Regional Resiliency Assessment Program

California Lifelines RRAP Project

Briefing

February 2019

Homeland Security

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Cybersecurity and Infrastructure Security Agency

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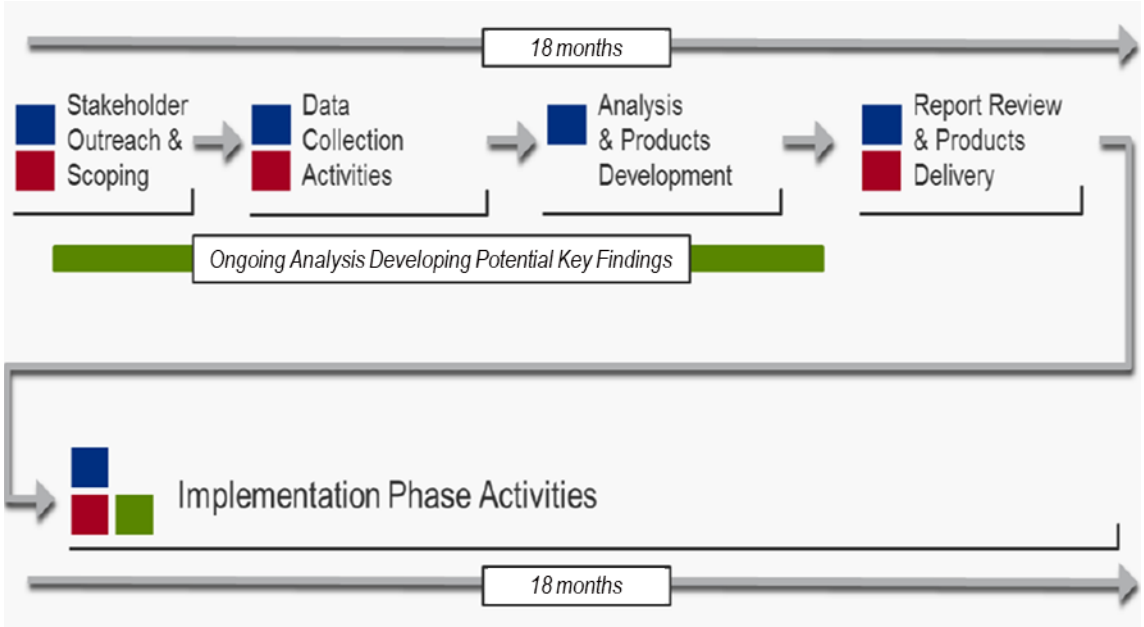
Regional Resiliency Assessment Program

The goal of the Regional Resiliency Assessment Program (RRAP) is to generate greater understanding and action among public and private sector partners to improve the resilience of a region's critical infrastructure

- Resolves infrastructure security and resilience knowledge gaps
- Informs risk management decisions
- Identifies resilience-building opportunities and strategies
- Improves critical partnerships among stakeholders

RRAP Project Lifecycle

- RRAPs have a 3-year funding lifecycle
- Key Activities include:
  - Data collection
  - Analysis
  - Implementation
- Participation requirements vary throughout the project's lifecycle.



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CA Lifelines RRAP Project

Purpose: The effects of a “Black Sky” event on highly connected infrastructure systems are not well understood

- “Black Sky” event = prolonged regional electrical power outage of at least 30 days
- Project results to inform state and local planning and preparedness efforts

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CA Lifelines RRAP Project

Goal: Study and assess the vulnerabilities and consequences of, and resilience to, a “Black Sky” event on critical infrastructure sectors in the San Diego area

- Lifeline – Energy, Water & Wastewater, Communications, and Transportation
- Emergency Services
- Healthcare & Public Health

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CA Lifelines RRAP Project

Objectives:

- Examine vulnerabilities of the region's electric power system to a black sky hazard and the probable effects of system performance
- Characterize the dependencies of energy, water, wastewater, communications, transportation, emergency services, and healthcare infrastructure on electric power
- Assess the impact and cascading effects of prolonged power outage on energy, water, wastewater, communications, transportation, emergency services, and healthcare infrastructure

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Proposed Deliverables

- Black sky electric power outage modeling results
- Support for enhancing and restructuring of the State's infrastructure database to include relationship information
  - Support for data gathering for San Diego case study
- Asset-level (bottom-up) infrastructure dependency analysis
  - Provide a better understanding of critical infrastructure lifelines dependencies with each other using San Diego black sky event as an illustrative case study
  - Provide a methodology to repeat the study (with or without support?) elsewhere in the state
- Resilience Assessment report with Key Findings and Resilience Enhancement Options

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Proposed Activities

- Outreach to stakeholder organizations
- Local project kickoff in San Diego – March 12, 2019
- Electric power outage modeling
- Discussions with State infrastructure database people
- Facilitated discussion with stakeholders based on black sky electric power outage scenario
- Research and data gathering, including stakeholder interviews and asset-level surveys
- Infrastructure dependency analysis

Discussion Questions

- What is your agency's role in responding to such an long-term power outage event?
- What are your primary concerns related to the impact and recovery from such an event?
- What organizations and partners should this project engage?

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For more information contact:

Kelly Wilson

Protective Security Advisor - San Diego

kelly.wilson@hq.dhs.gov