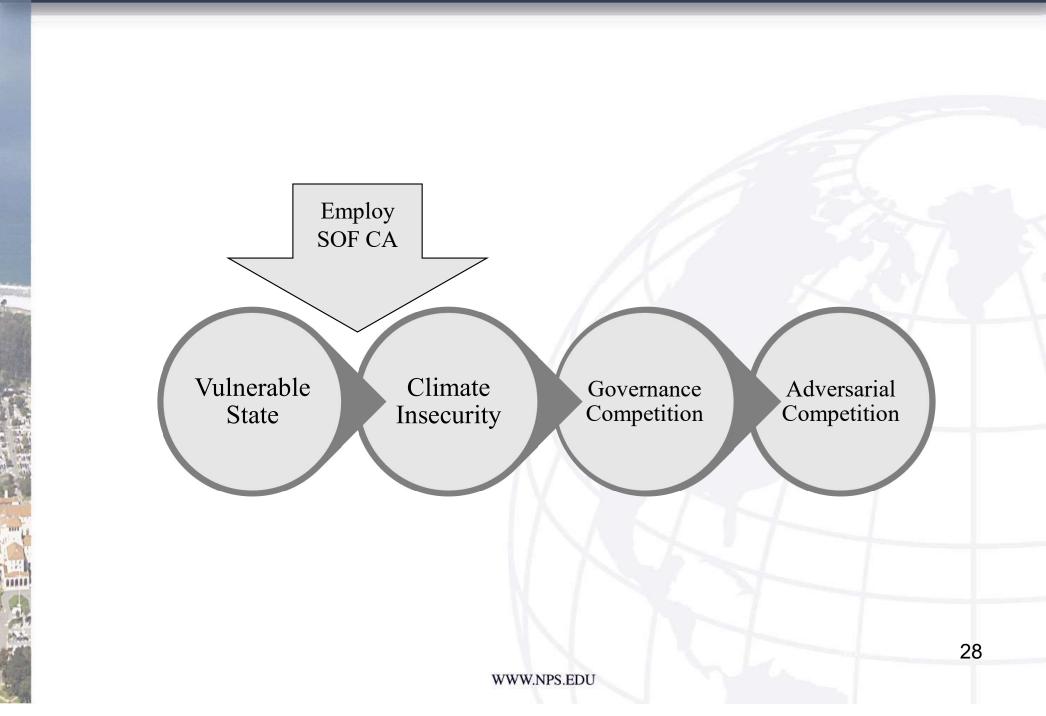


#### US Army SOF CA: "Hub & Spoke"



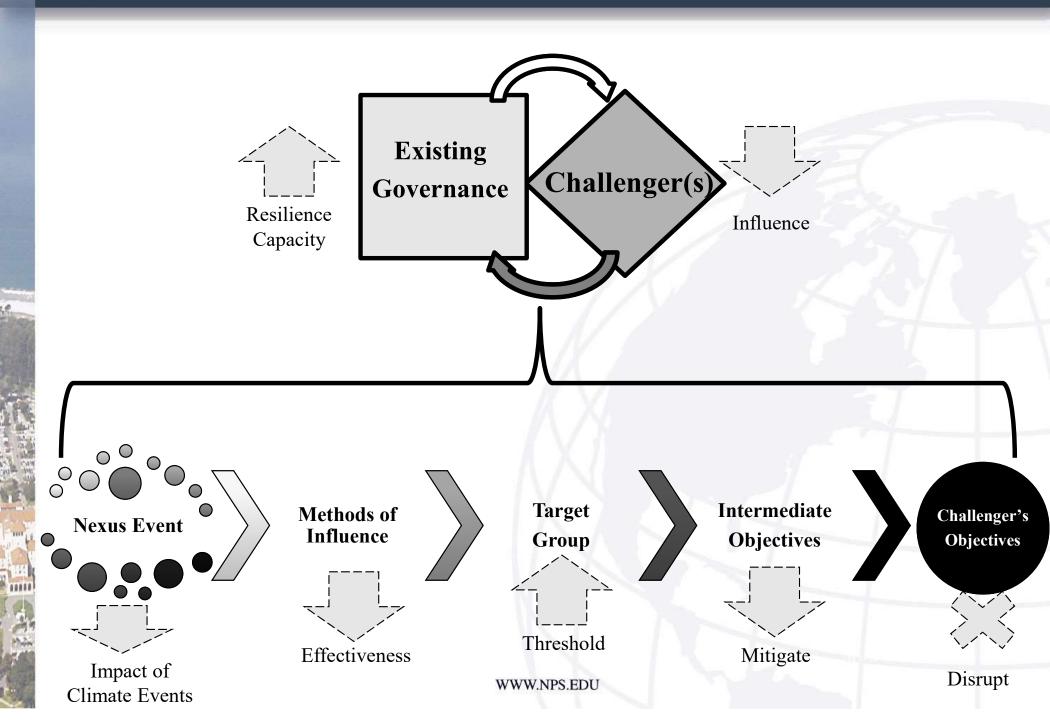
#### **Employ SOF CA**







#### **Governance Competition Model**





## **Questions?**

"To win one hundred victories in one hundred battles is not the acme of skill. To subdue the enemy without fighting is the acme of skill." -Sun Tzu

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