



Stennis Space Center

What Are We Going to Do?

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SAIC

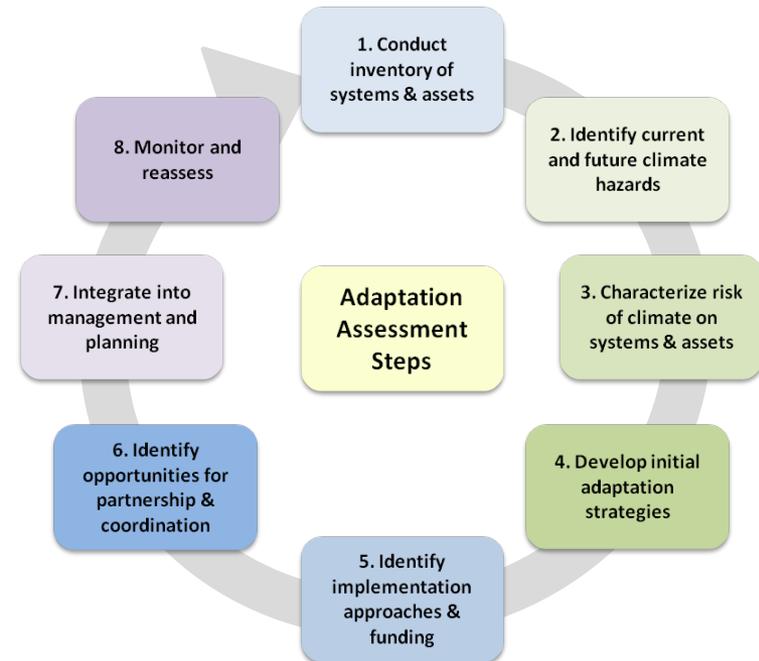
What do you want to ask a
climate scientist.....?

**Place your Post-its on the
appropriate wall/easel
during the break**

NASA's Climate Risks Workshops - Purpose → Climate Resilient Centers

OUTCOMES – SSC gains ability to:

- **Share climate information and expertise**
– historic, current, & projected climate hazards specific to the region
- **Identify and characterize risks and opportunities of current and future climate** on systems / assets / capabilities
- **Start a methodology / dialogue and make connections** to execute a continuous adaptation process
- **Begin to integrate climate considerations** into short & long term strategic planning and **existing** management plans and processes

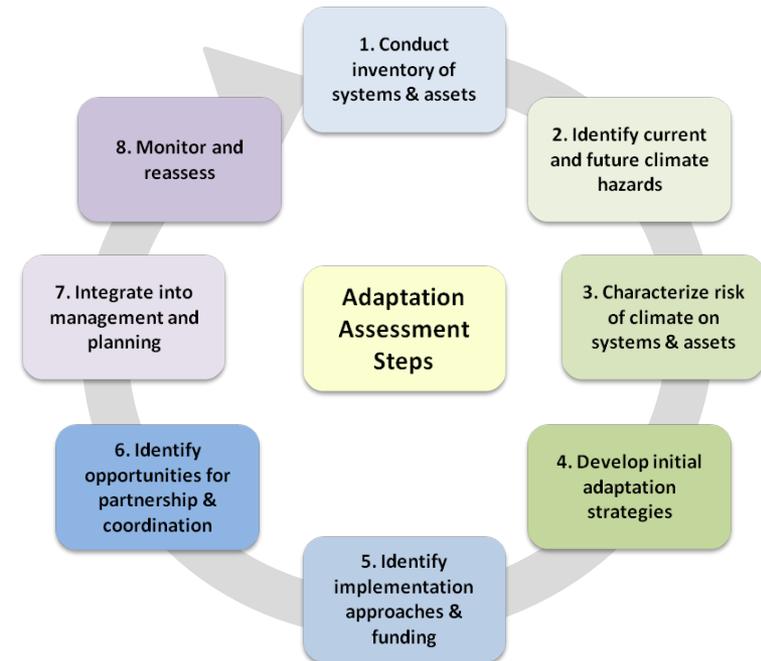


This is the beginning! There is follow-on work....
Workshop helps the integration process

NASA's Climate Risks Workshops - Purpose → Climate Resilient Centers

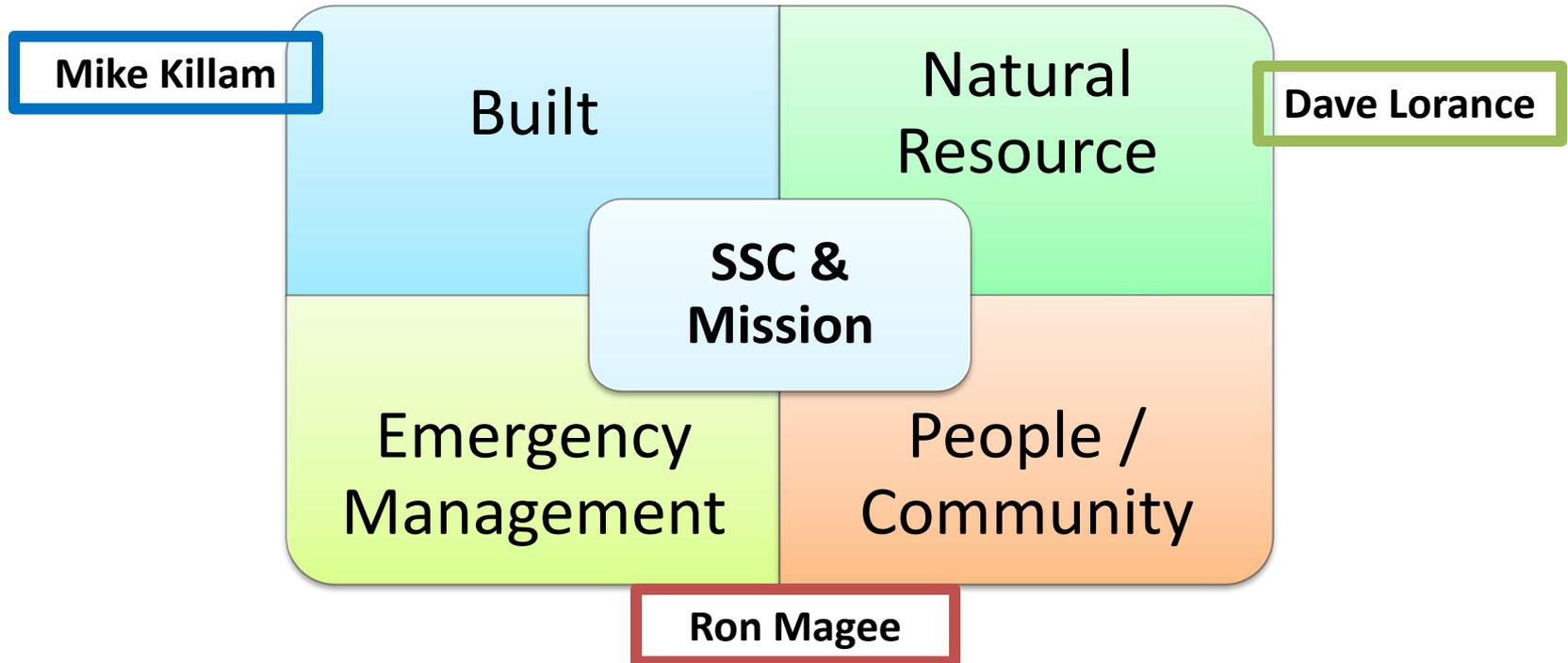
Objectives:

- Share climate information and expertise
- Identify and characterize risks and opportunities of current and future climate
- Start a process & partner
- Integrate into existing management plans and processes



This is the **beginning!** There is follow-on work....

SSC System Owners for this Workshop



- Person responsible for each overarching “system” that supports SSC and its mission.
- Provides leadership before, during and after workshop
- Expected by Center leadership to continue efforts post workshop

Who are SSC Plan and Process Owners?

- **Plan / Process Owner:** Person or organization point of contact responsible for a particular plan or decision-making process at the Center
 - **Most likely the ones who will execute strategies and incorporate climate risks into plan or process**

Some Plans and Processes

Safety

- Maximum Work Time Policy in SPD 8715.001 Safety and Health Handbook
- SPLN-8838-0001 SSC Fire Protection/Fire Prevention Plan

Permits

- Air Permit
- Water Discharge Permit (NPDES)
- Surface Water Withdrawal Permit
- Potable Water Permit

Telework

- SSC Telework Plan

Leave/Hours of Duty

- Time and Attendance Guidelines

Plans

- Center Master Plan
- SPLN 1040-0005 Continuity of Operations (COOP) Plan
- SPLN 1040-0006 Emergency Management Plan
- SPLN-8500-0067 Environmental Management Plan
- Integrated Contingency Plan

Who are SSC Stakeholders?

- Management
- Mission Directorate
- Fire & Emergency Mgt Staff
- Natural Resources Mgt Staff
- Environmental Mgt Staff
- Planning Staff
- Facilities Staff – Operations & Maintenance
- Safety and Health Staff
- Engineering & Facilities Mgt Staff
- Utilities Staff
- Information Technology
- Human Resources Staff
- Scientists
- Center services – cafeteria, clinic, child care, etc.



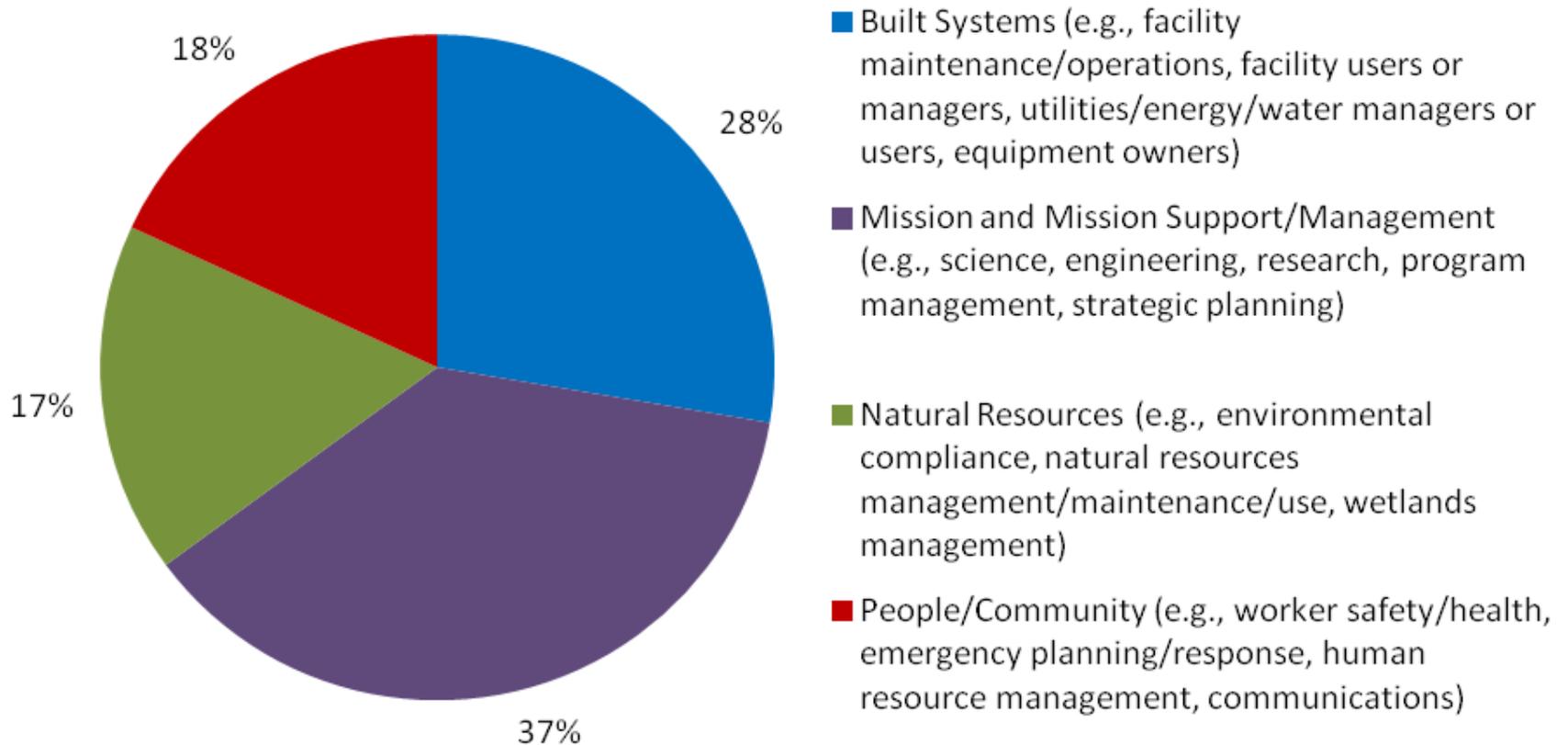
All either run, manage or use Center systems and assets

External Stakeholders Attending / Presenting

Gulf Regional Planning Commission	NAVFAC Southeast
Habitat for Humanity	NOAA
Hancock County	Northern Gulf Institute
Land Trust	Office of the Oceanographer of the Navy / Task Force Climate Change
Louisiana State University	Pearl River Community College
Mississippi Power Company	Southern Mississippi Planning & Development District
Mississippi State University - Northern Gulf Institute	U.S. Army / IMCOM / AEC
Mississippi Department of Environmental Quality	U.S. Army Corps of Engineers
NASA Dryden Flight Research Center	U.S. Department of Interior / National Park Service
NASA Goddard Institute of Space Studies / Columbia University	U.S. EPA
NASA Johnson Space Center	U.S. Navy
NASA Marshall Space Flight Center	U.S.G.S.
NASA Michoud Assembly Facility	USM/ MS-AL Sea Grant-Resilience Index
Naval Research Lab	

Registration Breakdown

94+ registrants. 57 from Stennis; 1 each from JSC and MSFC; 28 from outside NASA

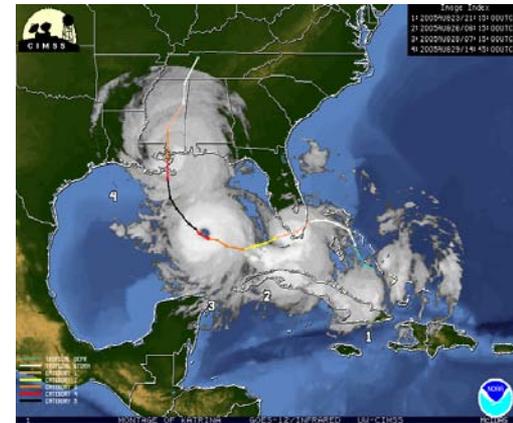


What are We Going to Focus On?

- *Mitigation* involves actions that decrease the atmospheric concentration of greenhouse gases (GHGs). This can be done by reducing GHG emissions and by enhancing the storage of carbon on the earth.



- *Adaptation* involves actions that reduce the effects of climate variability and change or enhance the benefits.



Mitigation & adaptation can be interactive

Definitely a WORKshop

**Briefings from NASA
and outside speakers.
> 50% is breakout
sessions and brief back
sessions**

Breakout Session #1: Characterize Risk of Climate on Systems & Assets

Guidance for Report Back

- PowerPoint template available
- 15-20 minute presentation from each system
- Focus on:
 - Main climate hazards to your system and assets/capabilities
 - Examples of impacts, current work-arounds, etc.
 - Were any climate impacts covered under existing plans?
- Summary of overall types of response (Develop strategies? Evaluate? Watch?)

Breakout Session #3 Integration & Implementation Approaches

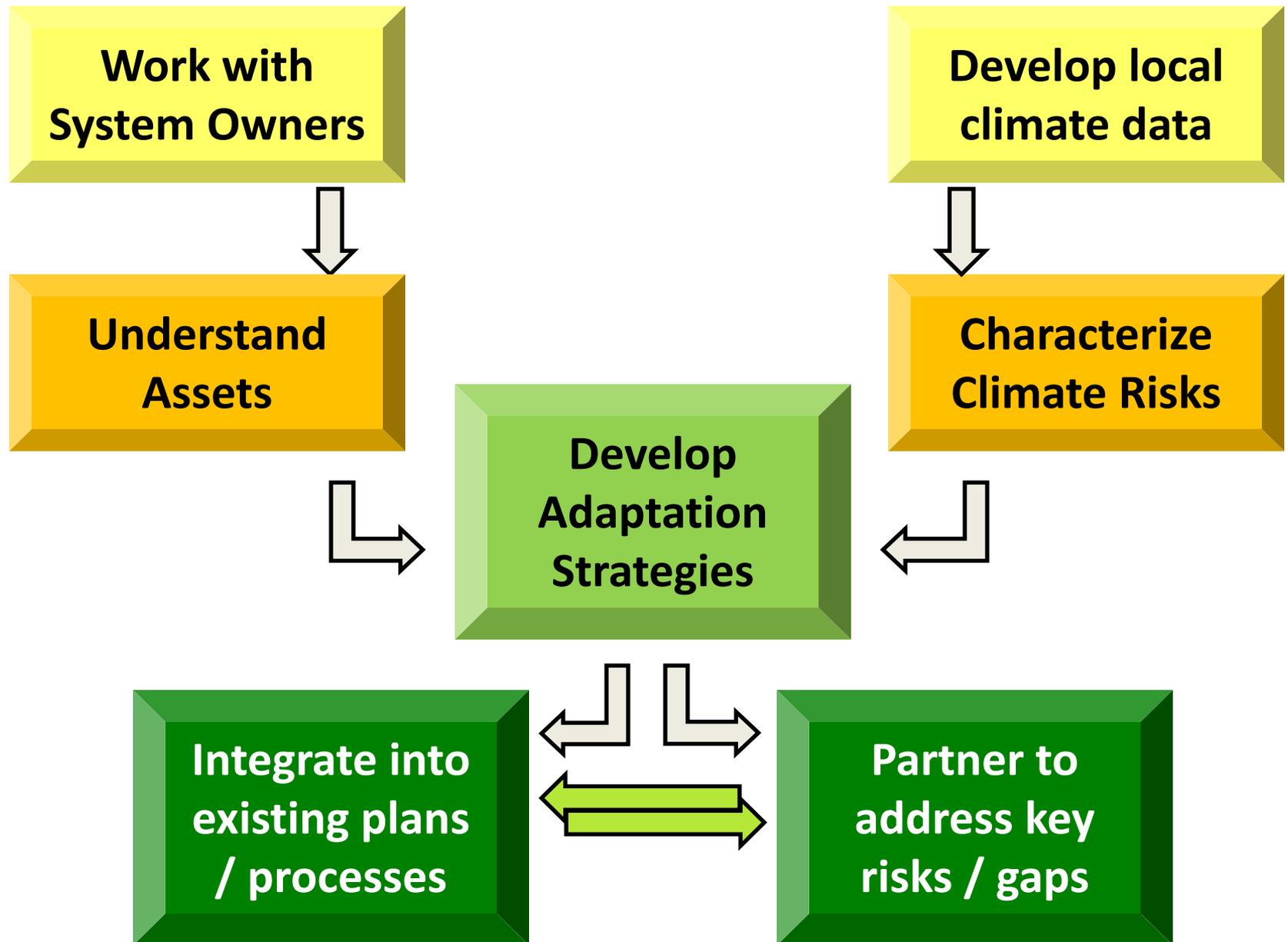
Breakout Session #2

Develop Potential Adaptation Strategies

Adaptation Strategy	Examples
Maintenance & Operations	<ul style="list-style-type: none">• Raising critical infrastructure which sits in basements or on ground floors• Increasing cleaning of drains and gutters to reduce flooding (process change)• Integrating “green” designs such as green roofs on buildings which house key infrastructure to reduce the building’s energy needs (both mitigation and adaptation)• Modifying networks (such as roads and telecommunications) to reflect changes in sea level rise, storm surge, and flooding
Capital Investments	<ul style="list-style-type: none">• New infrastructure• Installation or increase in the height of flood barriers• Relocation of critical elements or the entire infrastructure to higher ground• Changes in construction materials• Retrofits to existing infrastructure or the construction of new infrastructure
Policy	<ul style="list-style-type: none">• Zoning (e.g., land use)• Federal, state, local, agency policy changes• Emergency management• Joint operations for water, energy, transportation and communications with surrounding administrative and political units, such as requiring facilities located within flood zones to elevate electrical equipment above existing or projected flood levels

Products: Briefings, documentation

NASA's Current Workshop Approach



What's at Stake?

