

# LEVERAGING OUR DATA SYSTEMS

Region 7  
Emma Schillerstrom

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With R Shiny!

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## QUESTIONS TO PONDER (AND IDEALLY ANSWER)

1. What CAN we do with our data systems?
2. What CAN'T we do?
3. What do we WANT to do?
4. Can we achieve what we want to do? If so, HOW?

## PROJECTS

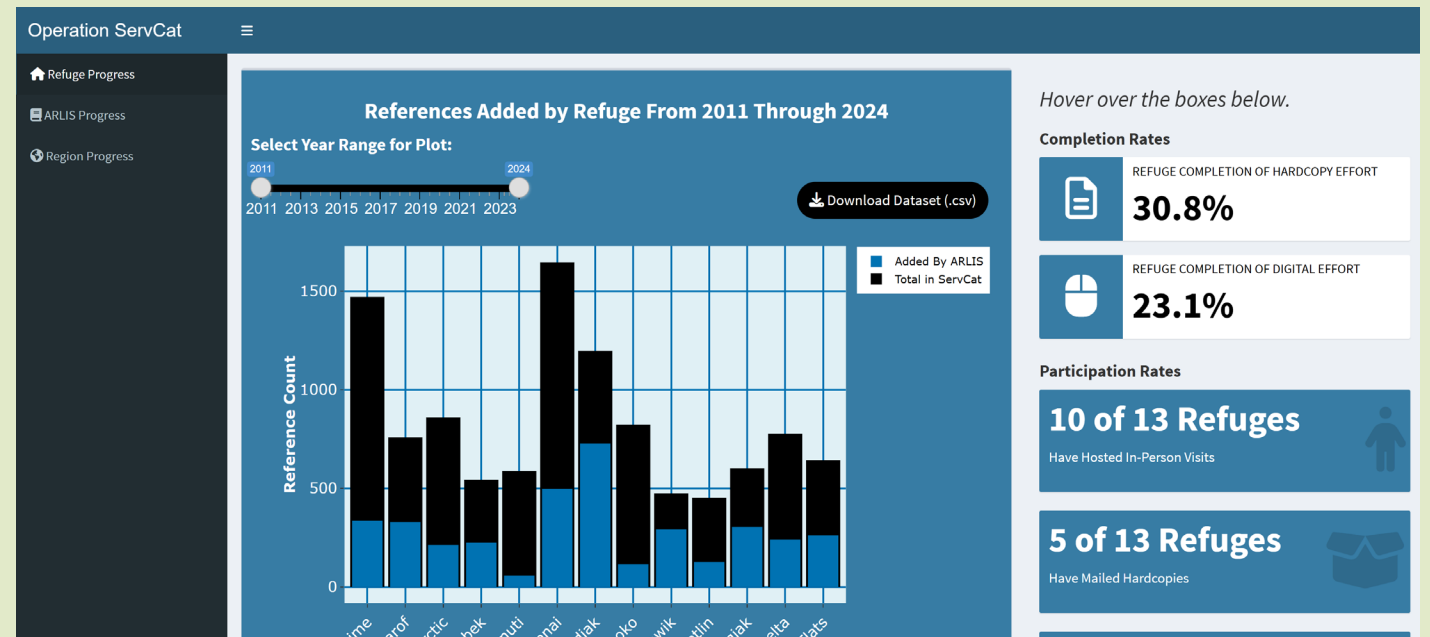
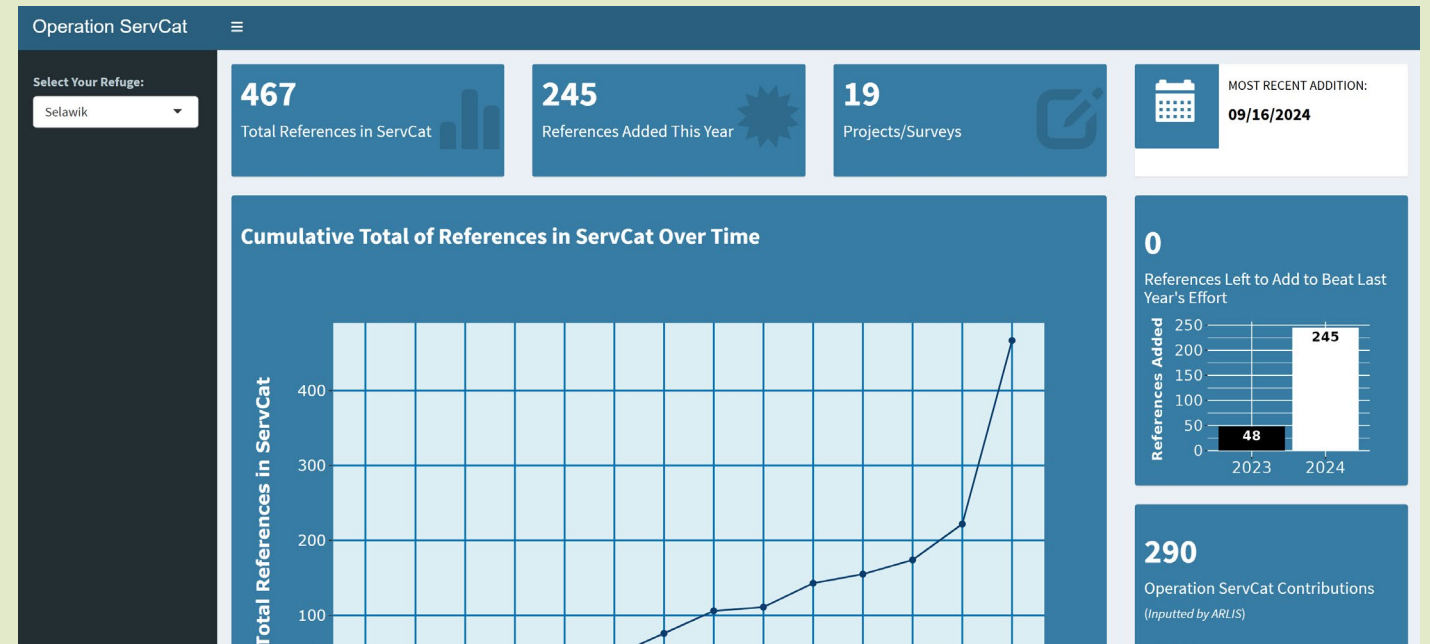
- 1 - Data Management Monitoring
- 2 - Succession Planning
- 3 - Survey Review/Planning: A Case Study
- 4 – Annual Activity, Other R7 Projects
- 5 - What's Next?

# APPS 1&2: “Operation ServCat” Dashboards

System: ServCat

Goals:

- Monitor project progress
- Quantify regional data management success
- Bridge gaps between field staff and ServCat



# DEMO



1 - <https://das.ecosphere.fws.gov/op-servcat-refuge/#>

2 - <https://das.ecosphere.fws.gov/op-servcat-management/>

## ASSOCIATED DISCUSSION QUESTIONS

1. How/what else can we measure to quantify our success as data managers or our progress as a program?
2. What metrics can be used in automated annual accomplishment reporting for regional I&M teams?

*Our team is about to begin exploring this.*

3. How else can we make it easier for refuge staff to find, access, and work with their information in ServCat?

*APP 3:*

# Preservation Monitoring Tool

**Systems:** PRIMR, ServCat

**Goals:**

- Quickly identify what has and has not been preserved at stations
- Prepare for succession

NEW

## Monitoring Data Asset Preservation for PRIMR Surveys

*You are on-network and viewing the internal version of this application.*

Please Select a Region Below:

Please Select a Refuge Below:

Optional Filters:

Filter by Coordinator:

Filter by Survey Status (multi-select):

Download Report (.html)

Download Inventory (.xlsx)

Survey Count: 44

1) Salmon Run Inventory ([PRIMR link](#))

Status: Current

Coordinator: Christopher Harwood

Project: Salmon Run Inventory at Kanuti National Wildlife Refuge (FF07RKAN00-003) ([ServCat link](#))

Products: None

2) Waterfowl Breeding Pair Survey ([PRIMR link](#))

Status: Current

Coordinator: Christopher Harwood

Project: Waterfowl Breeding Pair Survey (FF07RKAN00-004) ([ServCat link](#))

Products:

2 x Unpublished Report (1999, 2011)

3) Hudsonian Godwit Ecology Study ([PRIMR link](#))

Status: Future

Coordinator: Christopher Harwood

Project: None linked

4) Whimbrel Breeding Biology and Habitat Use Study ([PRIMR link](#))

Status: Historic

Coordinator: Christopher Harwood

Project: Whimbrel Breeding Biology and Habitat Use Study at Kanuti National Wildlife Refuge (FF07RKAN00-005)



# DEMO



<https://das.ecosphere.fws.gov/content/950dd946-3f0a-4b82-9a3d-223b2fa93887/>

## ASSOCIATED DISCUSSION QUESTIONS

1. What is I&M's role in succession planning?

*Note: Not currently in “set responsibilities”, but staff turnover has direct impacts on data management and survey management. It sounds like some regions may already be involved.*

2. How can our data systems be used to aid field staff with turnover events?

3. Is there information missing from PRIMR that is pertinent for survey continuation in the event of turnover? If so, what?

*APP 4:*  
Survey Review  
and Planning  
Report

**System:** PRIMR

**Goals:**

- Review what was achieved previous year to determine what is feasible for upcoming year
- Adapt and compare plans based on costs, schedule, and prioritization criteria

## Survey Planning and Review Using PRIMR Data: Tetlin NWR Case Study

### 2023 Survey Review

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#### **Expected for 2023**

**Survey Count:** 18

**Total Cost:** \$404,665.00

**Non-labor Operations Cost:** \$161,882.50

**FWS Staff Hours:** 5613

**Time Per Coordinator:**

*'Time per coordinator' includes time allocated to support staff, if applicable.*

1. Travis David - 22 hours | 3 work days | 1.195% of work year
  2. Brent Jamison - 5591 hours | 699 work days | 278.486% of work year
- 

#### **Completed for 2023**

*'Completed' in this case refers to data acquired.*

**Survey Count:** 12

# DEMO



1a - [year-review-report.html](#)

1b - app stored locally 😊

## ASSOCIATED DISCUSSION QUESTIONS

1. Do we need to capture more standardized survey timing information – in or out of PRIMR – to support survey planning (e.g., be able to create annual Gantt charts by refuge)?

*Helpful? Or out of our “jurisdiction”?*

2. Is it an issue that we currently have no way of knowing which surveys are happening in a given year until a full year after the fact (and assuming that reporting is completed and accurate)? Can we provide better support for surveys if we know which are actively ongoing?

*Our team decision: no.*

3. Are the estimates for costs and time in PRIMR accurate and detailed enough to make the conclusions we want to make? Do we need time breakdowns by survey lifecycle step?
4. In an ideal world, would actual costs and time spent be captured in annual activity reporting?
5. Should pROC data be standardized and/or incorporated into PRIMR?

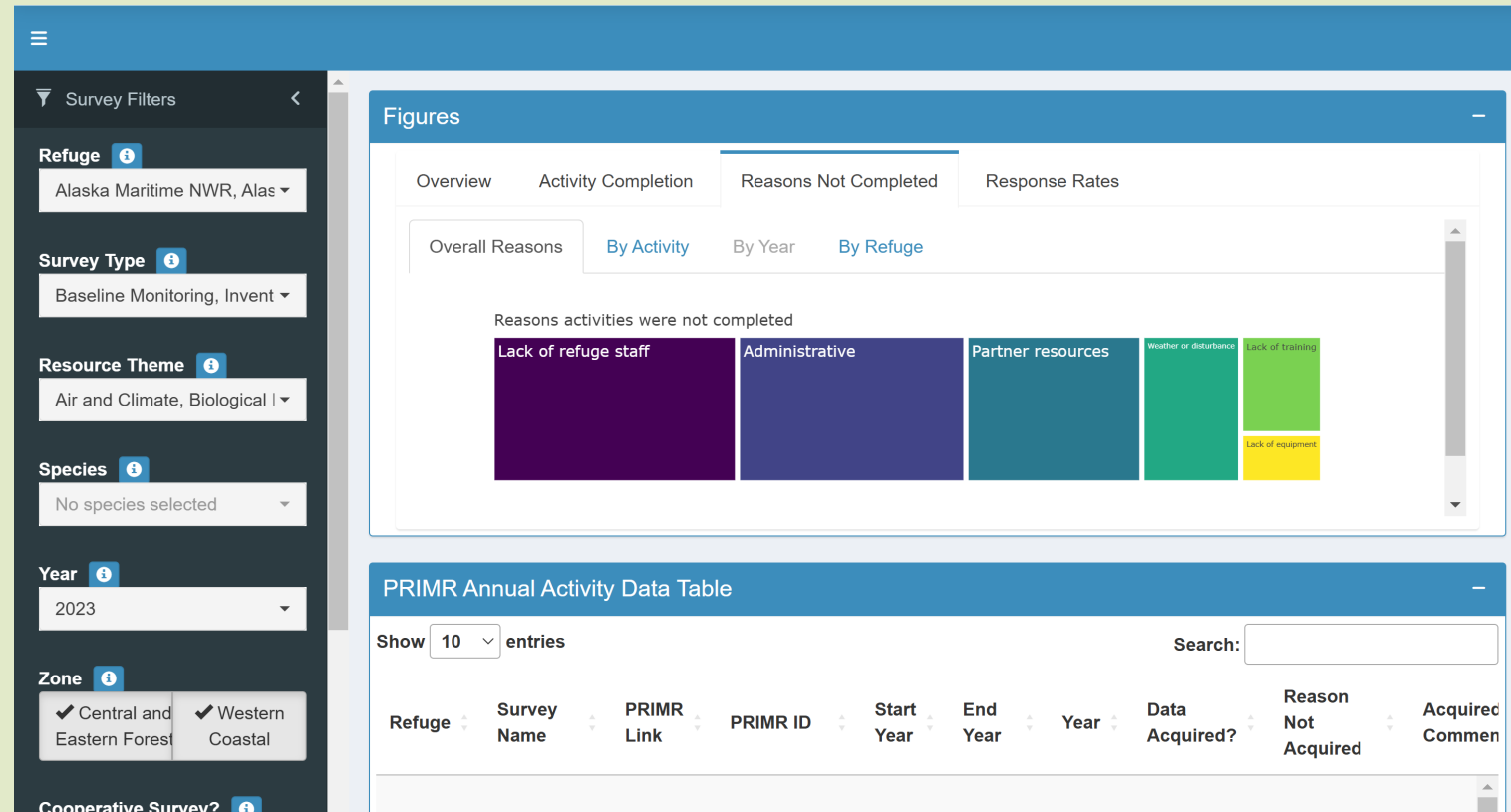
*APP 5:*

## Annual Activity Dashboard

System: PRIMR

Goals:

- Visualize annual activity information for interested parties
- Identify *which* surveys steps are not being completed
- Identify *why* survey steps are not being completed



**Disclaimer:** *made entirely by Caylen Cummins*

<https://das.ecosphere.fws.gov/content/3db3e1d1-009d-496d-b59d-b9522a3e7617>

## ASSOCIATED DISCUSSION QUESTIONS

1. What metrics are useful to communicate to our differing audiences: ourselves, our bosses, leadership, on-the-ground supporters/lobbyists?
2. Is the information in a state such that leadership can utilize it for decision making?

*We have made recent efforts to standardize interpretation of the questions and increase the coverage of collected information.*

3. Is there information missing from Annual Activity reporting that could be utilized?
4. What decisions can others (e.g., Refuge leadership) make from this?
5. How can I&M use this information?

# WAYS TO USE THE SERVCAT/PRIMR APIS?

- *Review* -

## Currently using for:

- Data management monitoring
- Summarizing annual activity reporting
- Data download for automated survey workflows
- Relaying information to I&M coordinators

## Exploring use for:

- Automated accomplishment reporting
- Succession planning
- Survey planning/review
- Implementing ServCat version control into automated workflows

## Could use for:

- Providing metrics or communicating information to decision makers
- Tracking program progress
- Living IMP
- ??



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What metrics matter?

THANK YOU

Thoughts? Questions?