

78th Air Base Wing



Robins AFB SAME Environmental Presentation

**78 CEG/CEIE
19 Aug 2026**



Presenter Backgrounds

Marissa Hartleb

NEPA Program Manager

Education:

- Biological Engineering B.S. and Plant Sciences B.S. from Cornell University
- Environmental Engineering M.S. from Penn State University

Experience

- Palace Acquire (PAQ) Intern at Holloman AFB, NM
 - EMS Coordinator & NEPA PM
- NEPA Program Manager at Robins AFB
 - Responsible for WR-ALC depot NEPA

Emma Browning

Natural Resources Program Manager

Education:

- Wildlife Biology B.S. from West Texas A&M University
- Forestry and Natural Resources M.S. from University of Georgia

Experience

- Wildlife technician on multiple university projects with a focus on herpetofauna and TES species
- Natural Resources Manager at Robins AFB
 - Manage wildlife, TES species, habitat, and green infrastructure



Environmental Management System

The Air Force adopts and conforms to:

ISO 140001, Environmental Management Systems



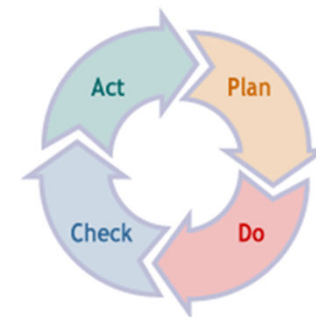
DAFI 32-7001, Environmental Management Systems (EMS)

■ **EMS Purpose:** It establishes environmental program compliance and budgeting for the three key pillars of environmental management.

■ **Compliance:** Air, Water, Tanks, Spills, HM, HW, NEPA

■ **Conservation:** Natural, Cultural

■ **Pollution Prevention:** Solid Waste, Recycling



■ **EMS Vision:** Provides a Systematic Framework implemented to minimize risks and promote continual improvement

■ We do this by using a “**Plan, Do, Check, Act**” Cycle



What is an EMS?

- **The Environmental Management System is a Systematic Framework implemented to minimize risks and promote continual improvement**

Environmental Management System	
Plan	Scope and Commitment Statement Identify programs and processes with the highest risks/costs Identify Legal Requirements
Do	Provide required training Operational Controls
Check	Inspect and verify compliance Corrective/Preventative Actions
Act	Management Review

A circular diagram illustrating the PDCA (Plan-Do-Check-Act) cycle. It consists of four colored arrows forming a circle: a yellow arrow at the top labeled "Plan", a red arrow at the bottom labeled "Do", a blue arrow on the left labeled "Check", and a green arrow on the right labeled "Act".

KEY = Continual Improvement



Robins AFB

Environmental Regulatory Drivers

Subject to inspections by: Federal (US EPA), Department of Defense (DoD), Air Force (internally and externally), State (GA EPD), and Houston County



To maintain compliance:

- 11 Environmental Management Plans
- 12 Environmental Permits issued by US EPA, US FWS, and GA EPD
- DAFIs, AFIs, AFMANs, DAFMANs, AFPDs, CFRs, GA EPD state regulations

AFPD – Air Force Policy Directive; CFR – Code of Federal Regulations

DAFI – Department of the Air Force Instruction; DAFMAN – Department of the Air Force Manual



Combined Outfall Discharge to Ocmulgee River



Environmental at Robins AFB

Safety

**Occupational
Health
(Bioenvironmental)**

Engineering

NEPA

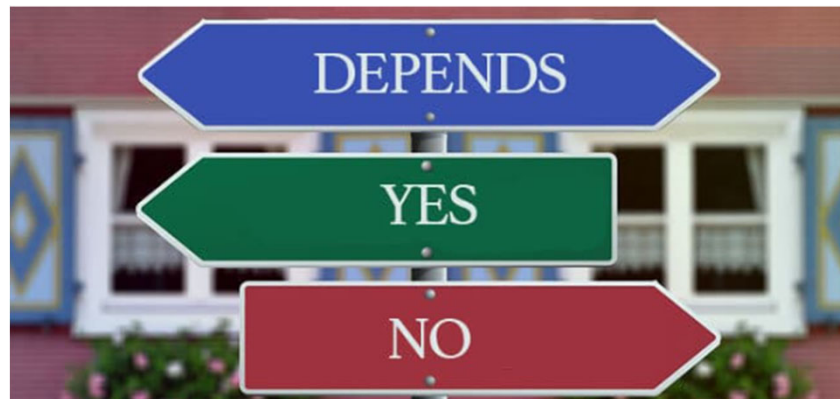
**E
M
S**

All Other Environmental Programs



What is NEPA?

- The National Environmental Policy Act of 1969– a **federal law**
- Requires a “**hard look**” at environmental impacts for government actions, considering both “**context**” and “**intensity**” to determine “**significance**”



- NEPA generally does not prohibit actions; it requires an **informed decision**
- NEPA is **procedural** – as long as there is a clear process/reasoning for making these informed decisions, it can usually be defended

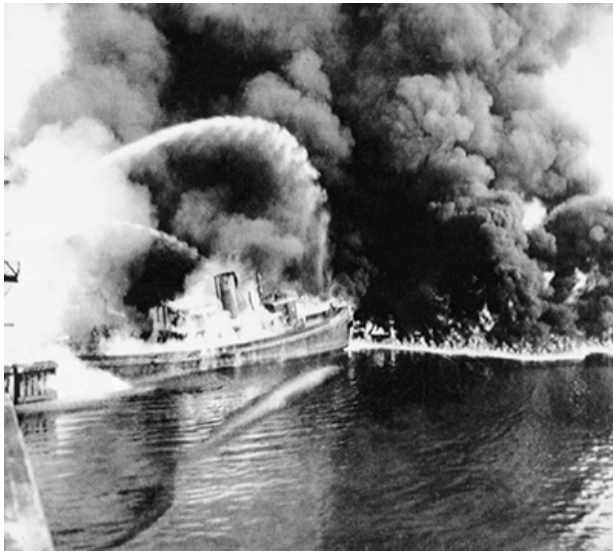


The Why

NEPA helps ensure we (the DAF, the US, humankind...) have what we need, now and in the future.



A canal along the Niagara River was abruptly stopped after only about 1 mile had been built in 1906. It became a poorly managed waste site with 21,800 tons of chemicals. In 1953, the city of Love Canal bought the land for \$1 and built a school on it. Children began getting sick. Birth defects, miscarriages, cancer rates rose. Led to **Superfund** sites.

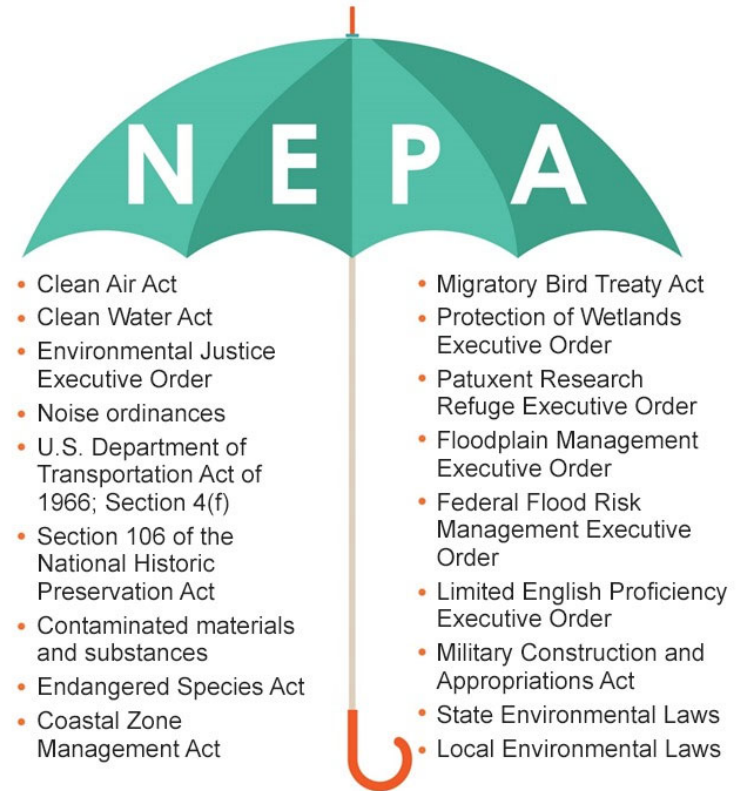
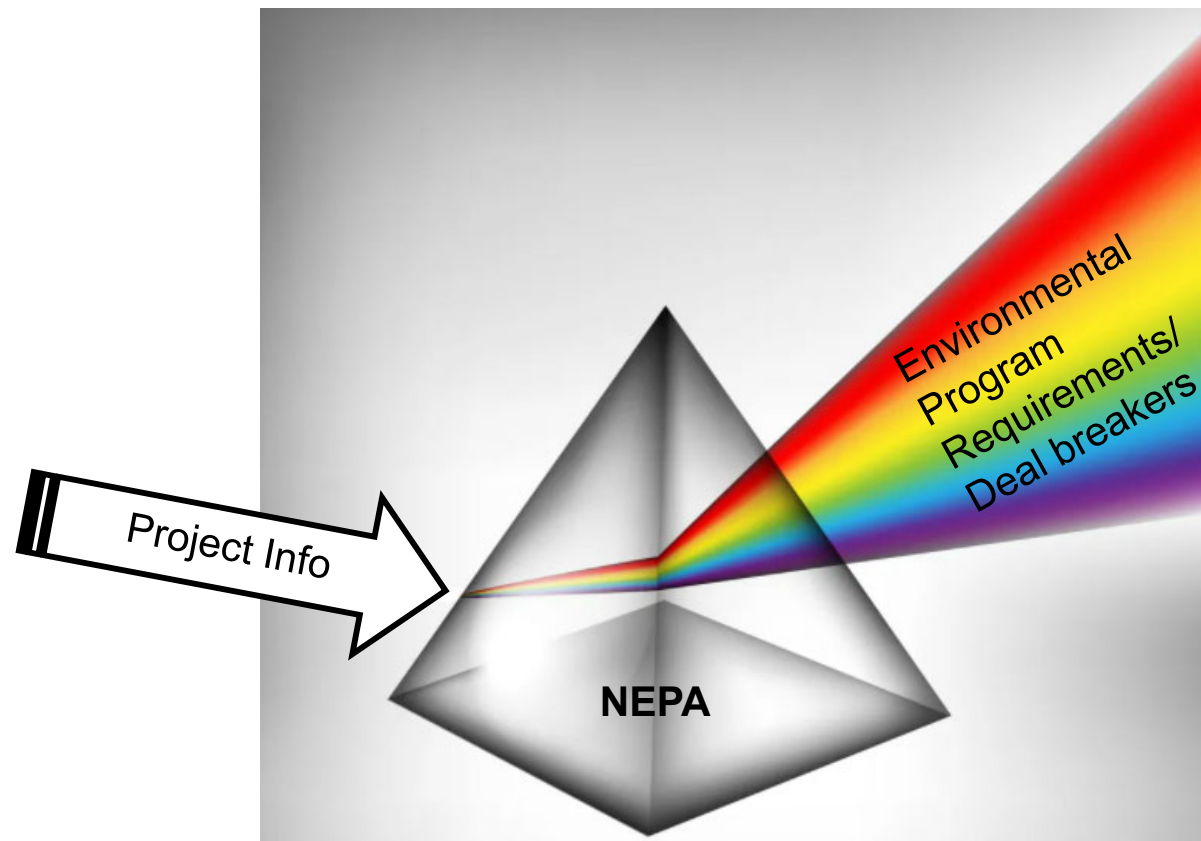


As Cleveland emerged as a major manufacturing center, the Cuyahoga River became heavily affected by industrial pollution, so much so that it "caught fire" **at least 13 times**, most famously on June 22, 1969, helping to spur the American environmental movement.



The NEPA Umbrella/Prism

NEPA is typically referred to as an “umbrella” statute because it encourages agencies to incorporate other environmental and historic preservation requirements into one analysis for a streamlined decision-making process.





Levels of NEPA



DAFF 813

- Small, simple actions
- Fit under Categorical Exclusions (CATEXs)
- Limited documentation needs
- Ex: Building renovation



- Environmental Assessment
- Moderately sized actions, especially if they do not fit under any available CATEXs
- No **significant** environmental impact expected
- Ex: Local Mission Beddown



- Environmental Impact Statement
- Large scale actions which do not fit under any CATEXs due to nature or scope
- **Significant** impact expected
- Usually garners substantial public input
- Ex: Regional airspace changes



Who is involved?

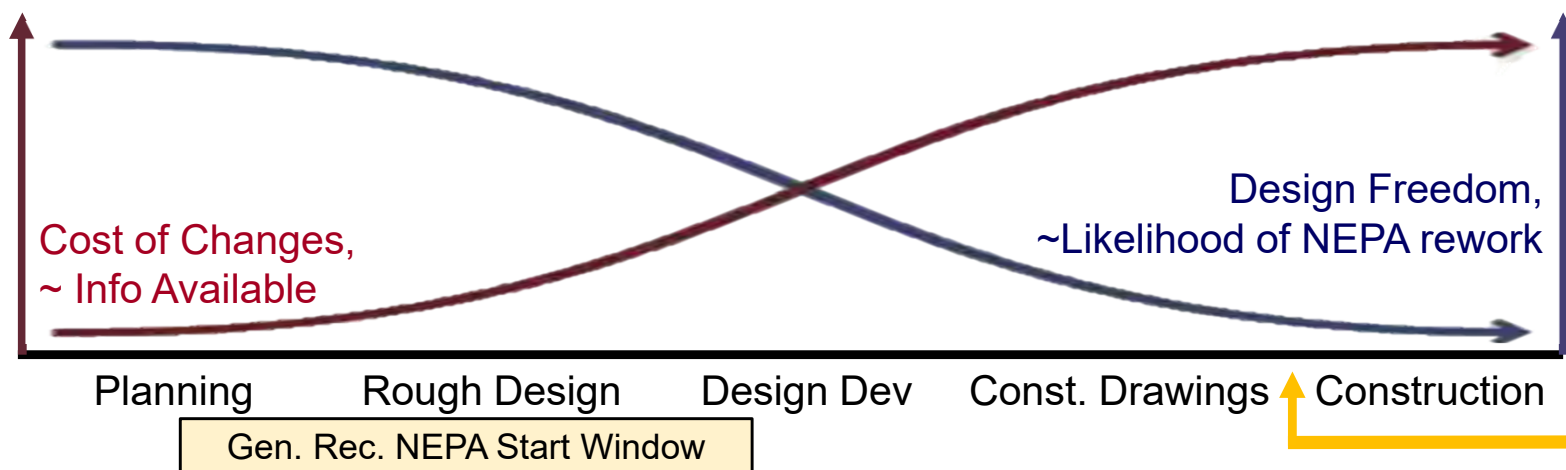
- Proponent
- NEPA Program Manager
- Subject Matter Experts
- Environmental Lawyer(s)
- Others as applicable





Challenge: NEPA Timing

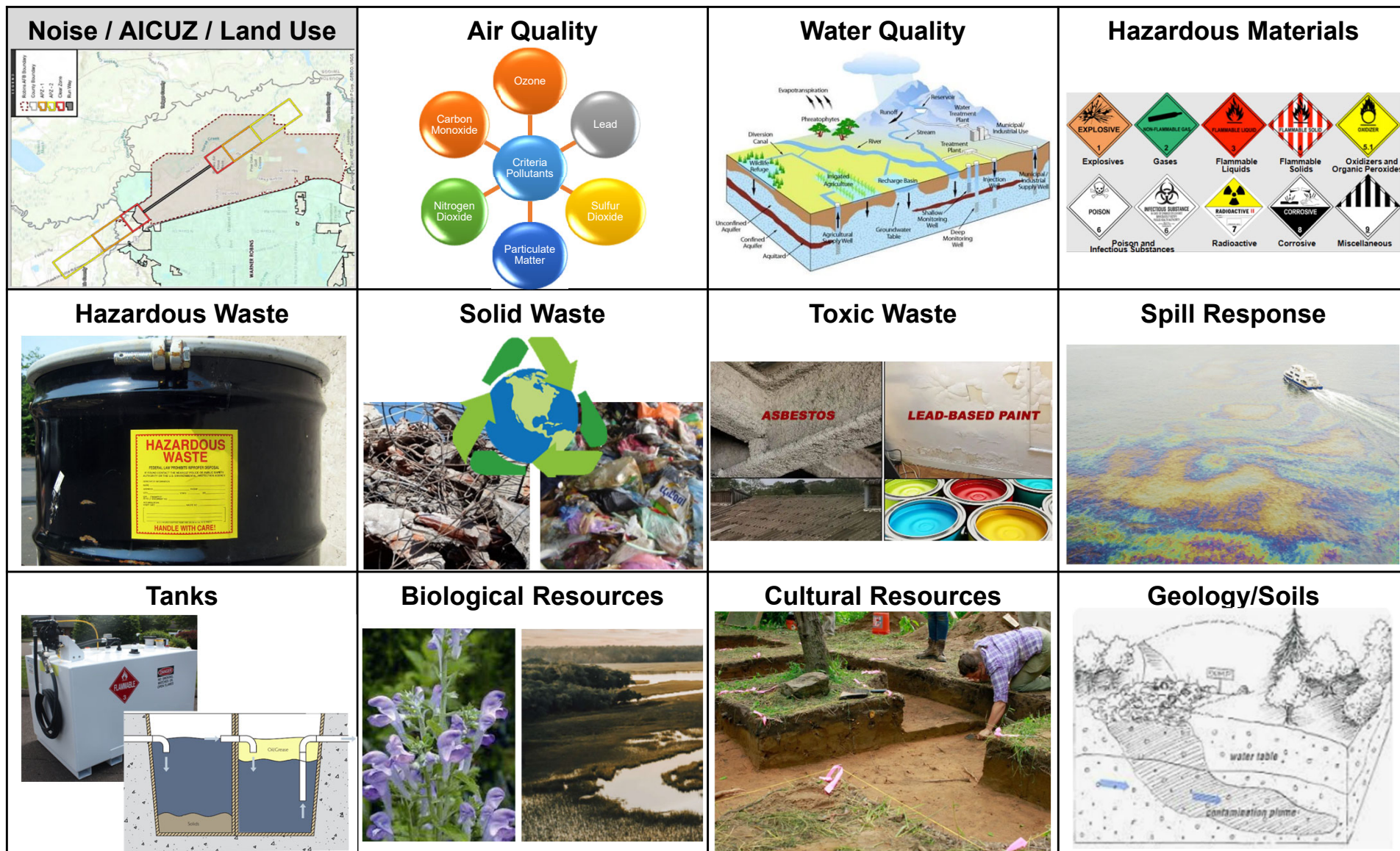
- When NEPA is done **early**, design can readily address key environmental requirements – reduces potential substantial design rework.
- **Trade-off**: less information. Substantial project changes require NEPA rework/supplementation. More stringent environmental requirements may require design rework.
- **Coordinate** with the NEPA PM to determine when there is adequate information on a case-by-case basis.



**NEPA must be
done before
construction
contract is
awarded**



Overview of Other AF Environmental Programs





AICUZ/Land Use

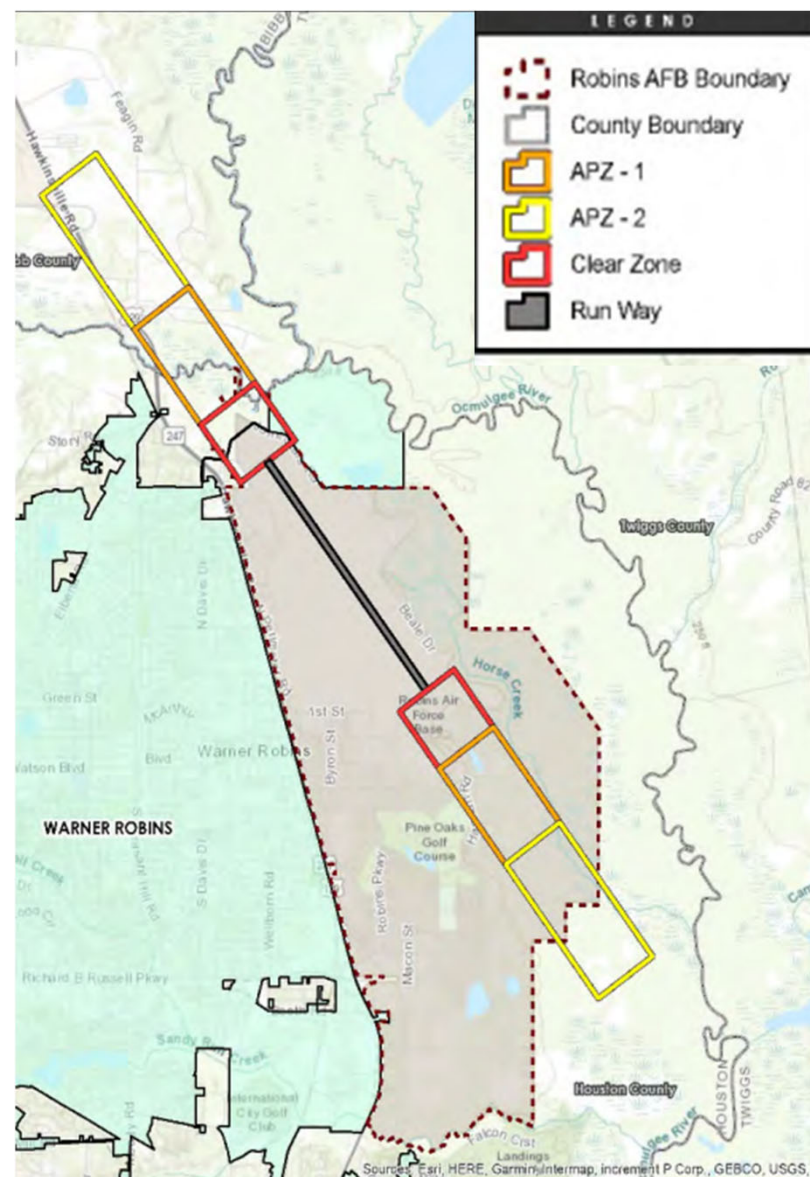
- Potential impacts to AICUZ/land use, including noise, accident potential, and encroachment.
- High levels of ongoing communication with surrounding communities to be a good neighbor and avoid encroachment.
- Collaborative planning – 2022 Middle Georgia RAFB Sustainability Plan
- Broad range of land uses from Airfield to Industrial to Housing to Outdoor Recreation.





AICUZ/Land Use

- Clear Zone
 - Highest risk – no structures
- Accident Potential Zones (APZs)
 - APZ I – Significant accident potential, but less than Clear Zone. Limited low-density use.
 - APZ II – Some risk. Somewhat limited use, including low density residential housing.



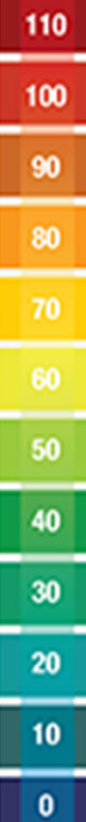


AICUZ/Land Use

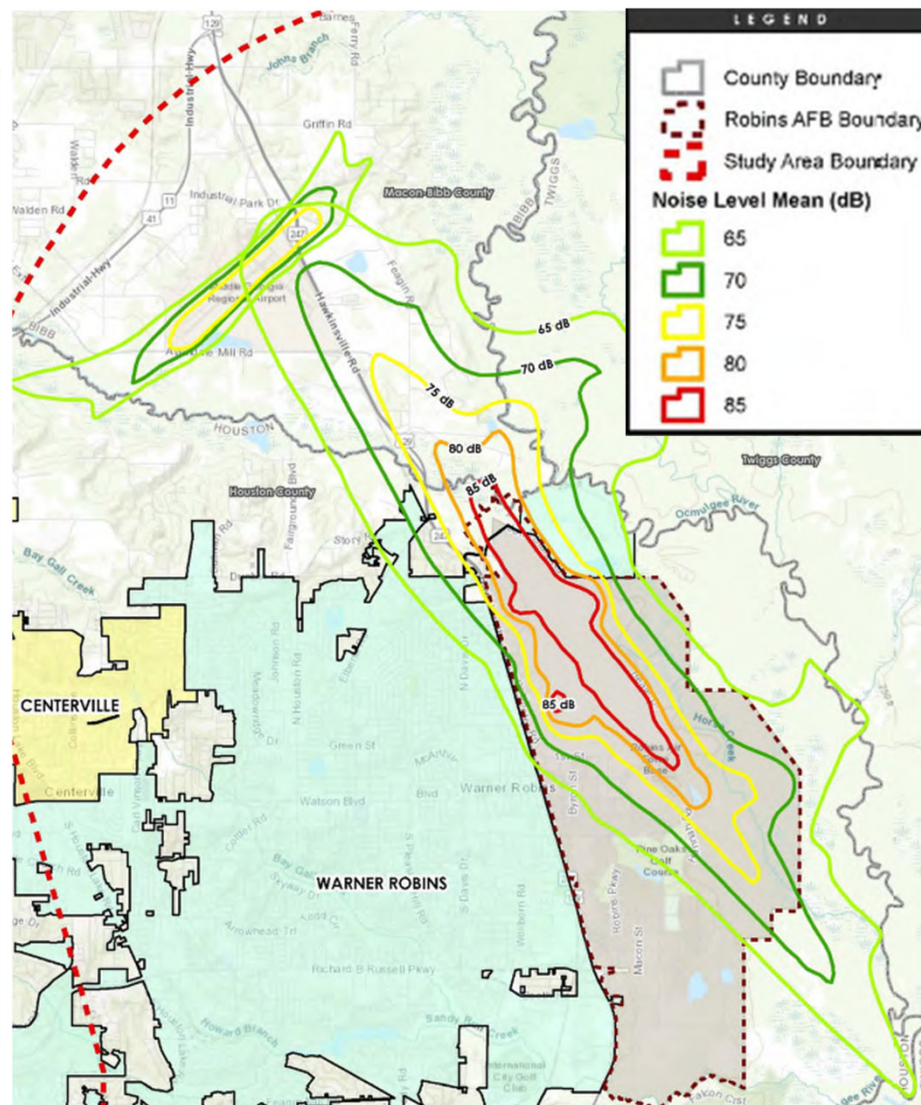
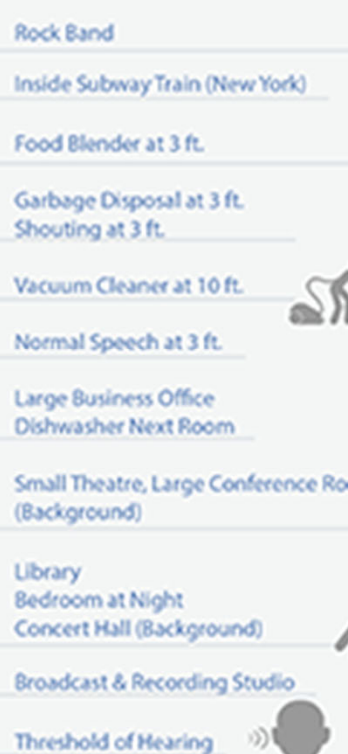
COMMON OUTDOOR SOUND LEVELS



NOISE LEVEL dB(A)



COMMON INDOOR SOUND LEVELS



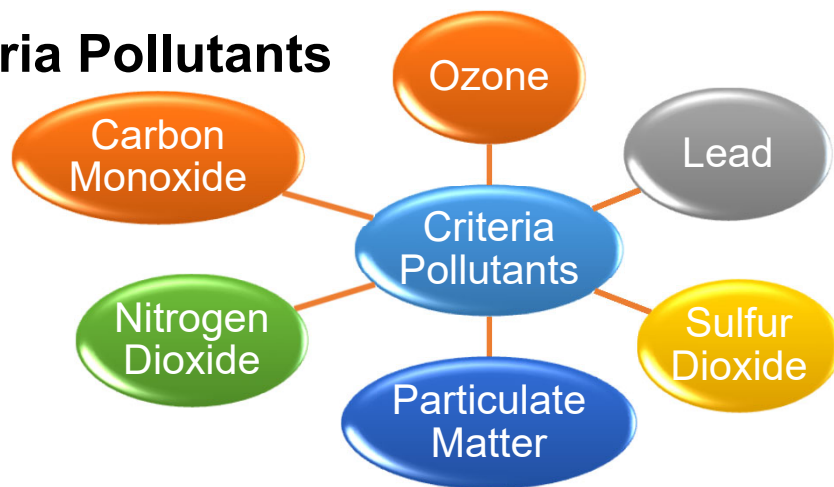


Air Quality

- Emissions, attainment status (National Ambient Air Quality Standards), state implementation plan

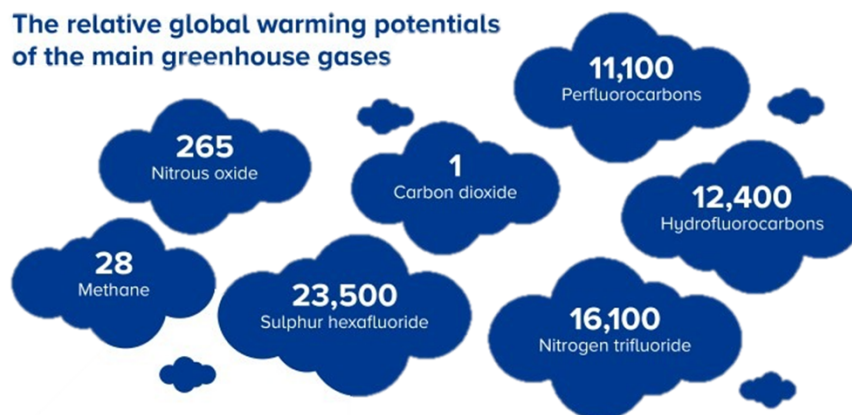
Clearly in attainment with NAAQS

- Criteria Pollutants



- Greenhouse Gases (CO_2e)

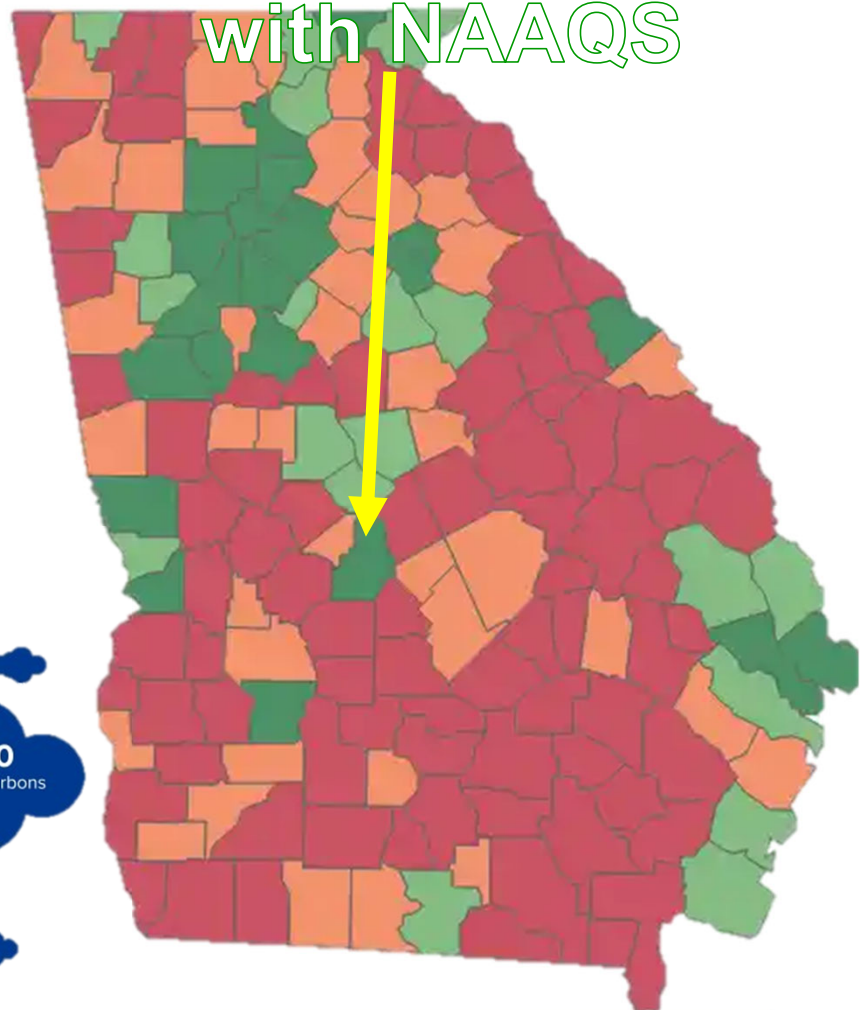
The relative global warming potentials of the main greenhouse gases



[Data: GWPs given for 100 year time horizon, IPCC 2021]

- Construction

- Operations





Air Quality

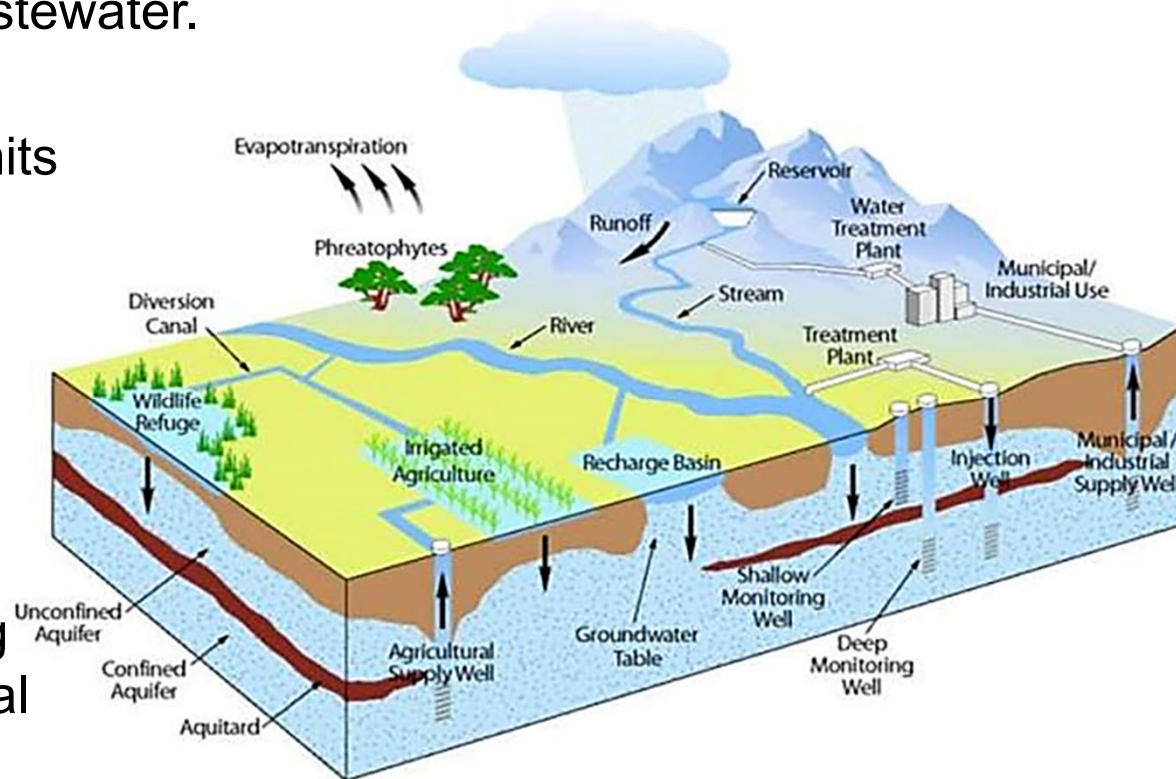
- Robins AFB is a **"major"** source of air emissions for one or more regulated air pollutants as defined in Title 40 of the Code of Federal Regulations, Part 70, Section 2 (40 CFR 70.2). The Base maintains a Title V Air Operating permit.
- Due to its missions, including the **depot**, the Warner Robins Air Logistics Complex, Robins AFB has a wide variety of air emission sources. Primary emission sources include **painting and depainting operations**, solvent cleaning, and combustion sources such as boilers. Other sources include **jet engine testing**, chromium **electroplating** and anodizing, small fuel burning equipment, diesel powered emergency generators, and various volatile organic compound (VOC) sources.
- **Challenge:** Ensuring good **timing** for construction permits and Title V permit modifications (6 – 9 months) so projects proceed smoothly and in compliance.
- **Challenge:** Large **scale** of operations on Base. Support contractors help with compliance checks and permit paperwork. Emissions sources must be inventoried and emissions themselves tracked.



Water Resources

Sub-areas include stormwater (runoff/flooding), surface waters, water supply and drinking water, groundwater, and wastewater.

- National Pollution Discharge Elimination System (**NPDES**) permits for wastewater, stormwater, construction, and small municipal separate storm sewer systems at military facilities.
- Permit to operate a public water system as well as permits to withdraw **groundwater** for drinking water, remediation, and recreational lake water level maintenance. (SWPPP).
- In support of these efforts, numerous **plans** and **reports** are involved, such as the annual Consumer Confidence Report (CCR) regarding drinking water quality, the Water Conservation Plan, and the Stormwater Pollution Prevention Plan (SWPPP).





Solid Waste



- Construction and Demolition Waste (C&D), Municipal Solid Waste (MSW) or refuse
- MSW is handled via the 78 CES Services Integrated Solid Waste Management (ISWM) contract. Along with refuse collection, this contract covers Recycling Center oversight, Scrap Metal Yard management, and the white paper and Cardboard pick-up at various buildings across the installation.
- **Challenge:** Diversion Goals of 65% for non-hazardous waste and 75% for C&D waste by 2030. Historical diversion of MSW ranges from 24% to 48% while C&D diversion ranges from 2% to 90%. Highly variable due to **dynamic** projects, contractor teams, and population on Base.

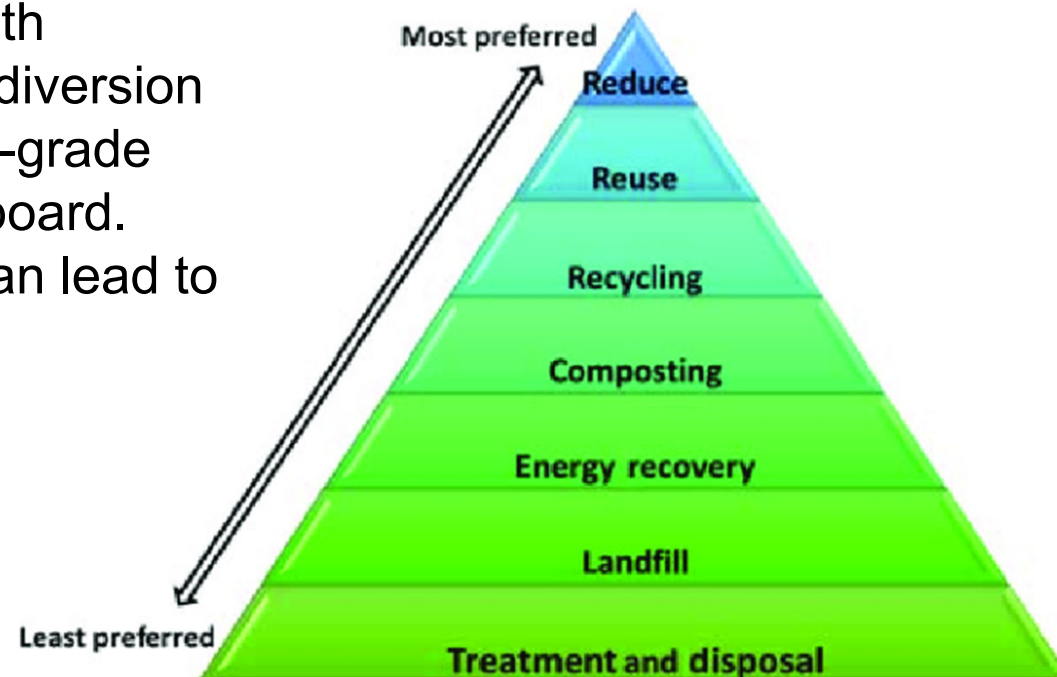


Recycling

■ Qualified Recycling Program (QRP)

- Receives the proceeds from the sale of all previously mentioned recyclables along with several other commodities not covered by the contract. Additional commodities recycled by the QRP include toner cartridges, used oil, lead acid batteries, wood pallets, expended small arms cartridge casings (ESACCs), and the occasional electronics collected during e-cycling events.

- **Challenge:** Program self-sustainment with variable market conditions and required diversion commodities. Diversion required for high-grade paper, newspaper, and corrugated cardboard. However, diverting these commodities can lead to a net negative effect due to commingling/contamination.





Toxics

- Toxic Substances Control Act (TSCA) – often focused on Polychlorinated biphenyls (PCBs), asbestos, lead-based paint. TSCA list contains >83,000 chemicals.
- Covers a wide range of industrial, consumer, and commercial chemicals not regulated by other U.S. laws (e.g., food, drugs, cosmetics, and pesticides are excluded). Provides EPA with authority to require testing, reporting, recordkeeping, and **restrictions** on chemicals that may pose unreasonable risks to health or the environment.



Visual signs of lead paint

- Chalky, powdery texture
- Fading or discoloration
- Feels waxy to the touch
- Grayish hue
- Chipped, cracked, or peeled



FRIABLE ASBESTOS

- Crumbles, frays, or breaks with little effort.
- Easy to damage.
- Dangerous to handle.
- Included in insulation, pipe lagging, spray-on paints, and surface coatings.



NON-FRIABLE ASBESTOS

- Can't be damaged by human hand.
- Resistance to damage.
- Less likely to release asbestos.
- Included in bitumen products, cement sheets, gaskets, and floor tiles.



Hazardous Materials

- Includes materials such as paints, solvents, welding gases.
- As Robins AFB has one of only three Air Force depots, HM usage is relatively high – about 5 million lbs / year on average for CY17-20. Most of the HM used is nitrogen (41%) and carbon dioxide (23%).

Nine Classes of Hazardous Materials

Class 1: Explosives Divisions: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6	Class 2: Gases Divisions: 2.1, 2.2, 2.3	Class 3: Flammable Liquid and Combustible Liquid	Class 4: Flammable Solid, Spontaneously Combustible, and Dangerous When Wet Divisions 4.1, 4.2, 4.3	Class 5: Oxidizer and Organic Peroxide Divisions 5.1, 5.2
				
Class 6: Poison (Toxic) and Poison Inhalation Hazard	Class 7: Radioactive	Class 8: Corrosive	Class 9: Miscellaneous	Dangerous

Revised 04/13

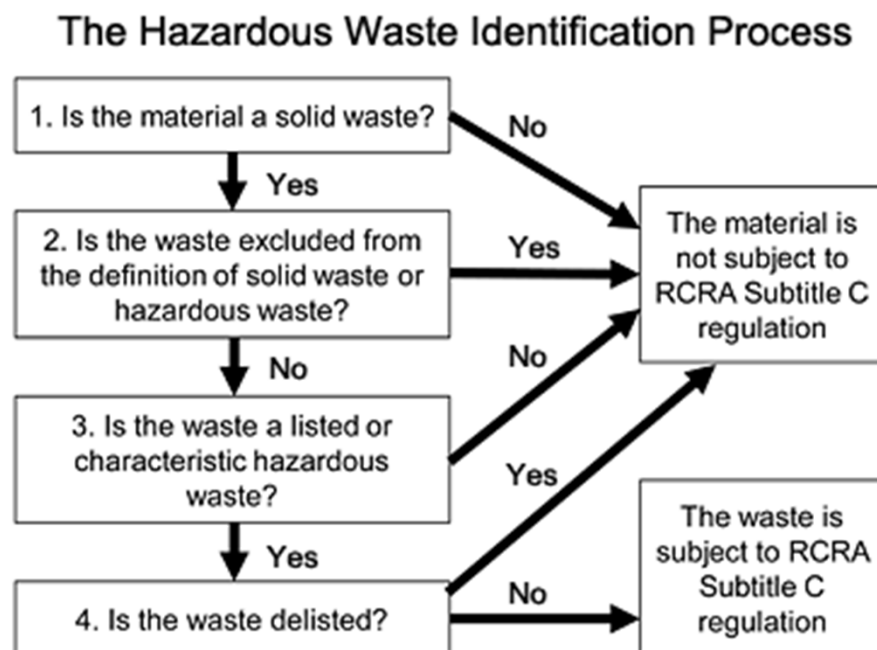
Federal Motor Carrier Safety Administration

U.S. Department of Transportation
www.fmcsa.dot.gov



Hazardous Waste

- **Resource Conservation & Recovery Act (RCRA)** - Gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage and disposal of hazardous waste. To achieve this, EPA develops regulations, guidance and policies that ensure the safe management and cleanup of solid and hazardous waste, and programs that encourage source reduction and beneficial reuse.
- Robins Air Force Base is the **largest single-site industrial complex in Georgia**
- Approximately 20 tons/year RCRA Hazardous Waste generated
- **Challenge:** Minimizing waste while ensuring materials are available when needed to support essential operations, such as depot maintenance.





Tanks

- Robin's storage tanks have the capacity to hold **millions of gallons** of fuel capacity, to include Jet A, one grade of diesel fuel (DS2), regular unleaded gasoline, E-85, and purge fluid. The installation operates and maintains **177 aboveground storage tanks** (ASTs), 5 underground storage tanks (USTs), 25 Oil Water Separators (OWS's), and 7 Edible Oil Containers (EOC).





Spill Response

- 40 CFR §112 – prevent discharge of oil into/upon navigable waters, shorelines, etc.



Dover AFB – Spill Exercise

Integrated Spill Prevention, Control, and Countermeasure
Plan and Facility Response Plan

Annual training exercises

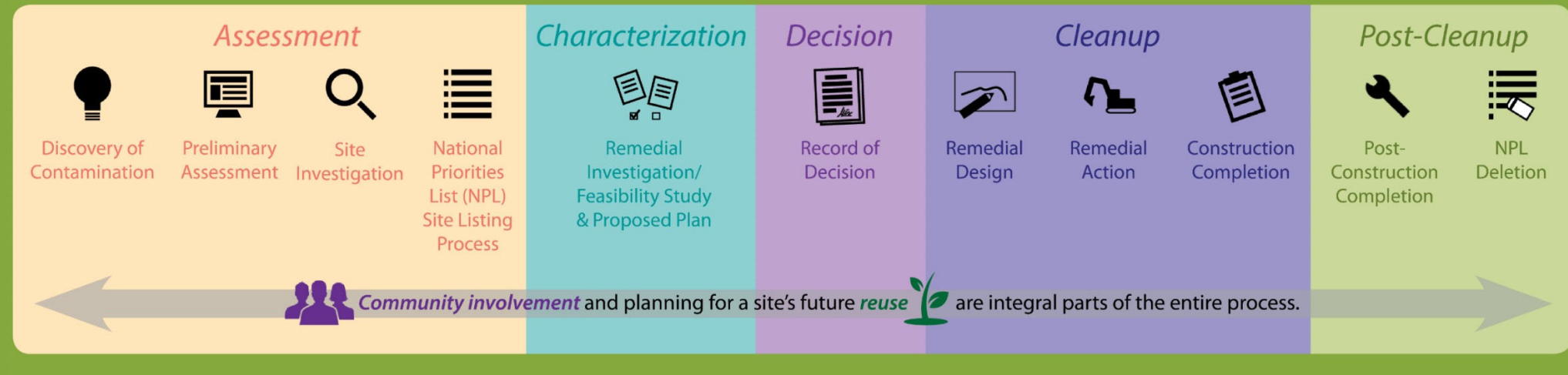




Installation Restoration Program

- Investigate, clean up, and monitor contaminated groundwater and soil.
- Extensively available public information: <https://ar.cce.af.mil/> - AFCEC Administrative Record site.
- **CERCLA** – Comprehensive Environmental Response, Compensation, and Liability Act (aka Superfund) enacted in 1980.

THE SUPERFUND PROCESS





Installation Restoration Program

2019 RESTORATION SITE STATUS MAP





Cultural Resources

- National Historic Preservation Act (NHPA, 1966), Archaeological resources Protection ACT (ARPA, 1979), Native American Graves Protection and Repatriation Act (NAGPRA, 1990).
- Historical Resources, Archaeological Resources
- Native American Tribe coordination – 13* affiliated tribes



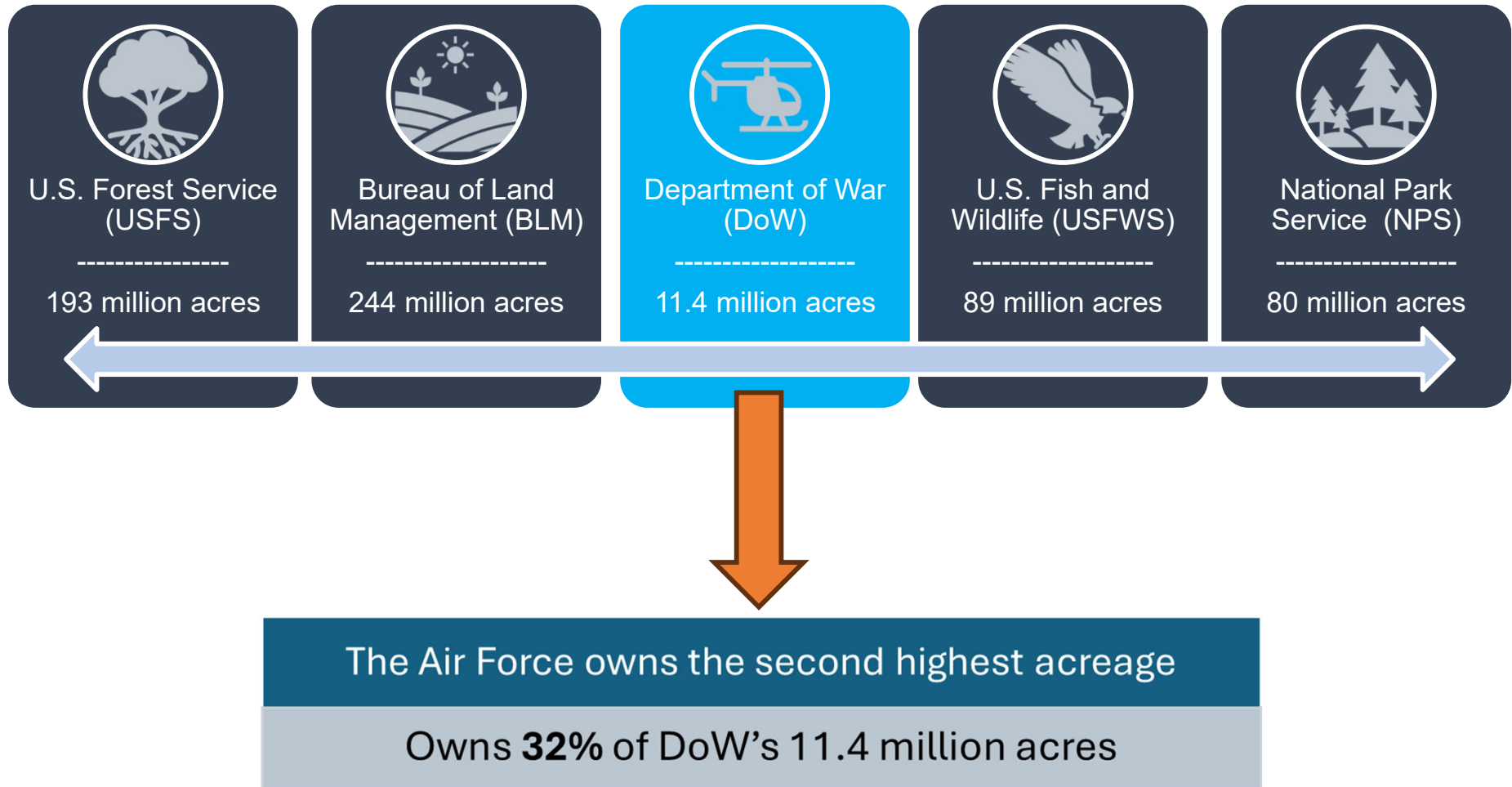


Natural Resources

Why is Conservation on Military Lands Important?

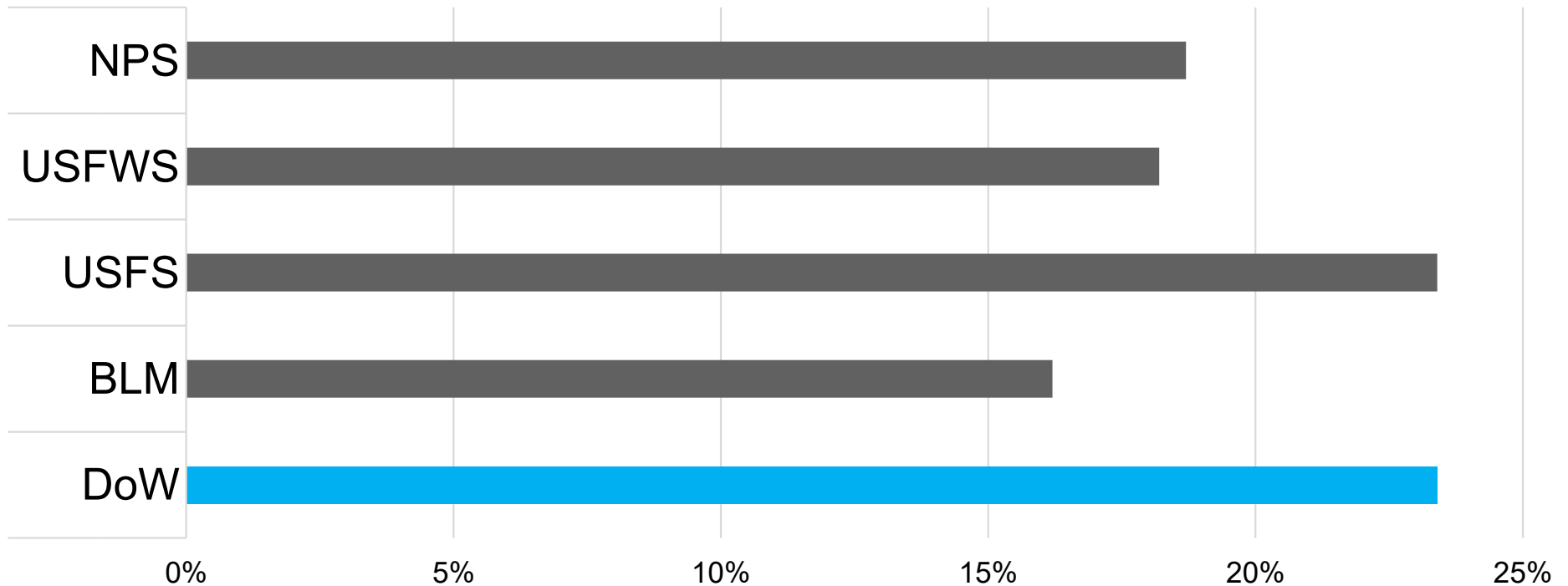


Federal land management





Protected Species on Federal Land



Percentages of T&E Species on Federal Land (Stein et al 2008)



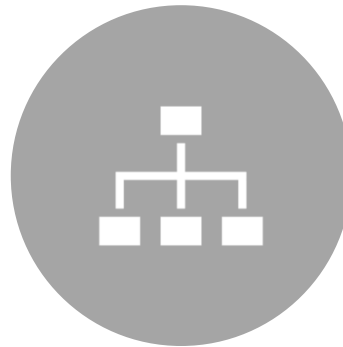
Air Force properties as of 2023 have 500+ protected plant and animal species.



Federal Government Responsibilities



**COMPLY WITH
ENDANGERED SPECIES
ACT (ESA)**



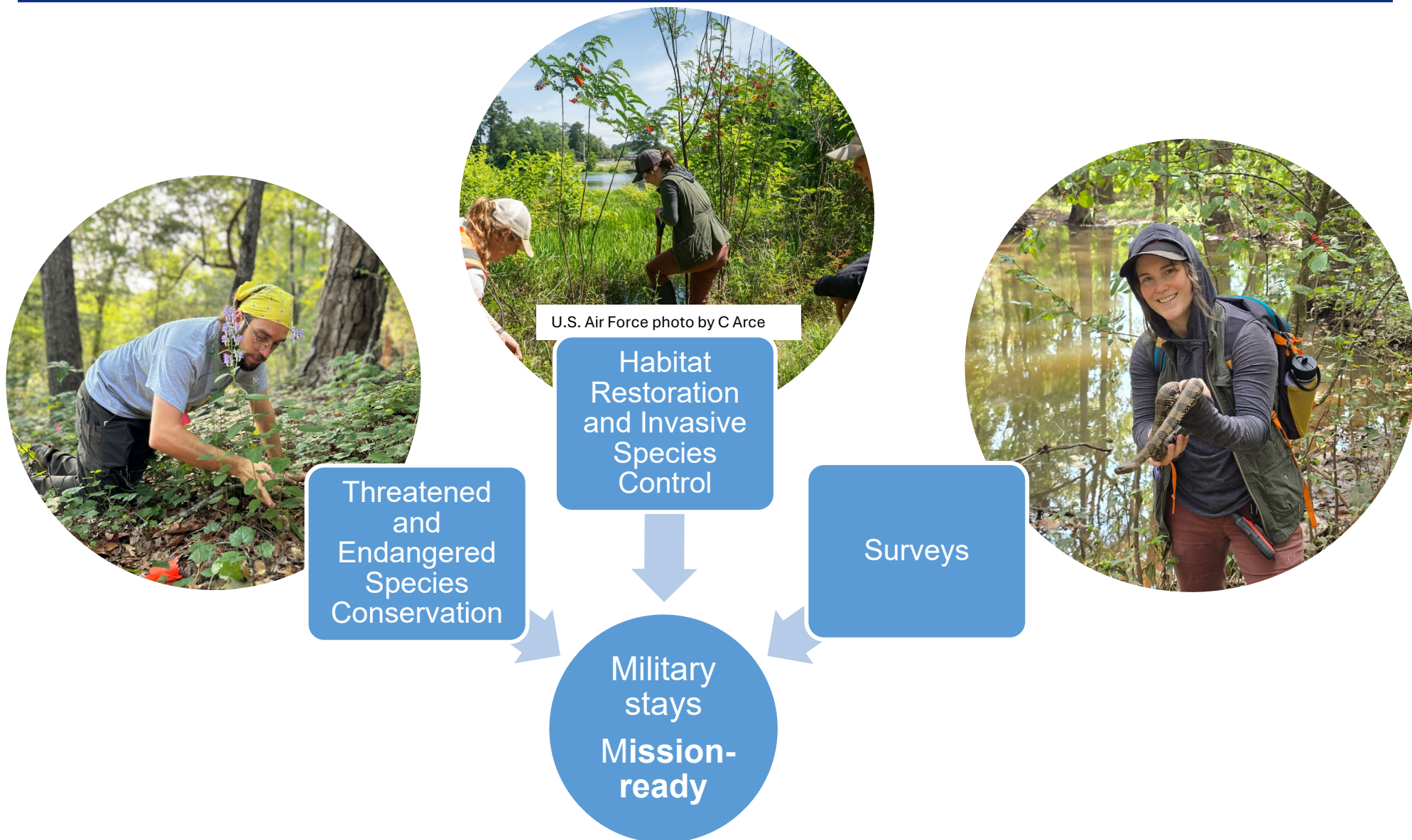
**FOLLOW INTEGRATED
NATURAL RESOURCES
MANAGEMENT PLANS
(INRMP)**



**WORK WITH STATE AND
FEDERAL AGENCIES IN
T&E CONSERVATION**



Natural Resources Management on Military Lands





Threatened and Endangered Species Conservation



Ocmulgee skullcap (Federally Endangered)

- Monitoring species population is essential
- Conserving populations through removal of invasive plant species
- Forming partnerships to expand knowledge and program capabilities





Habitat Restoration and Invasive Species Control

Forest stand management through mulching and removal of invasive species





Habitat Restoration and Invasive Species Control

**Forest stand management through
prescribed fire**





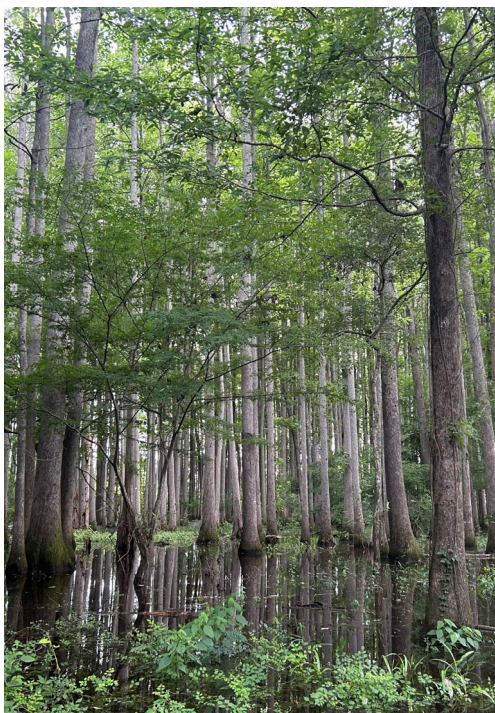
Habitat Restoration and Invasive Species Control

- Invasive species control is a priority
- Invasives disrupt ecosystems
- Removal through mechanical and herbicidal efforts





Surveys



Conduct wetland, animal, and plant surveys in-house and through partnerships



In-house



Natural Resources staff conducts surveys



External partnerships



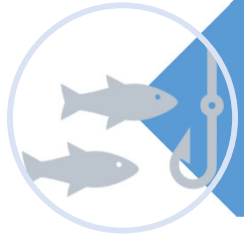
Symbiotic relationship



Other Roles



Green infrastructure management



Hunting and fishing management



Educational trail establishment and maintenance



Questions

