



National Early Detection and Rapid Response Framework Implementation

Informational Briefing

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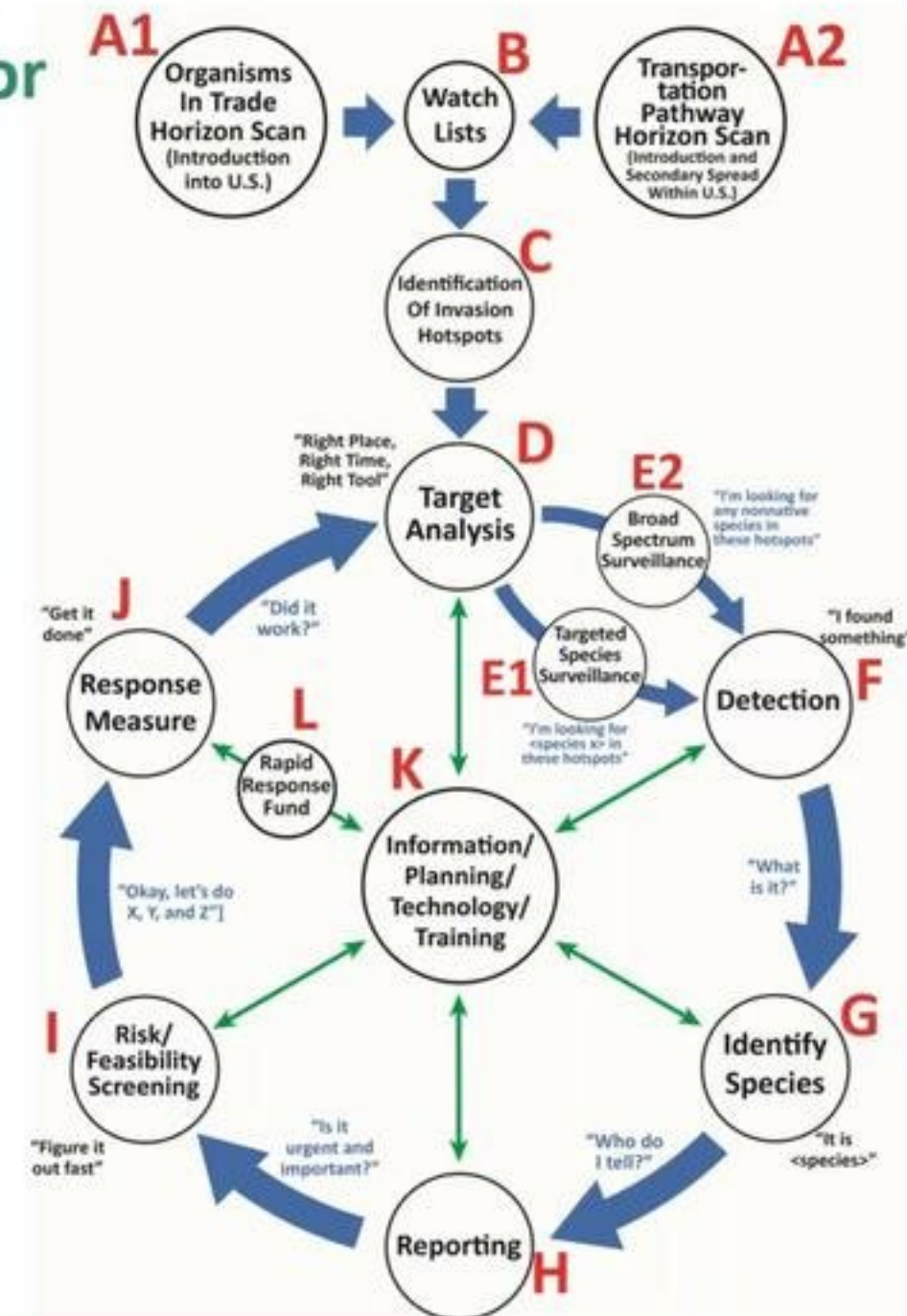
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DOI INVASIVE SPECIES TASK FORCE

Projects to Develop the Institutional Architecture for a National EDRR Framework in FY22

- Horizon scans (A1, A2) to develop Watch Lists (B)
- Hot spot analyses (C)
- Molecular detection tools at points of entry (E, F, G)
- Genetic material repository and network (E, F, G)
- Natural resource manager's eDNA toolbox (D-K)
- READI-Net – eDNA surveillance network (D-K)
- Invasive species habitat tool – terrestrial plant forecasting (D, E, F, K)
- National EDRR information system (K)



Conduct Horizon Scans



EDRR Framework Institutional Architecture

Consider potentially invasive species not yet found in the US:



Watch Lists!

Determine extent of potential habitat in the US:

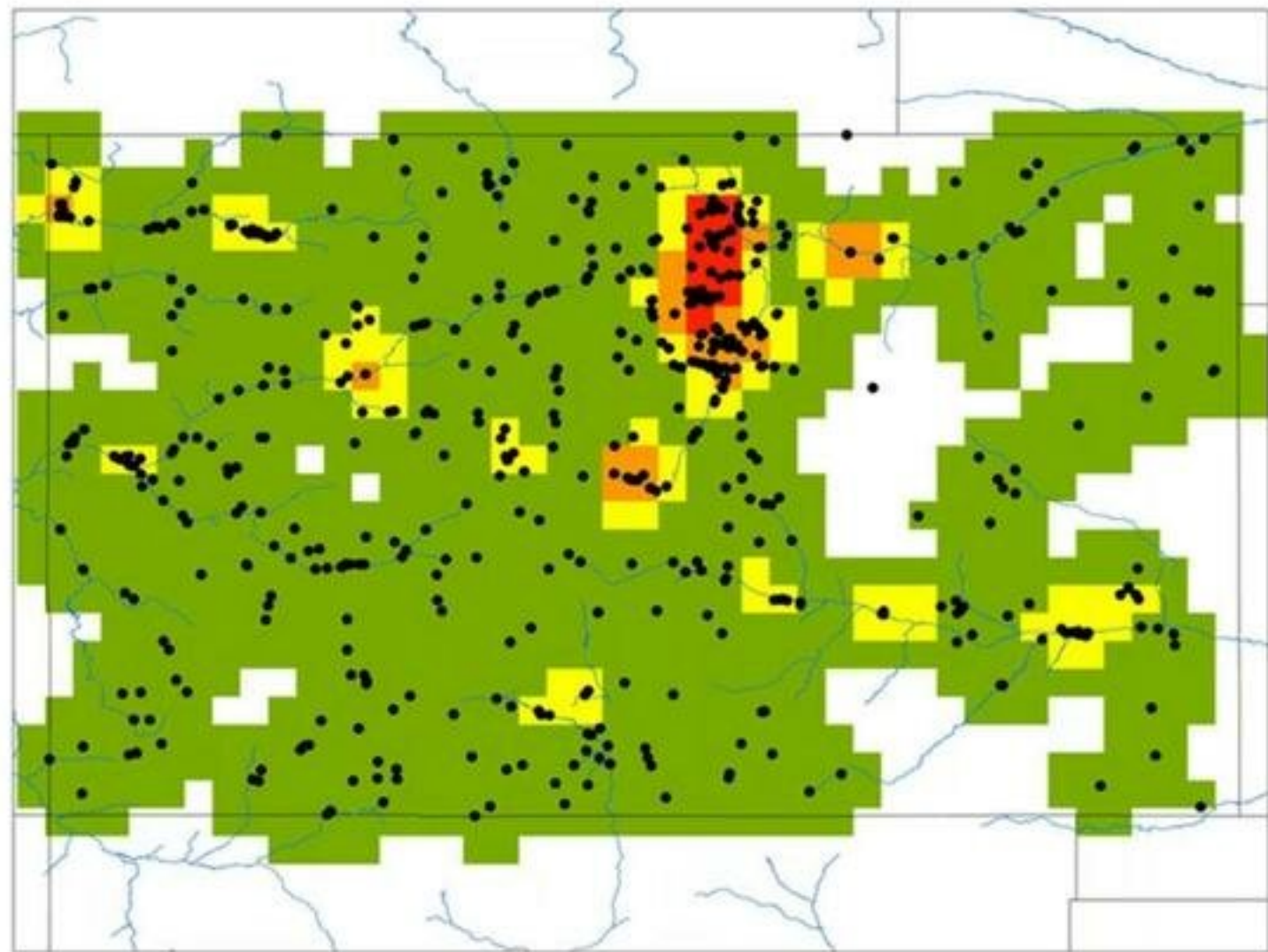


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Conduct Hot Spot Analyses



Established AIS Hot Spots in Colorado

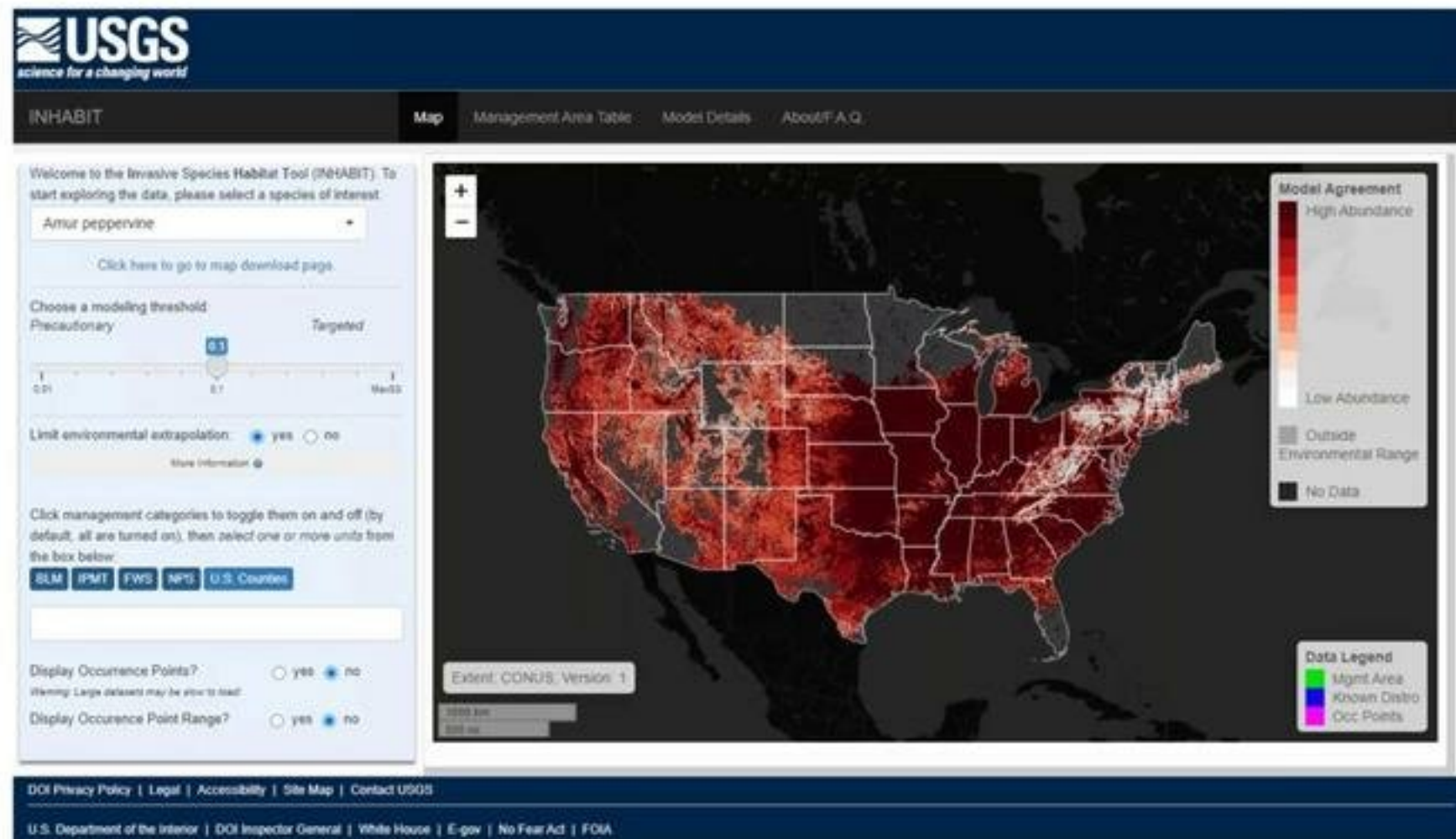


Increase EDRR Capacity for Terrestrial Plants



EDRR Framework Institutional Architecture

Invasive Species Habitat Tool (INHABIT)



- Predicting species **abundance** not just suitability of invasive species.
- Including watchlist species that are **not yet known to occur** in the U.S.

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Develop Molecular Detection Tools at Points of Entry



EDRR Framework Institutional Architecture



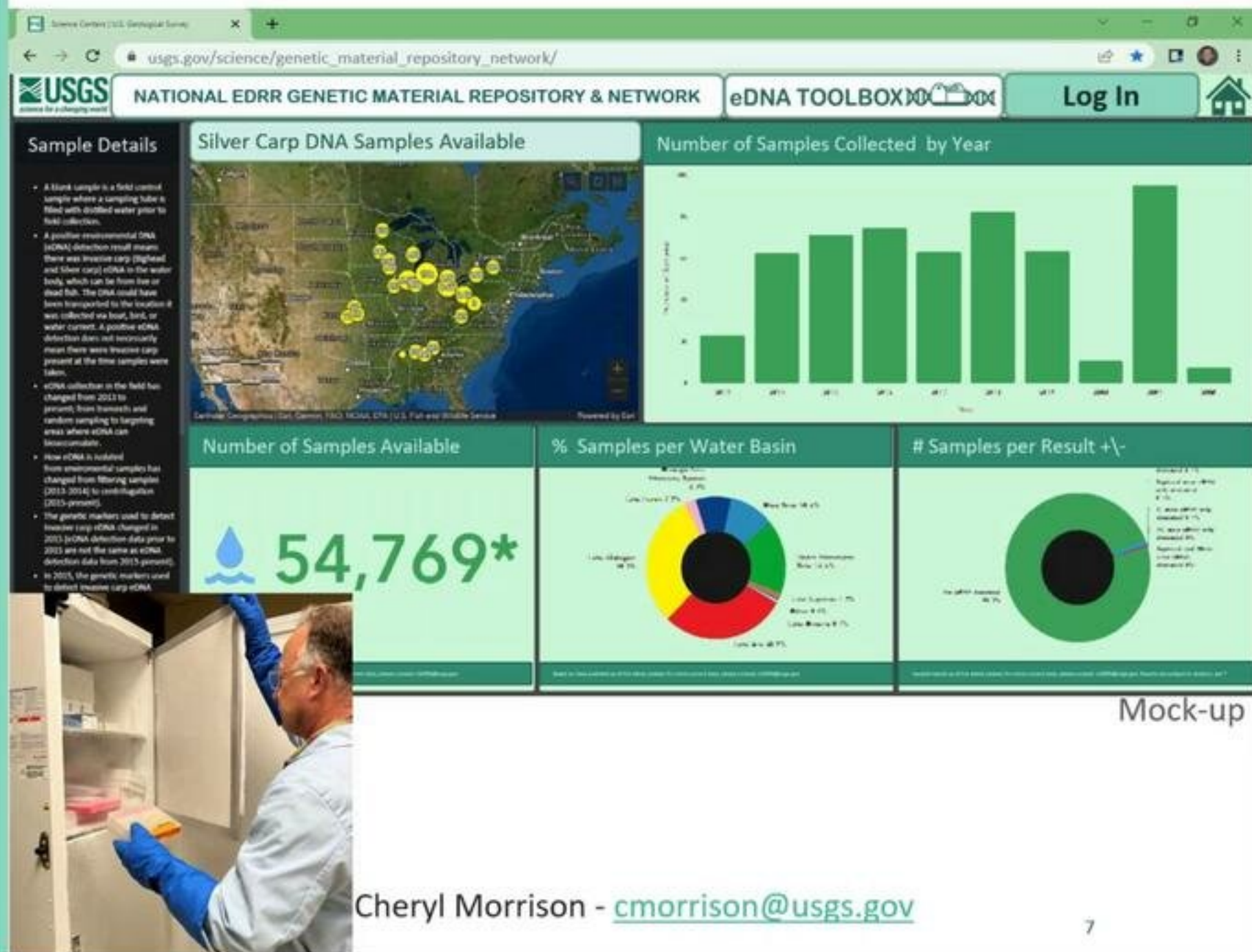
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Develop Genetic Material Repository & Sharing Network



EDRR Framework Institutional Architecture



Mock-up

Develop Manager's eDNA Toolbox



EDRR Framework Institutional Architecture

USGS science for a changing world

eDNA TOOLBOX

Log In

Overviews Tool Search eDNA Standards Communications Dictionary Repository FAQ

Tool Type: Native/Invasive: Taxa: Region: Keyword: Search

Filter by:

Mock-up

Collections

Add Collection Create

ID	Name	Status	Last Updated	Queries	Documents	Language	Actions
1	can	Active	28-Jul-2019 07:34:42 UTC	0	24	English	View Edit Delete
2	mange	Active	28-Jul-2019 07:42:42 UTC	0	24	English	View Edit Delete
3	mead	Active	28-Jul-2019	0	24	English	View Edit Delete

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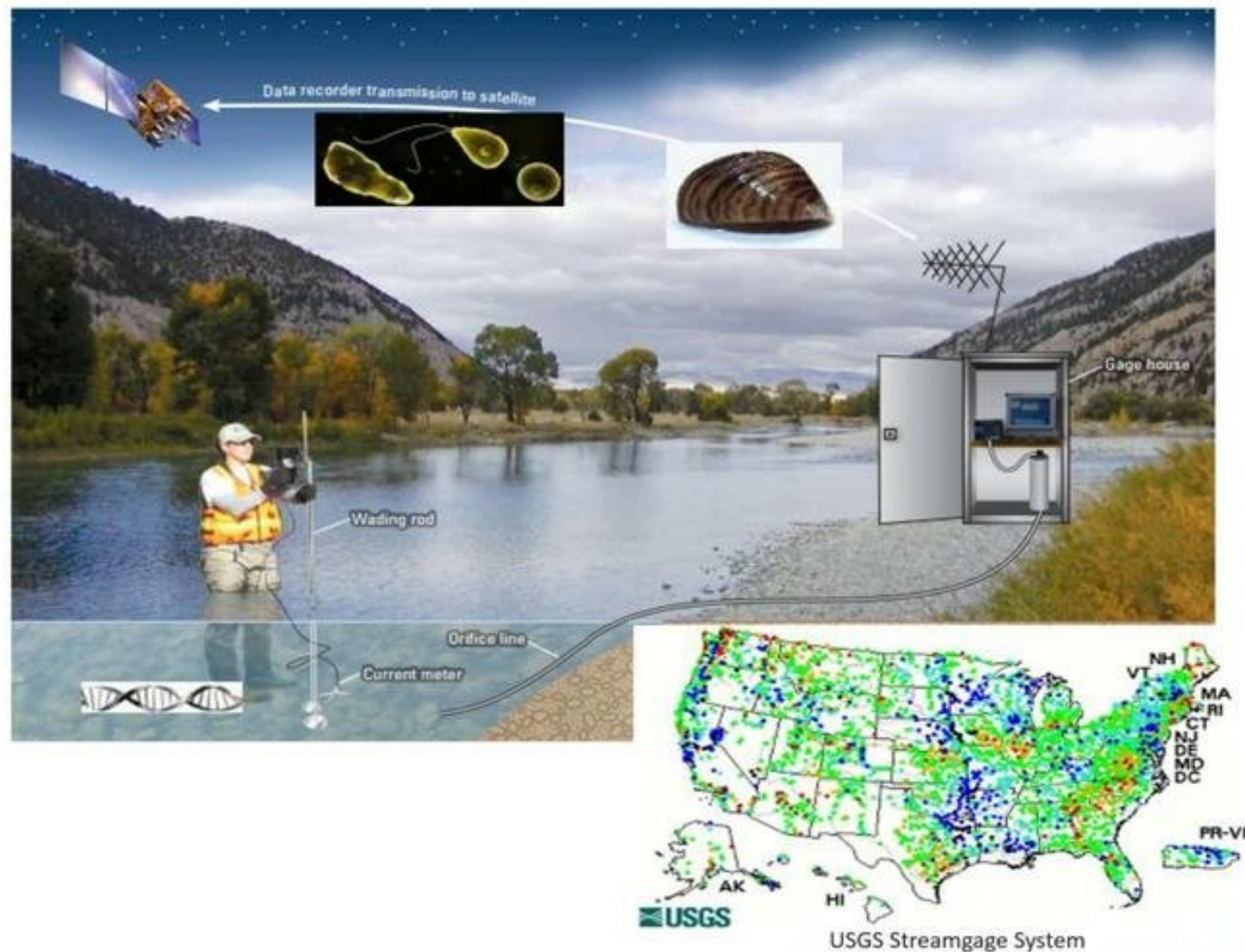
Maggie Hunter (standards) – mhunter@usgs.gov

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Develop Rapid eDNA Assessment & Deployment Initiative Network



EDRR Framework Institutional Architecture



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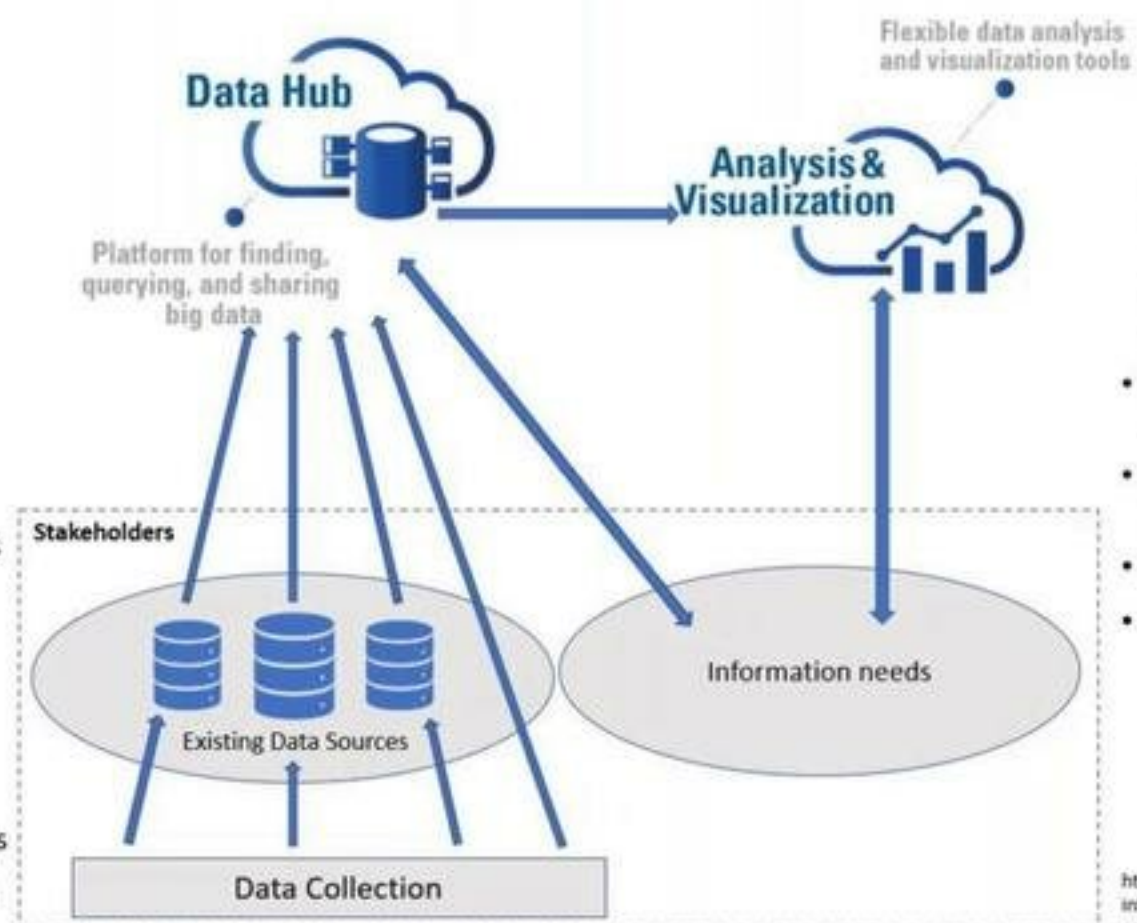
Develop National EDRR Information System



EDRR Framework Institutional Architecture

National EDRR Information System

- Stakeholders**
- Policy-Makers & Lawmakers
 - Regulatory Agencies
 - Land & Resource Managers
 - Private Industry
 - Protected-Area Managers
 - Private Land-Owners
 - Other USG Partners



- Information needs**
- National Policy
 - Spatial prioritization for targeted action
 - EDRR Network Users & customized alerts
 - Jurisdictional based data-sharing
 - Training & Outreach
 - Automated Reports

<https://www.usgs.gov/associate-chief-information-officer/cloud-hosting-solutions>

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