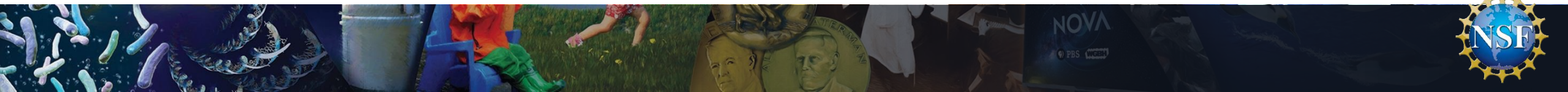


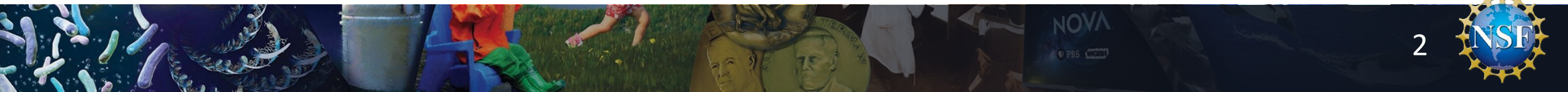
NEON: Observatory Status, Future Plans, and Research Intersections

Roland P. Roberts, Program Director,
National Ecological Observatory Network (NEON),
Division of Biological Infrastructure,
Directorate for Biological Sciences,
National Science Foundation



Presentation Overview

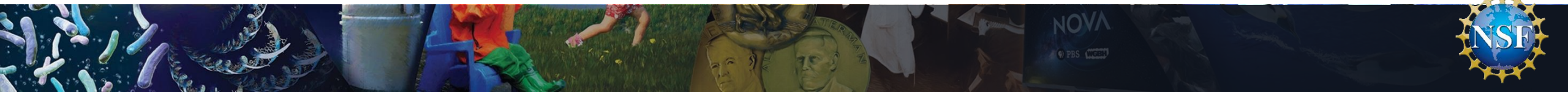
- Intent informing Design
- Construction update
- Operations update
- NEON management competition
- Research intersections



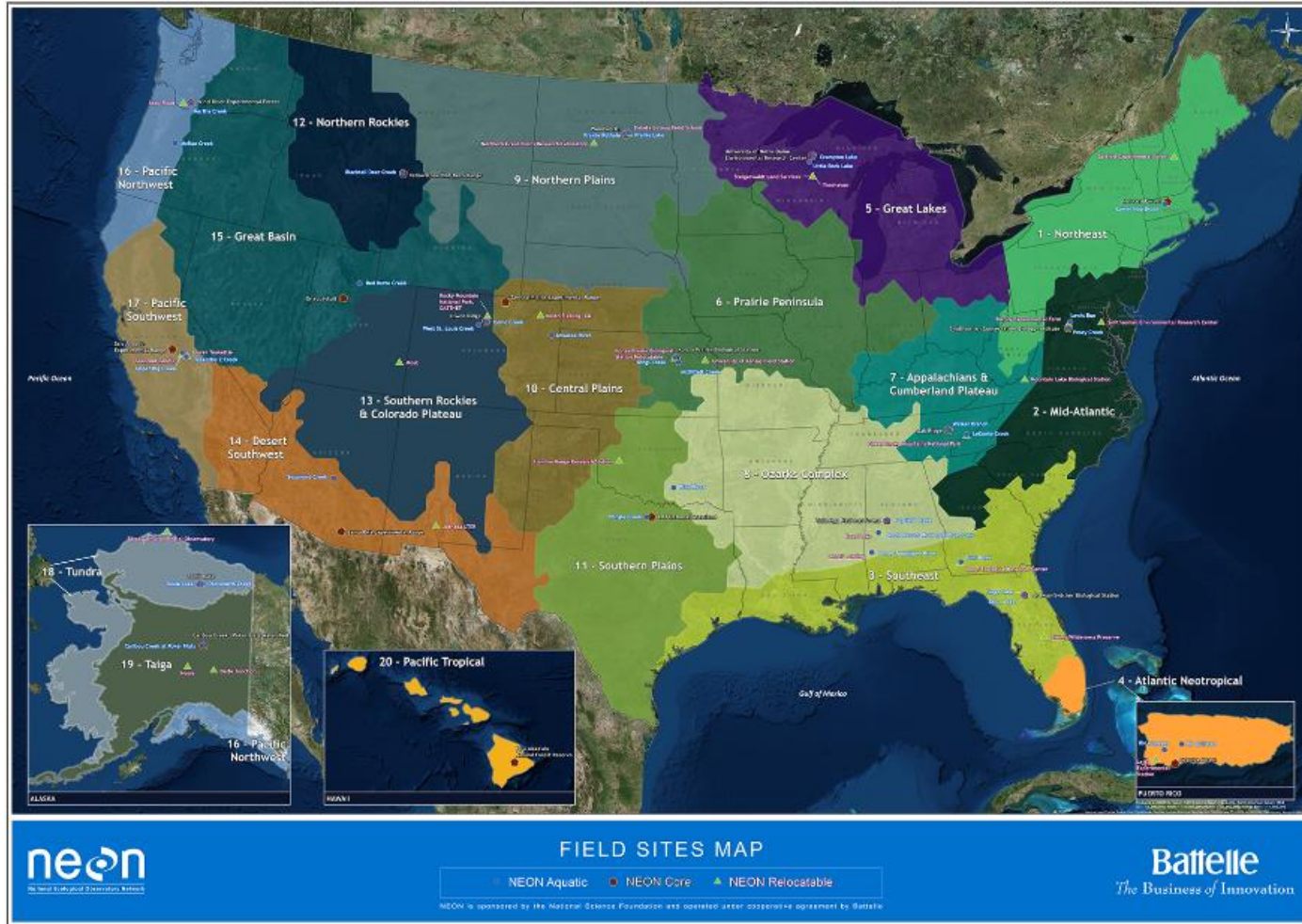
NEON: Intent & Design

- Enable regional- to continental-scale research
- 30-year lifespan to explore decadal trends
- Enable individual and team science
- Democratize and standardize ecological research

- Geographically distributed field and lab infrastructure
- Fully networked research platforms
- Internet accessible, data, computational, analytical, and modeling capabilities



NEON: 81 field sites in 20 eco-climatic zones



- 47 terrestrial
- 34 aquatic

Located in

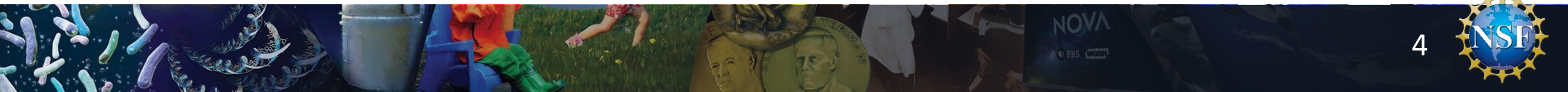
24

STATES

(plus Puerto Rico)

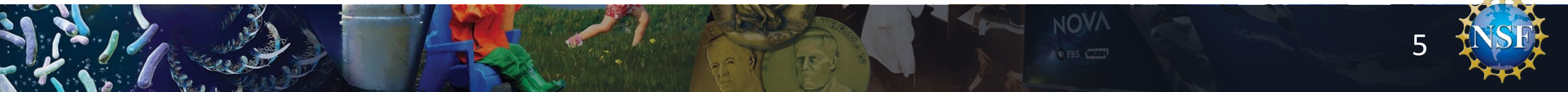
179

DATA
PRODUCTS

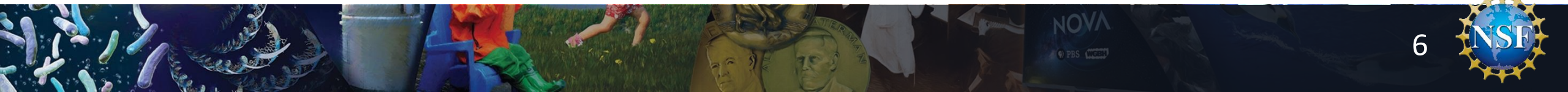
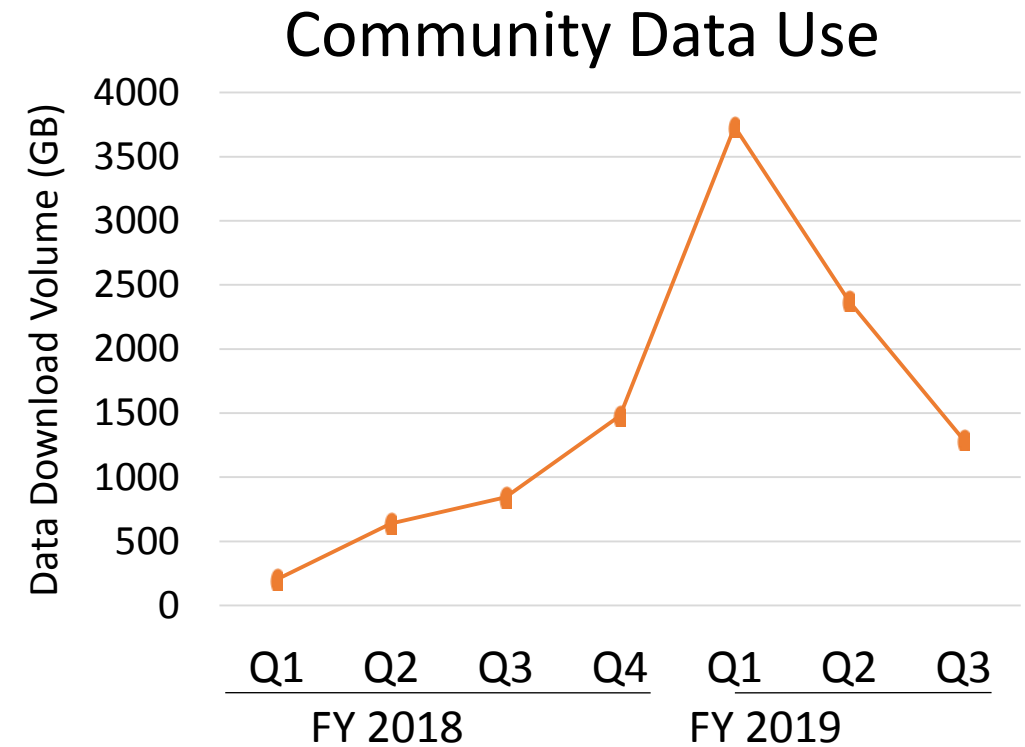
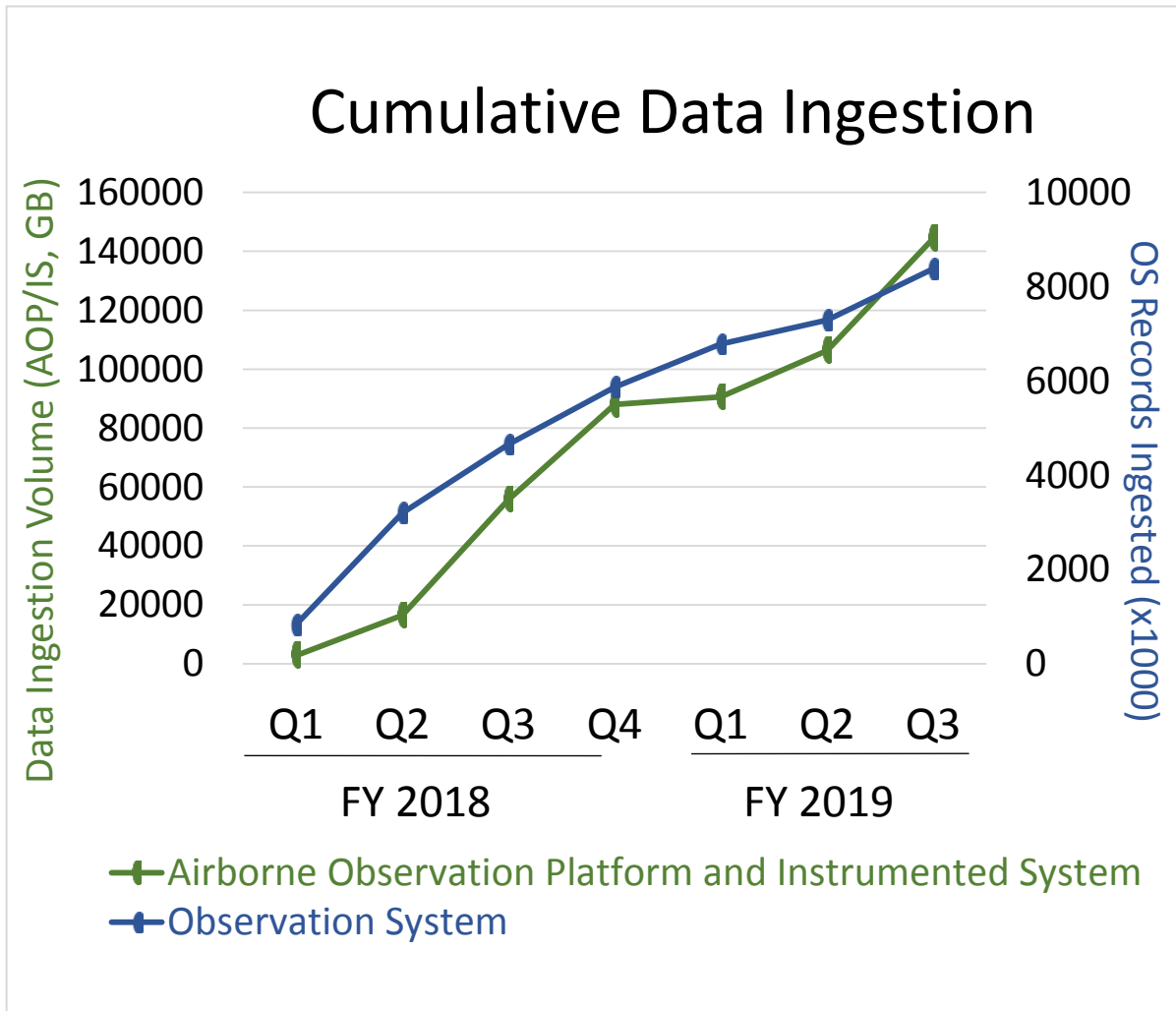


NEON Construction Completed

- D20 Terrestrial Instrument System (TIS, Hawai'i)
- Completed and transitioned to Operations, May 2019

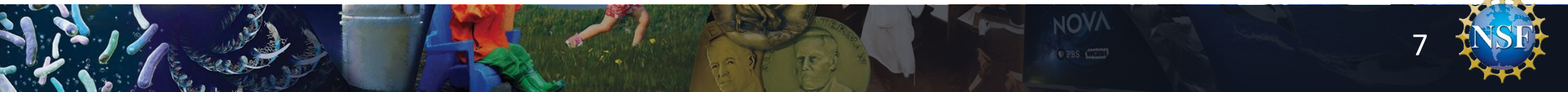


Data Ingestion and Community Data Use



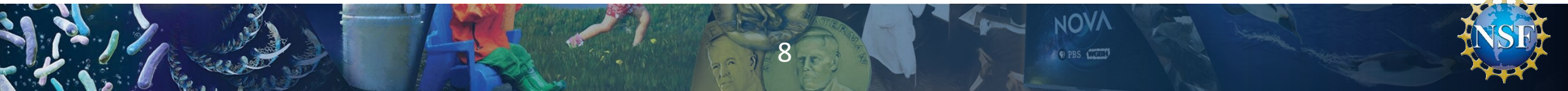
FYI: Competition to Manage NEON: 2021-2026

- Dear Colleague Letter issued, July 26, 2019 (NSF-19-080)
- Information session at 2019 ESA meeting
- Informational webinar, September 11, 2019
- Next six months
 - Publish solicitation, late fall 2019
 - Letters of Intent, anticipated
- Proposal due date, June 2020

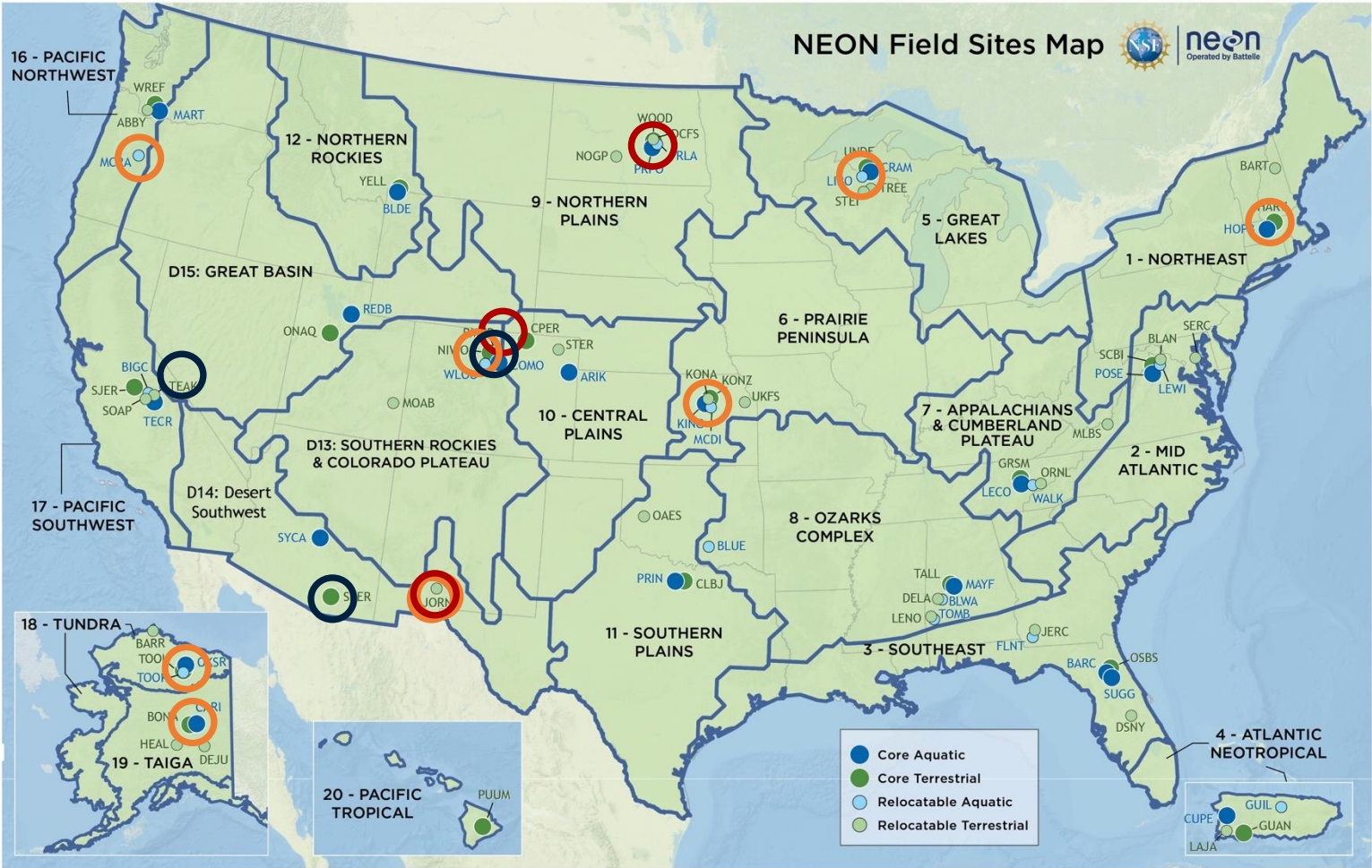


NEON Research Intersections

- NEON FULLY Operational
- Delivery of Quality Data
- Promote Collaboration with other Environmental Monitoring Projects
 - National
 - International (US Leadership)



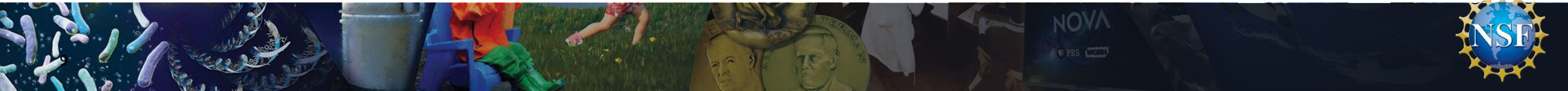
Integration Across Observation Networks



○ Co-located LTAR & NEON sites

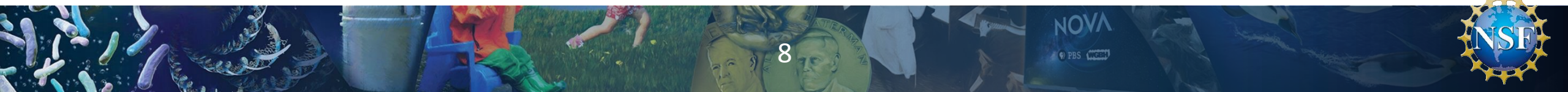
○ Co-located LTER & NEON sites

○ Neighboring CZO & NEON sites



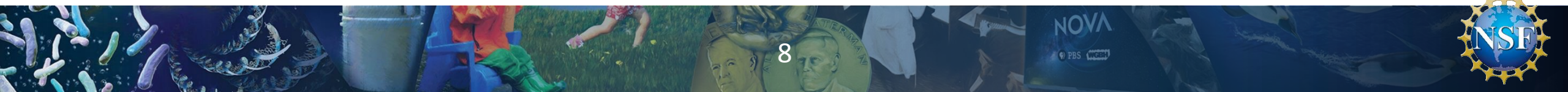
Research Intersections

- Maintain stand-alone, siloed projects
 - Different mission, vision, research foci
 - Different funding streams
- Natural environments and human manipulated environments overlap
 - Biotic and abiotic exchange across imagined boundaries
 - Need for a comprehensive, holistic approach to research informed by all available data
 - Leverage investments across these projects



NEON Research Intersections

- **Remaining Relevant:** Integrative and transdisciplinary; adapt to research needs, apply lessons learned, explore new ideas and technologies
- **Societal Impact:** Research intended to maximize benefits to society needs to consider these intersections
- **Training:** Integration allows for more effective training of the next generation of scientists
- **NEON, LTER, LTAR** can serve as the catalyst for initiating this type of integrative approach



Thanks!

