

DCR's Research Initiative

Stewardship Council Meeting - December 8, 2022

dcrrMassachusetts

DCR'S MISSION:

To protect, promote and enhance our common wealth of natural, cultural, and recreational resources for the well-being of all

Our Core Principles:

1

Provide access to a diversity of outdoor recreational experiences & unique landscapes

that is equitable, inclusive, and welcoming

2

Conserve lands, water, and forests

by integrating science, research, and technical expertise into the management of our natural resources

3

Advance climate change mitigation and adaptation efforts

by implementing sustainable practices & advancing resiliency across our infrastructure, assets, & resources

4

Support healthy communities

by providing places for people to connect with nature and each other

5

Inspire generations of stewards

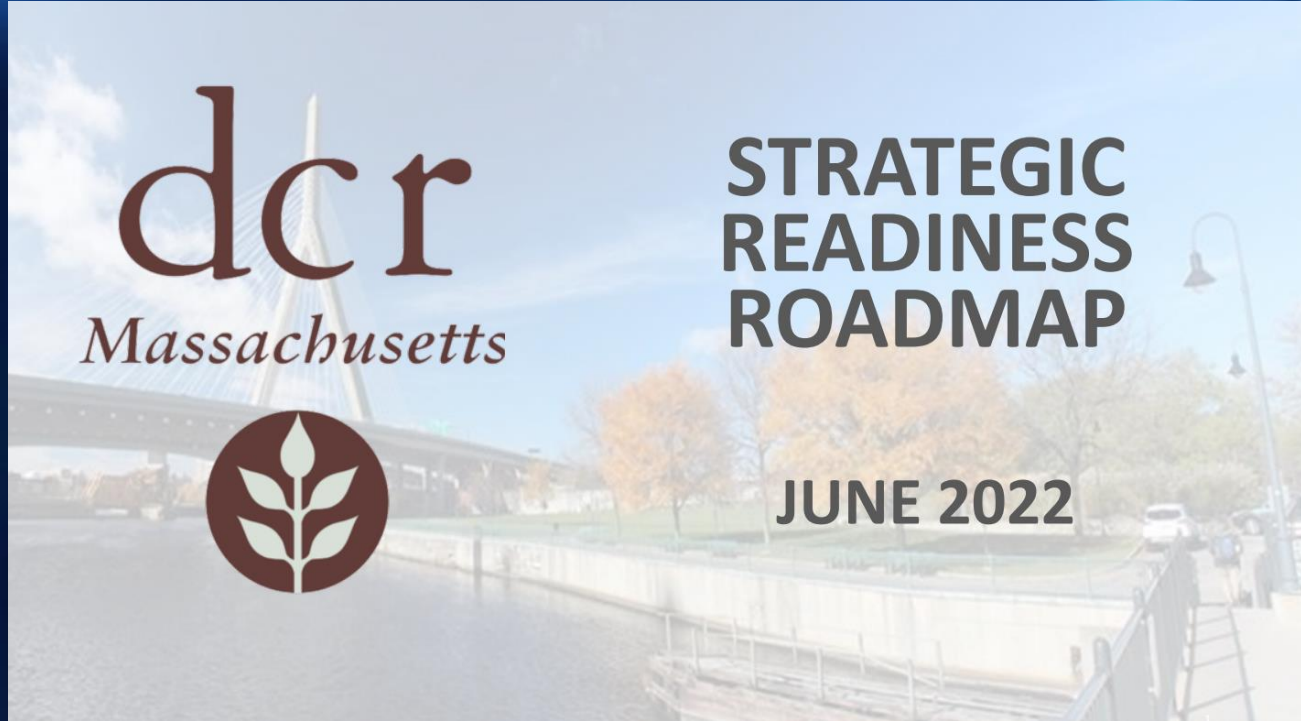
by recognizing and honoring our legacy through partnerships, public engagement, and education

2

Conserve lands, water, and forests

by integrating science, research, and technical expertise into the management of our natural resources

dcrrMassachusetts



12. Create an agency-wide research agenda and implement a knowledge management system to share and apply research findings

- ✓ **Advance climate-based resource management efforts**
- ✓ **Integrate best management practices into conservation efforts**
- ✓ **Develop repository of scientific information to incorporate into DCR's work**















Focus Areas:

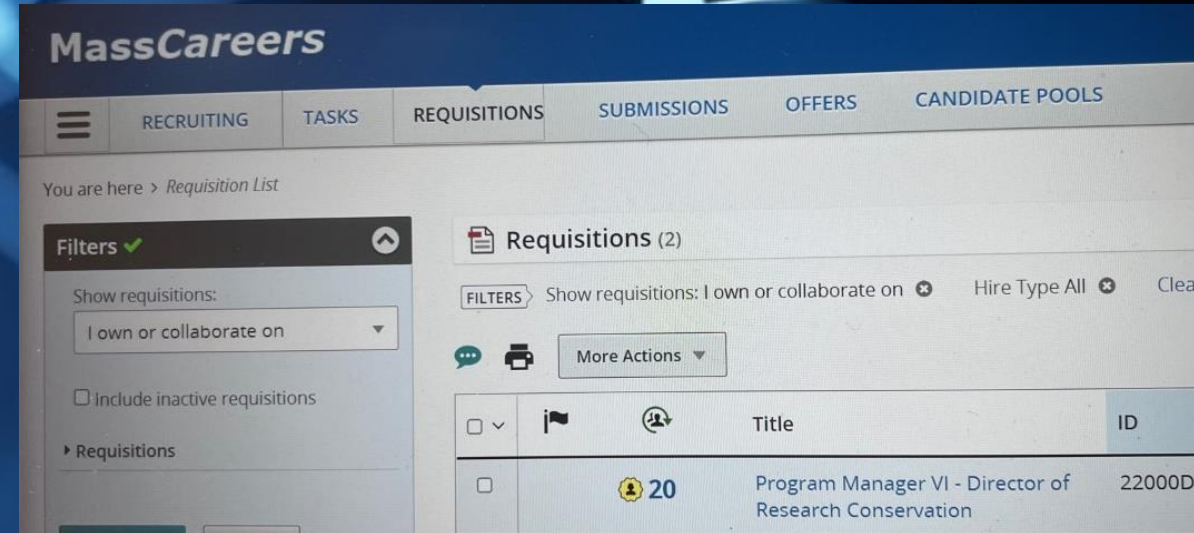
- Research Office
- Research Permits
- Research Survey
- Research Symposium



Research Office

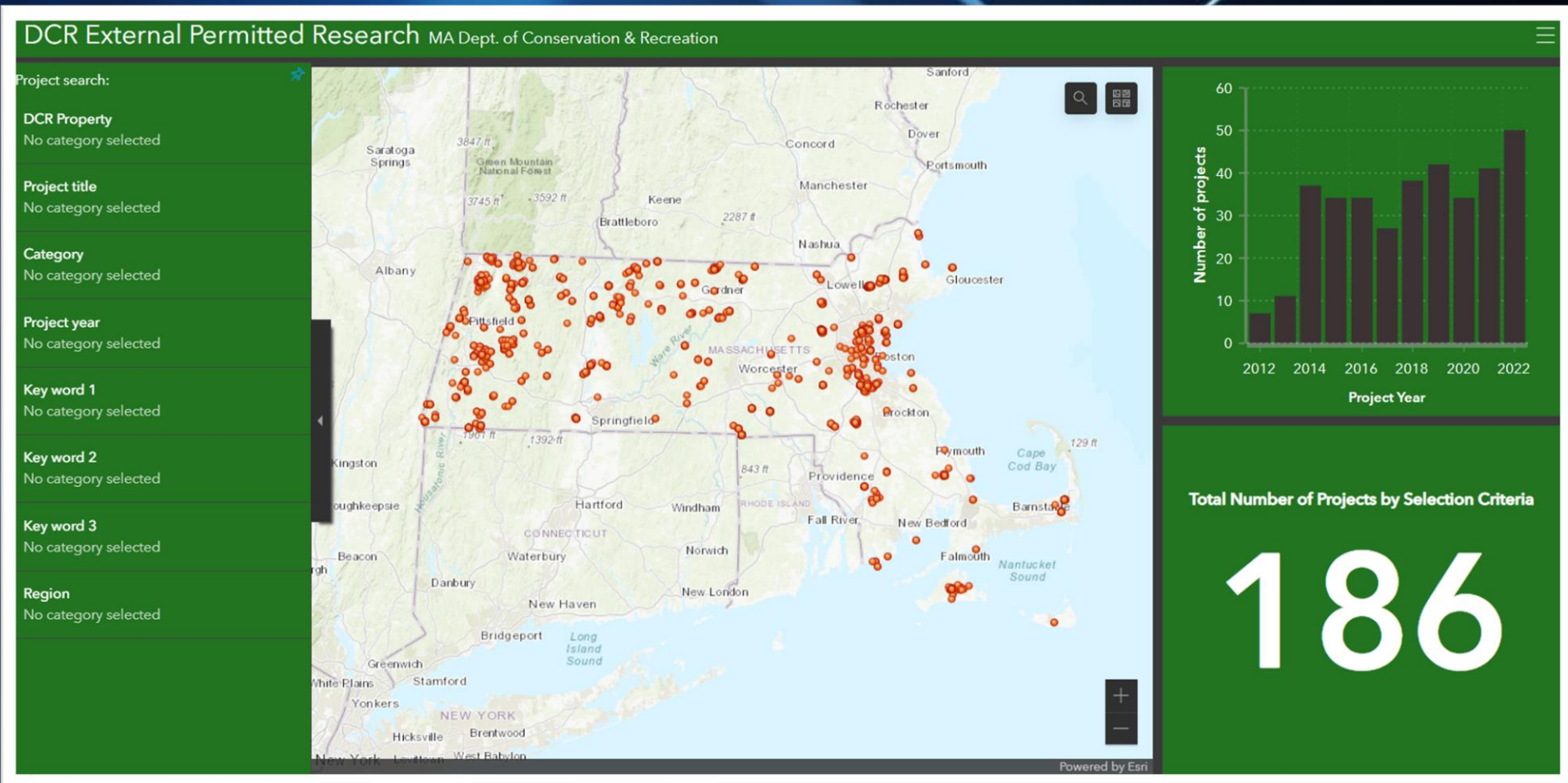
- ✓ Established a research office that will support staff throughout DCR
- ✓ Developed goals for the office
- ✓ Created a job description for Research Director

- Position posted just over 2 weeks ago
- 20 applications received so far



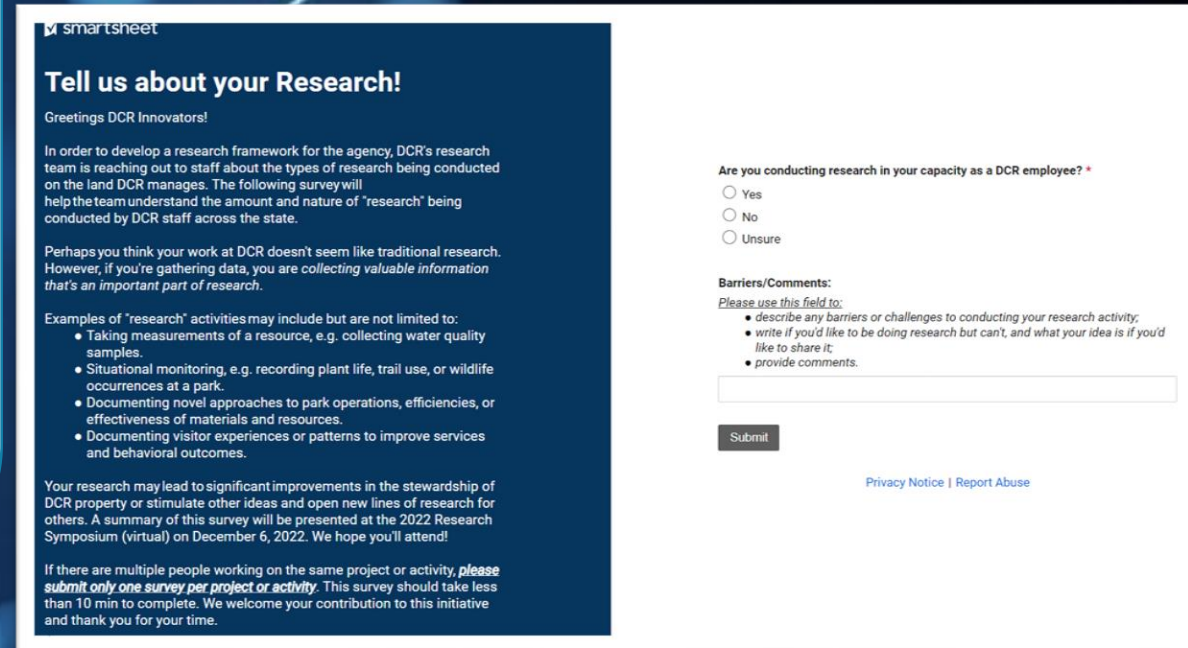
Research Permits

- ✓ Developed a GIS-based dashboard for staff to view research on DCR properties
- ✓ Working closely with EEA IT to update the current research permitting system



Research Survey

- ✓ Current extent of DCR internal research
- ✓ Capture the breadth of the types of research and monitoring staff are conducting
- ✓ Understand the agency's research needs and barriers



smartsheet

Tell us about your Research!

Greetings DCR Innovators!

In order to develop a research framework for the agency, DCR's research team is reaching out to staff about the types of research being conducted on the land DCR manages. The following survey will help the team understand the amount and nature of "research" being conducted by DCR staff across the state.

Perhaps you think your work at DCR doesn't seem like traditional research. However, if you're gathering data, you are *collecting valuable information that's an important part of research.*

Examples of "research" activities may include but are not limited to:

- Taking measurements of a resource, e.g. collecting water quality samples.
- Situational monitoring, e.g. recording plant life, trail use, or wildlife occurrences at a park.
- Documenting novel approaches to park operations, efficiencies, or effectiveness of materials and resources.
- Documenting visitor experiences or patterns to improve services and behavioral outcomes.

Your research may lead to significant improvements in the stewardship of DCR property or stimulate other ideas and open new lines of research for others. A summary of this survey will be presented at the 2022 Research Symposium (virtual) on December 6, 2022. We hope you'll attend!

If there are multiple people working on the same project or activity, **please submit only one survey per project or activity.** This survey should take less than 10 min to complete. We welcome your contribution to this initiative and thank you for your time.

Are you conducting research in your capacity as a DCR employee? *

☐ Yes

☐ No

☐ Unsure

Barriers/Comments:
Please use this field to:

- describe any barriers or challenges to conducting your research activity;
- write if you'd like to be doing research but can't, and what your idea is if you'd like to share it;
- provide comments.

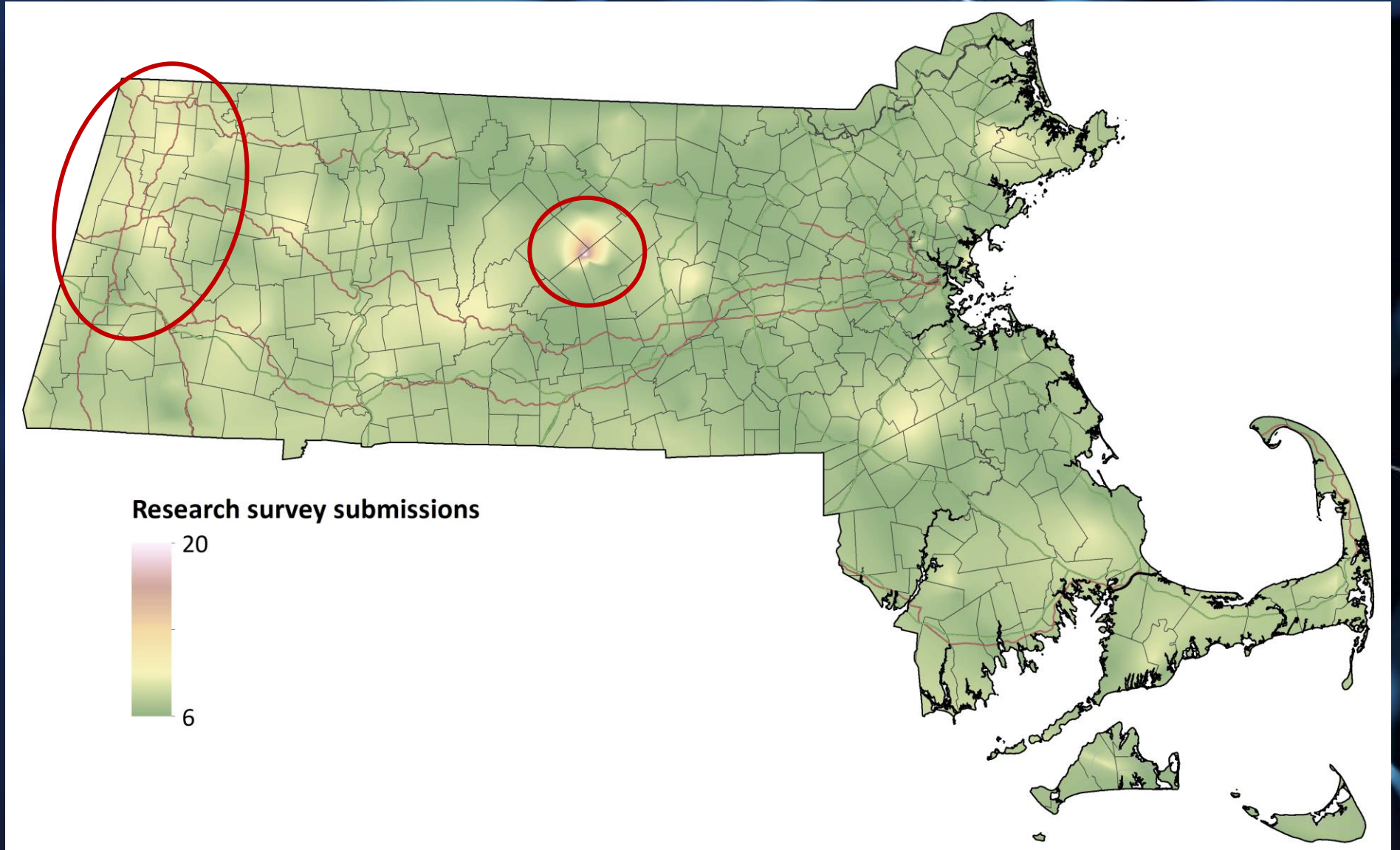
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Research defined as:

- Collecting data
- Analyzing data
- Using data to draw conclusions



Research Survey Responses

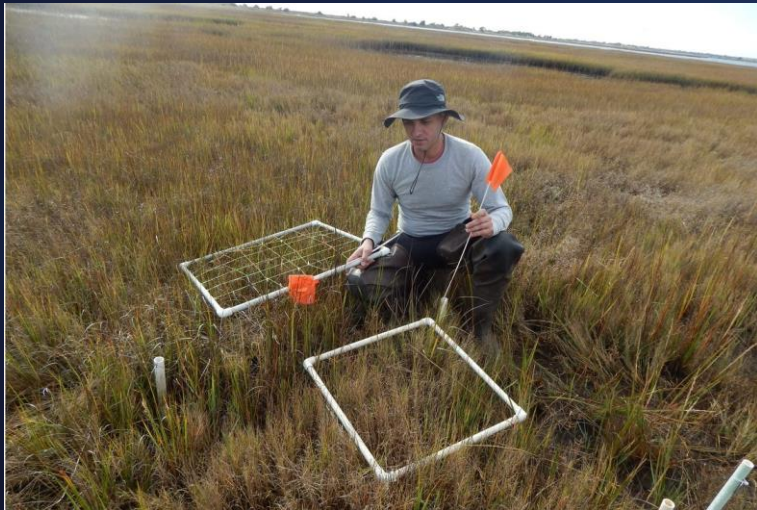
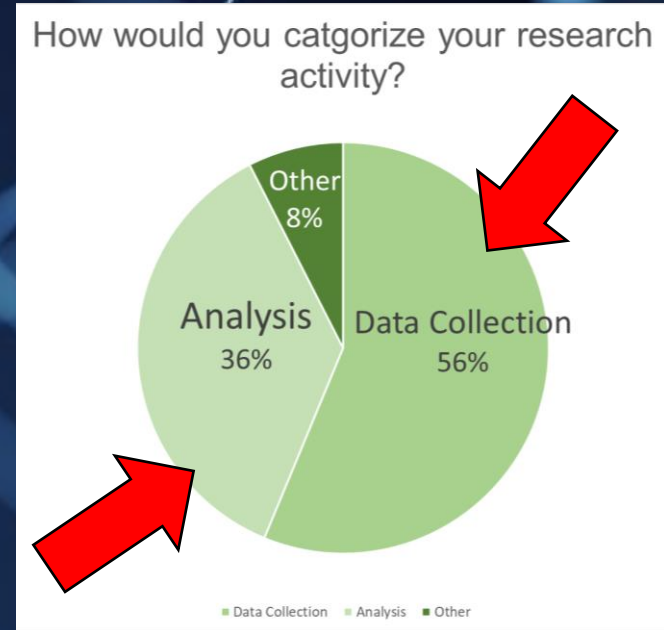


80 Total Responses

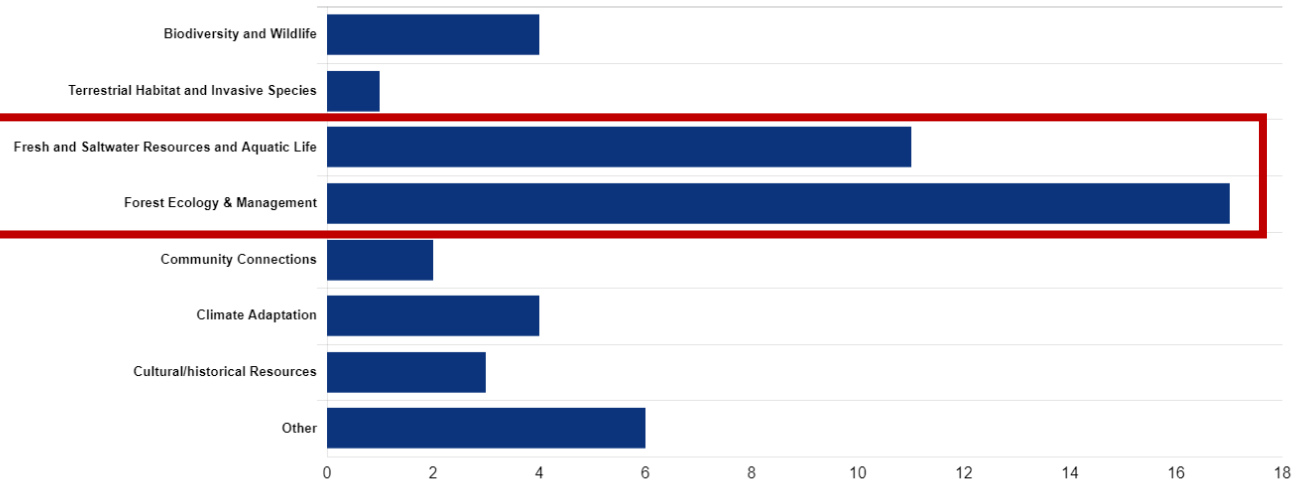
Over 50% of people answering the survey are conducting research or monitoring!

36% of DCR research is being analyzed to help make decisions.

There is a lot of research and monitoring going on in **Forestry (17)** and with **Water Resources (11)**.



Research category

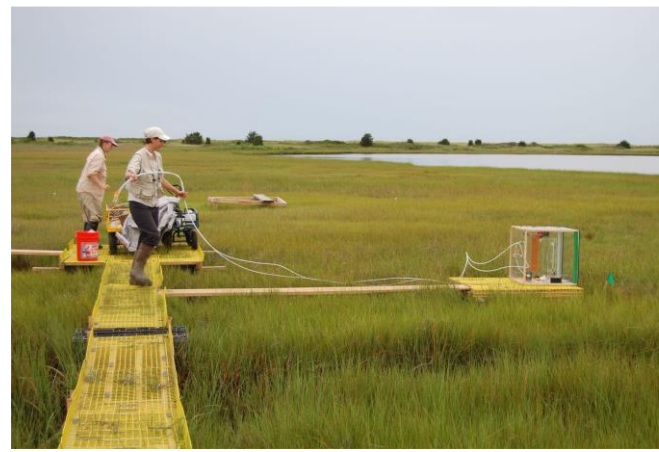


Research: Key Words

Describe your Research:

- Biodiversity
- Bird
- Carbon Stock
- **Climate Change (7)**
- Coastal
- Ecology
- **Forestry (16)**
- Interpretive Programs
- **Invasive Species (8)**
- Long-term
- **Water (12)**
- **Water Quality (8)**
- Water Supply
- Visitor Services

BIG 5 topics in Yellow



48 Research Projects

How many FTE are working on your Research Project?

- 242 FTE conducting research on 48 projects

Are multiple DCR employees involved in your research activity?

- YES: 87.5 %
- NO: 12.5 %

Are you using seasonals to help with your project?

- 191 total seasonals involved with research



Research Needs

Researchers wrote 1,338 words
653 distinct Words

Words/Phases that reflect Research Needs



- Data
- Public
- Quality
- Stakeholder
- Climate
- Water
- Monitoring
- Equipment
- Land Management
- Water quality
- Data Collection
- Climate change
- Stakeholder engagement

Research Barriers

Researchers wrote 1,557 words
756 distinct Words

Words/Phases that reflect Research Barriers

A word cloud on a dark blue background with a faint map of Massachusetts. The words are in various shades of blue and white, with different fonts and sizes. The most prominent words are 'Monitoring', 'Equipment', 'Capacity', 'Duties', 'Hiring', 'Results', 'Seasonal', 'Support', 'Funding', 'Training', and 'Communication'.

Capacity Communication Training
Support Funding
Duties Monitoring
Hiring Equipment
Results
Seasonal
Competing Duties

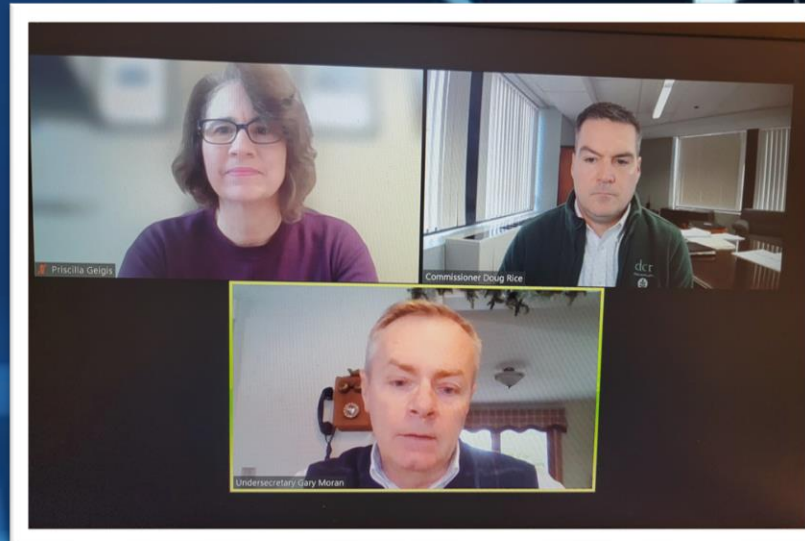
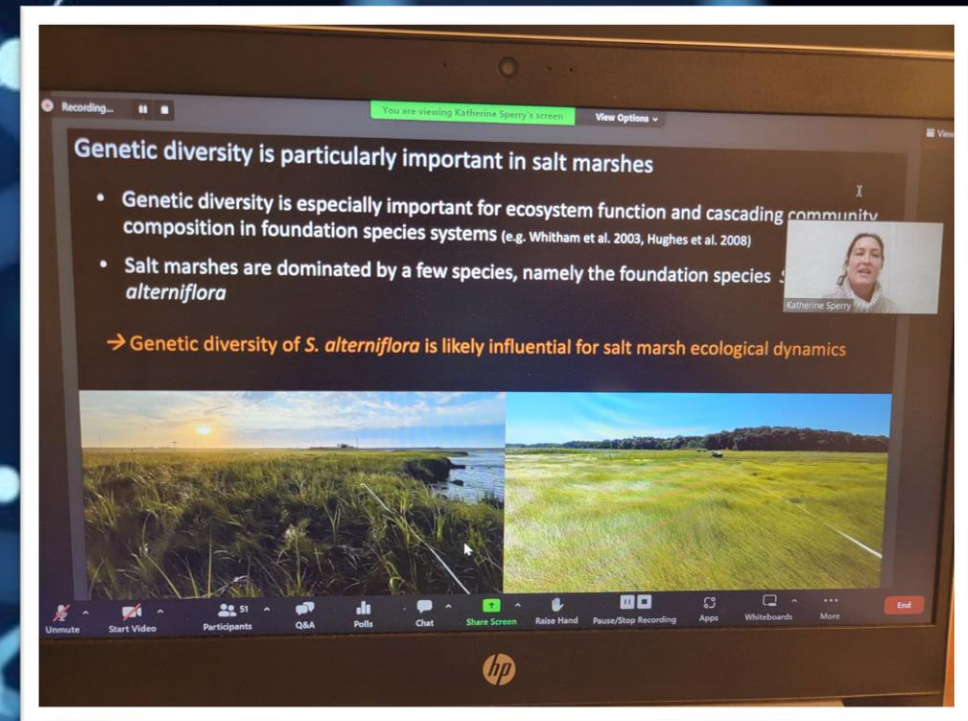
- Support
- Results
- Equipment
- Seasonal
- Monitoring
- Funding
- Duties
- Training
- Capacity
- Communication
- Hiring
- Competing Duties
- Time and Funding



DCR Research Symposium!

December 6, 2022
9:00 am – 2:30 pm

- 230 attendees
- 30 presenters - DCR staff & outside presenters
- EEA Undersecretary and DCR Commissioner kicked off virtual symposium
- Presented results of DCR Research Survey
- Keynote: Leading the Way with DCR's Shorebird Recovery Program



Topic areas:

- Habitat Restoration (66 attendees)
- Forest Ecology and Management (110)
- Climate Adaptation (63 attendees)
- Biodiversity (81 attendees)
- Water Quality (47)
- Community Connections (75 attendees)



“Quite Simply...Now THAT was time well spent! Thank you to all who organized today's event and to all of those who presented. I thoroughly enjoyed all the presentations. Well done!”

“Thank you very much for organizing the research symposium. I learned a lot today”

“Congratulations on a great first research symposium. I thought it went very well!”

WOW! What a great line up. It was a good variety of topics, I could not decide! Even though it was all day, it was so engaging and so well organized! **I can't wait to see what's next!**

Next Steps:

- Symposium Survey
- Hire Research Director
- Provide baseline information to Director
- Offer Training to DCR staff on GIS-based application
- Continue working with EEA IT to integrate DCR's research permitting to the E-Permitting platform used across the Commonwealth
- Determine forum to highlight specific research at DCR

