

ECOSYSTEM MANAGEMENT AND RESTORATION RESEARCH PROGRAM (EMRRP)

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**US Army Corps
of Engineers**



TOPICS FOR TODAY....

- ❖ What kind of R&D we do and where it fits operationally
- ❖ How our research is informed
- ❖ Current research efforts
- ❖ Research interests
- ❖ Possible R&D intersects

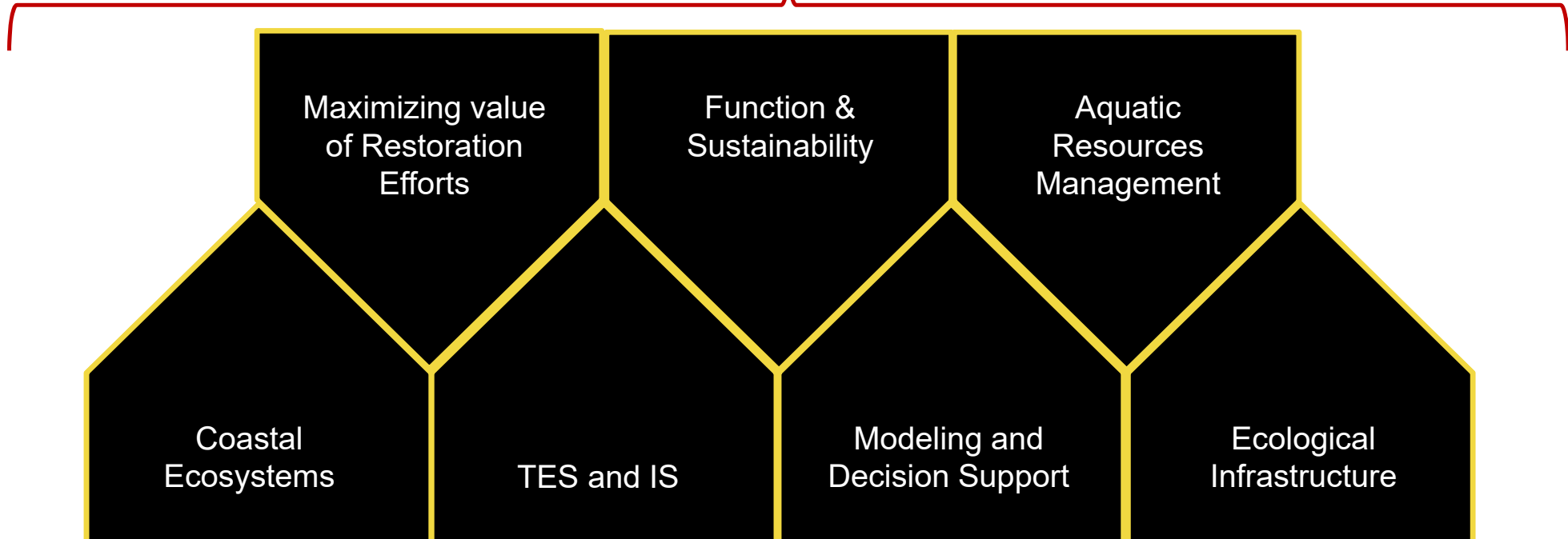




EMRRP MISSION – AQUATIC AND FLOOD PLAIN ECOSYSTEM RESTORATION

- ❖ Civil Works R&D Program
- ❖ 7 focus areas

Planning Support





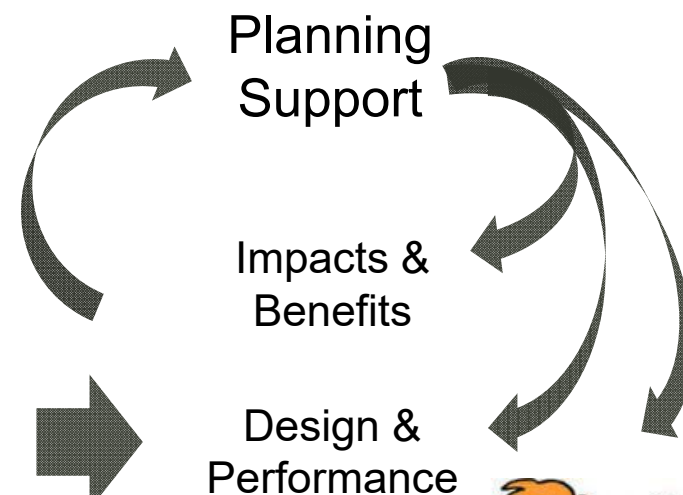
EMRRP MISSION – AQUATIC AND FLOOD PLAIN ECOSYSTEM RESTORATION

- ❖ Civil Works R&D Program
- ❖ 7 focus areas
- ❖ Flask to Field...ish....



Basic/Academic Research

EMRRP



Construction & Management

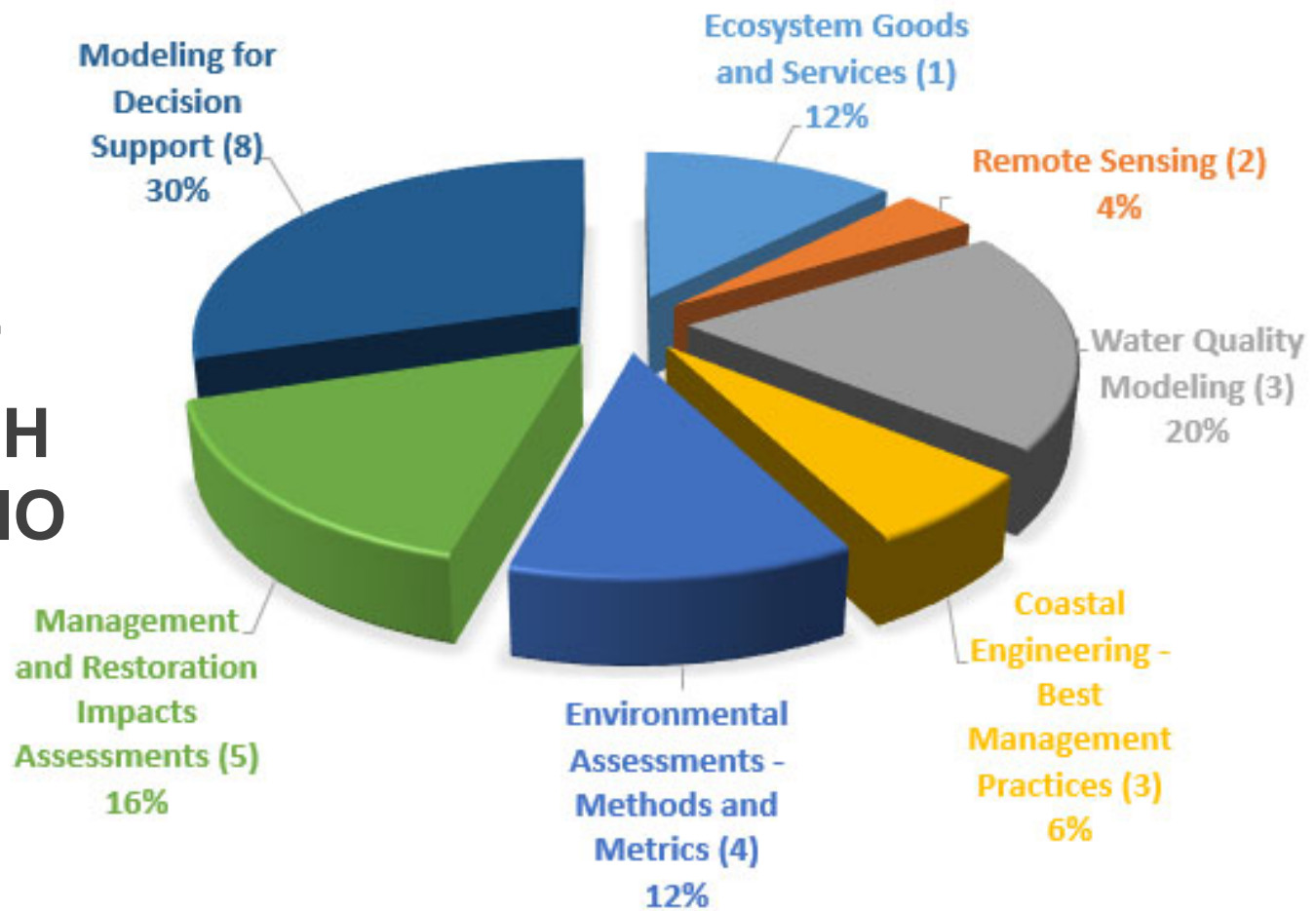


Statements of Need



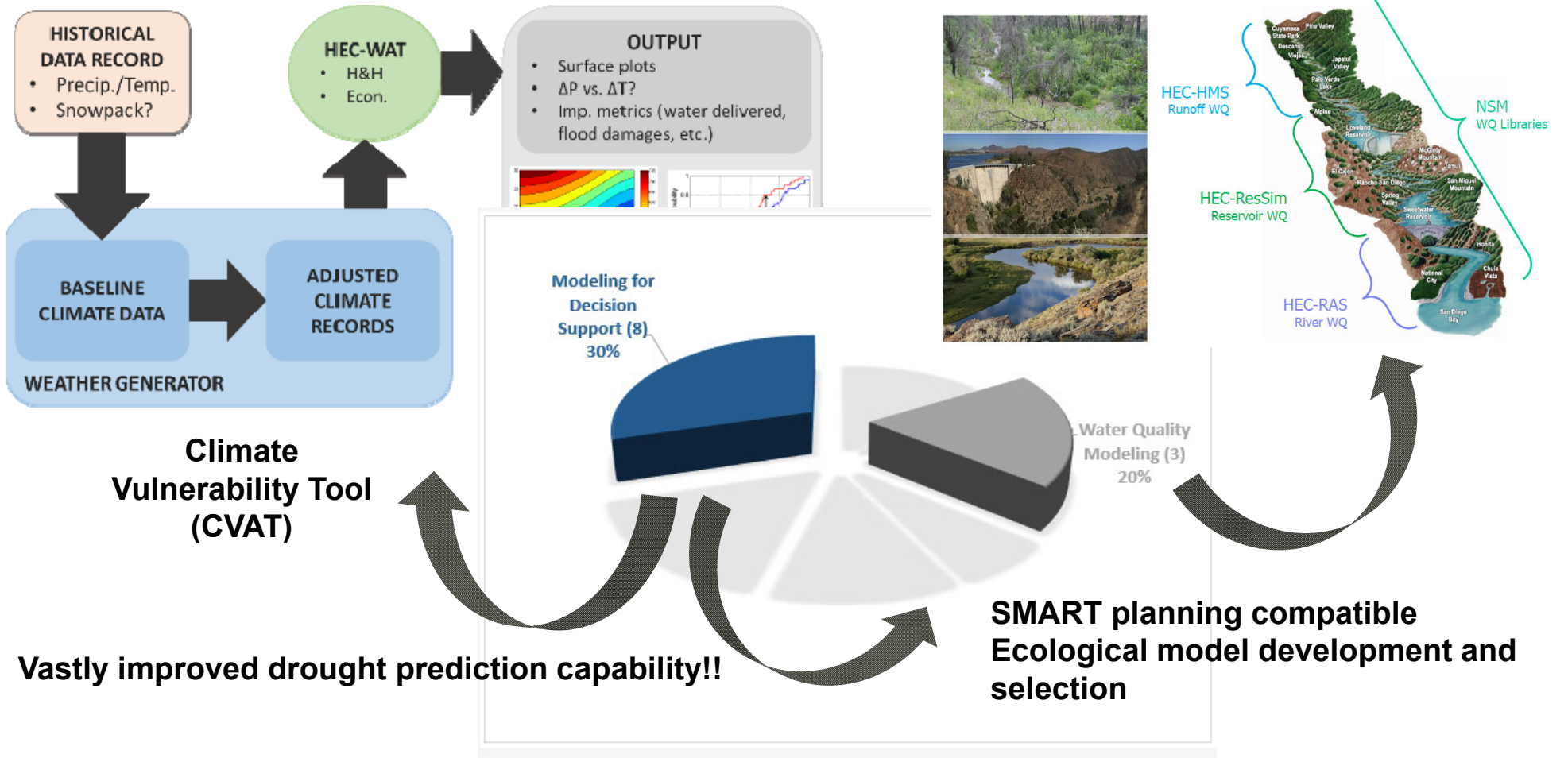


EMRRP - CURRENT RESEARCH PORTFOLIO



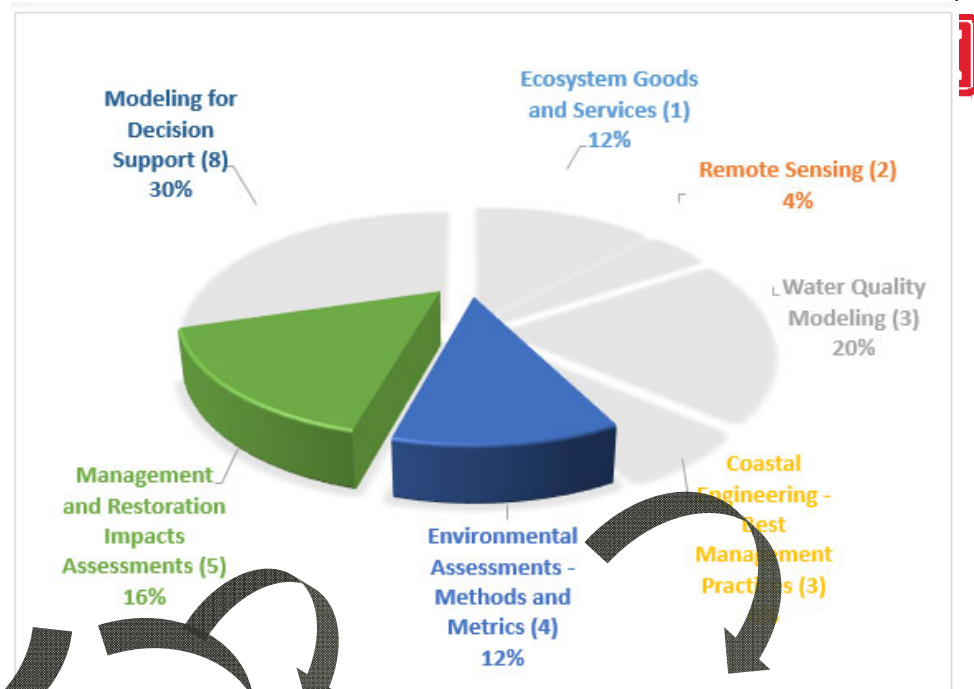


INTEGRATED WATERSHED WATER MODELING





ENVIRONMENTAL MANAGEMENT AND ASSESSMENT



Land Management Impacts on Bats?

ERDC TR-XX-DRAFT

Engineer Research and Development Center

US Army Corps of Engineers
Engineer Research and Development Center

ERDC
INNOVATIVE SOLUTIONS
for a safer, better world

Ecosystem Management and Restoration Research Program (EMRRP)

Literature Review: Macrohabitat metrics to identify presence of Chiroptera on the landscape in the United States

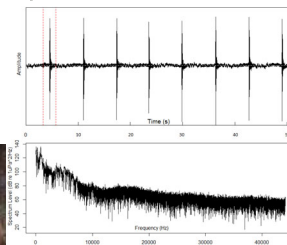
Christina L. Saltus and Eric R. Britzke

September

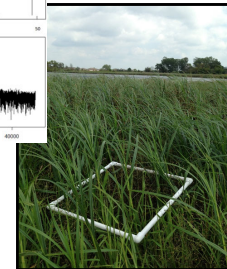
Photo by Merlin D. Tuttle, Bat Conservation International, www.batcon.org in Kansas

Approved for public release; distribution is unlimited.

Dam Removal



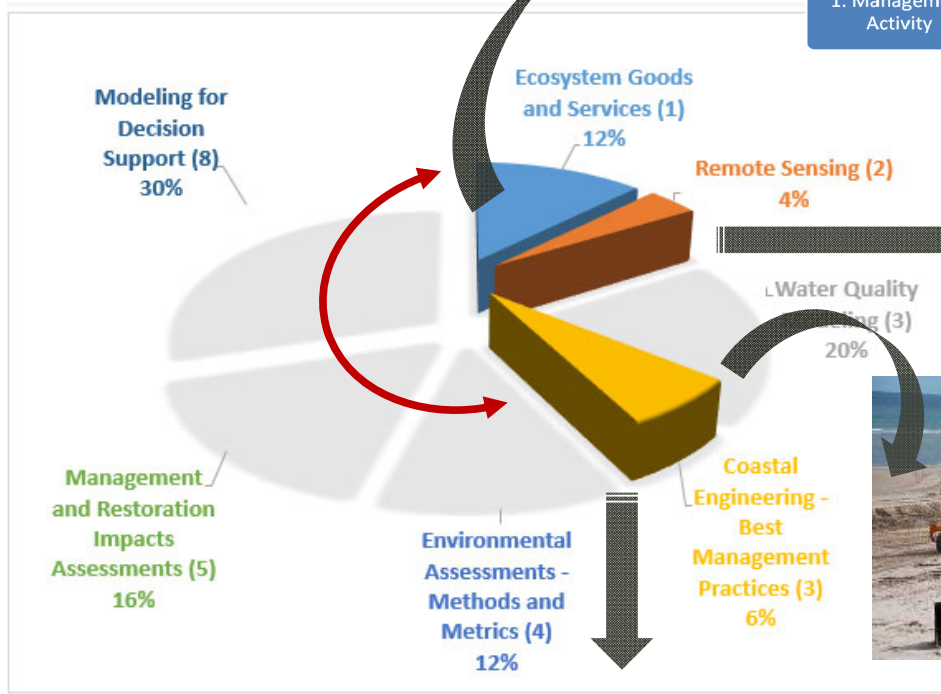
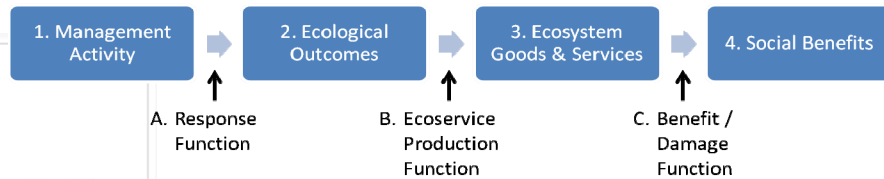
Restoration Metrics





EGS, REMOTE SENSING AND NNBF

Grey vs. Green? Or Grey + Green?
Quantifying flood risk reduction
from restored wetlands – adapting
stormwater engineering methods.

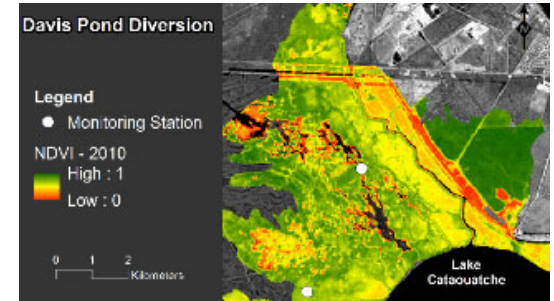


NNBF Performance Metrics

Mapping aquatic and terrestrial land cover change using UAS and satellite imagery



BMP for Shorebirds and Nesting Turtles





NEW/FUTURE RESEARCH EFFORTS



- ❖ New Starts in FY19
 - Model complexity vs. uncertainty
 - Effects of sedimentation in sensitive environments
- ❖ NNBF
- ❖ EGS
- ❖ TLP
 - Geochemistry changes
 - Placement design/modeling

