



National Library of Medicine  
National Center for Biotechnology Information

SRA

SRA

GenBank

Nucleotide



@A2\_S2

ATATGAGGGGAA  
TGCTCTGCGGCCAT  
TCCGTACATAACAA  
ACGGTCGGGAGAA  
TCACTGCGCACCCA  
ACTACCAATACT

GTAACAATT  
GCATCAGGCC  
TGATGCCTGA  
GTATG  
ATAACACCAATACTG...



# Who governs these data



# Who gets to decide

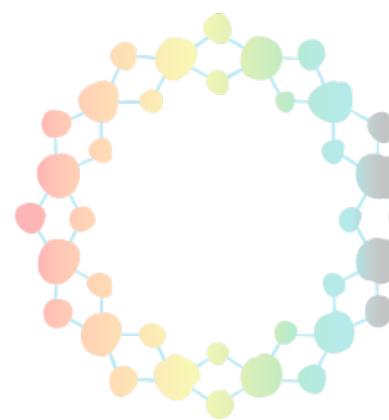
?



# Indigenous data sovereignty and governance



# Indigenous data sovereignty and governance



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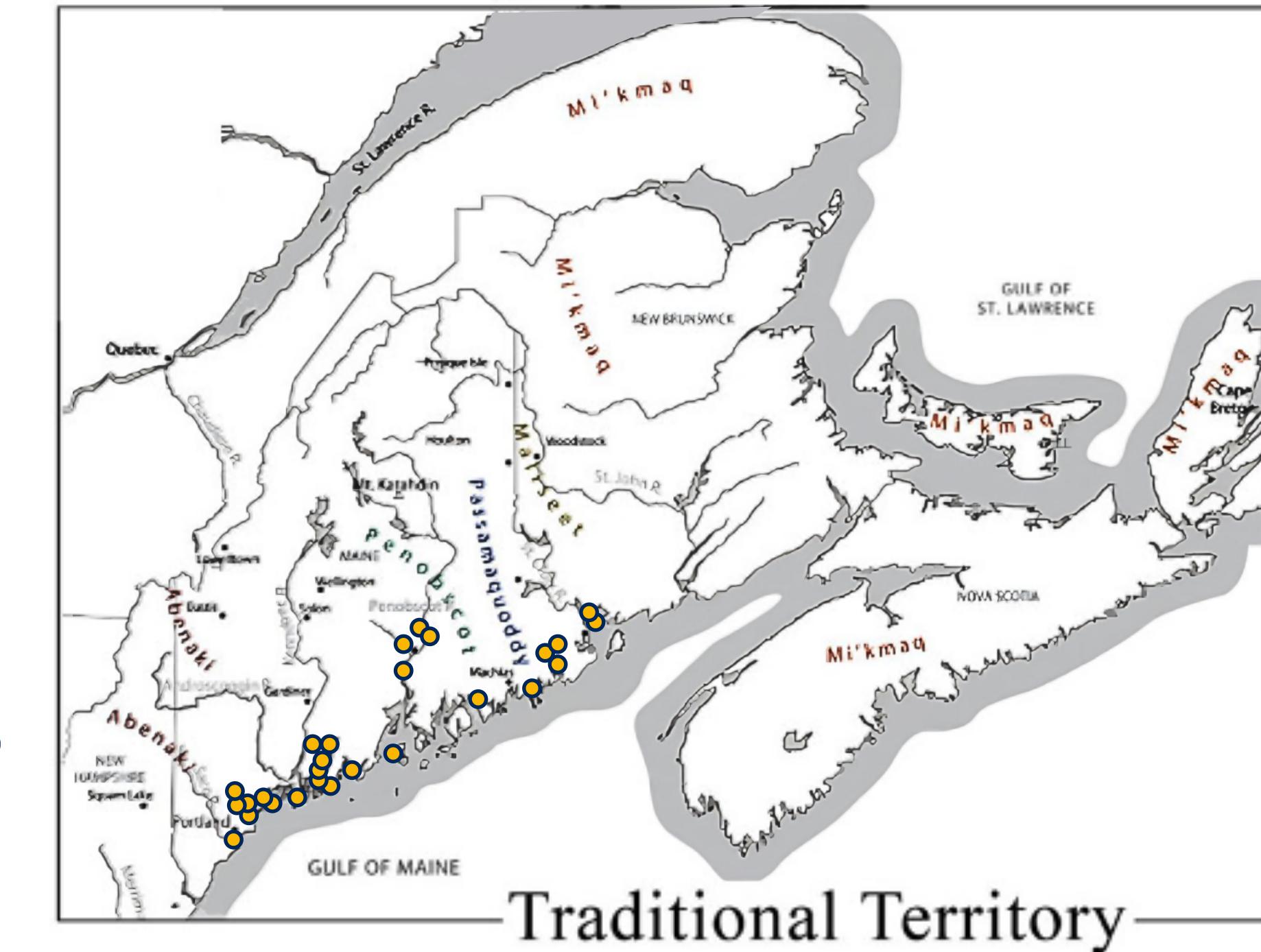
Local  
Contexts



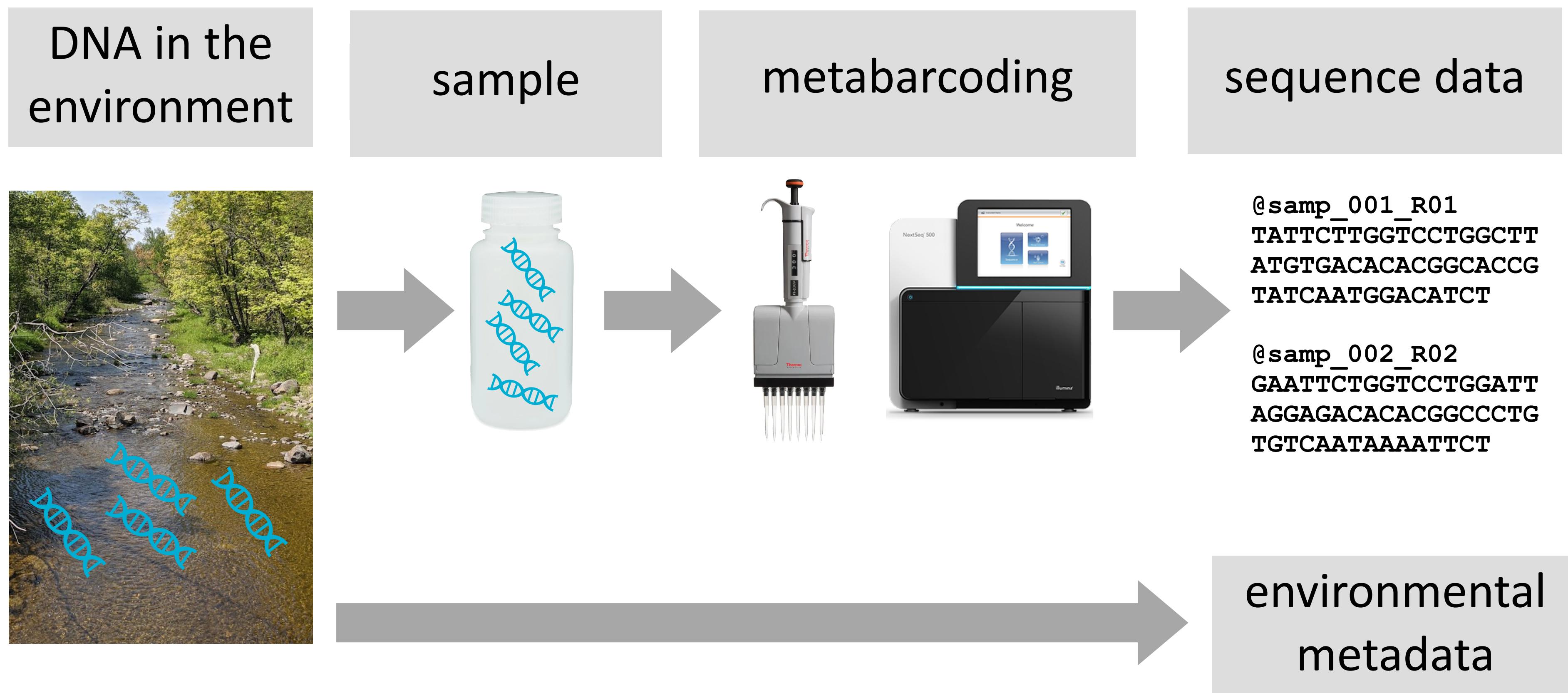
**GIDA**  
Global Indigenous  
Data Alliance

# Biodiversity data with CARE

Maine-eDNA sample locations

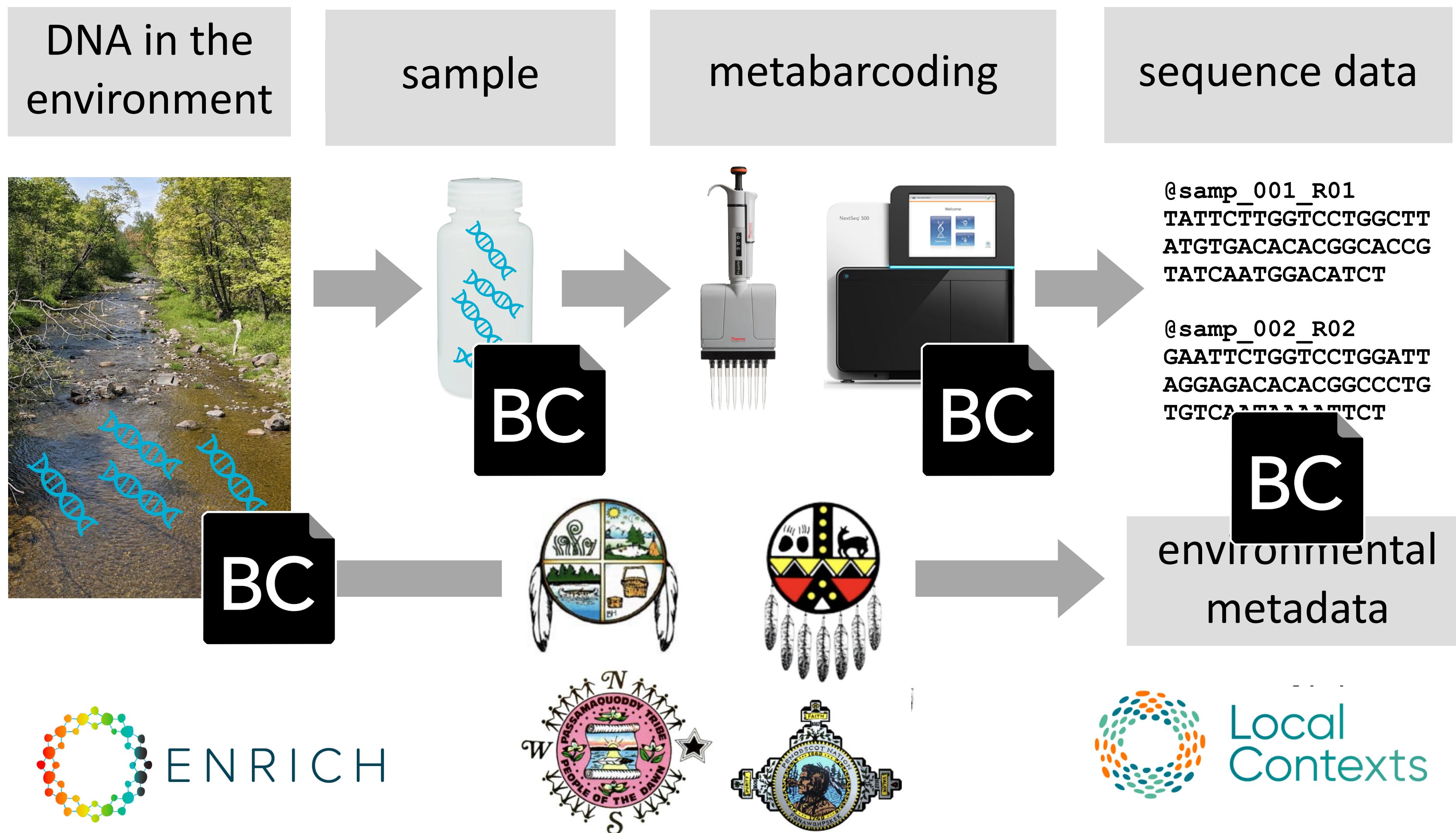


# Biodiversity data with CARE

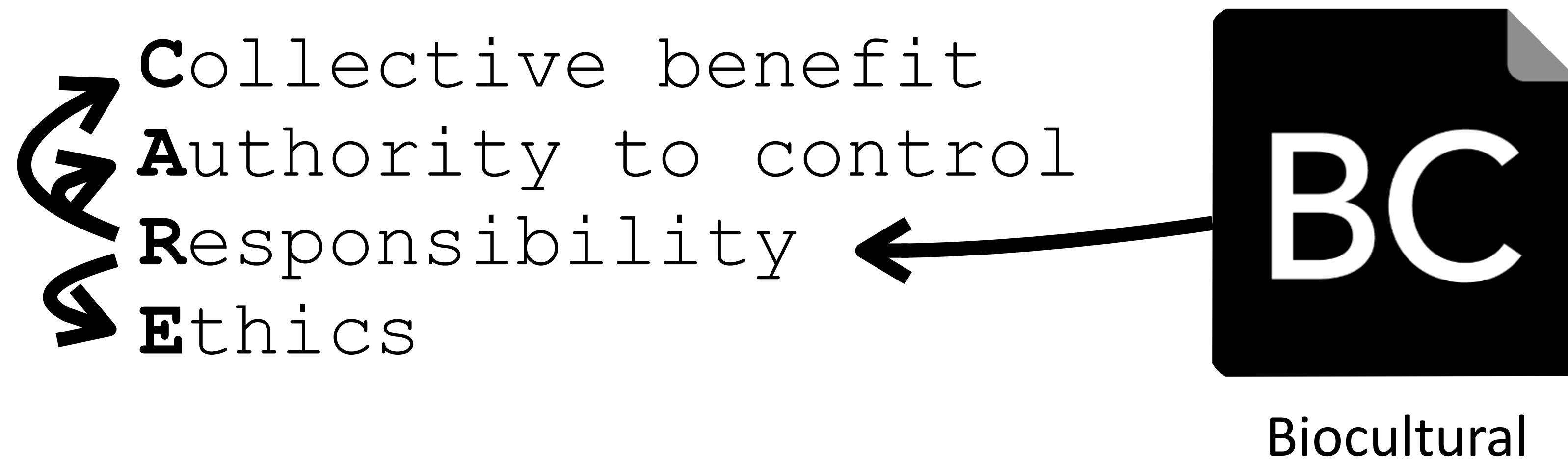


	salinity	pH
samp_001	0.01	7
samp_002	0.03	7

# Biodiversity data with CARE



# Indigenous data notices



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Local  
Contexts



**GIDA**  
Global Indigenous  
Data Alliance

# Indigenous data notices



Open to  
Collaborate



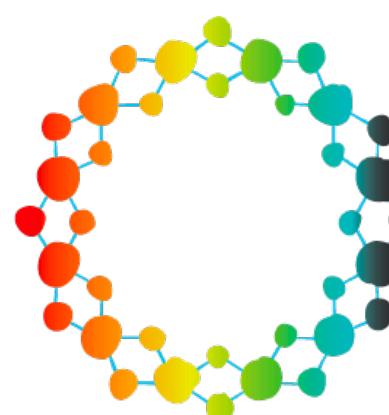
Attribution  
Incomplete



Biocultural



Traditional  
Knowledge



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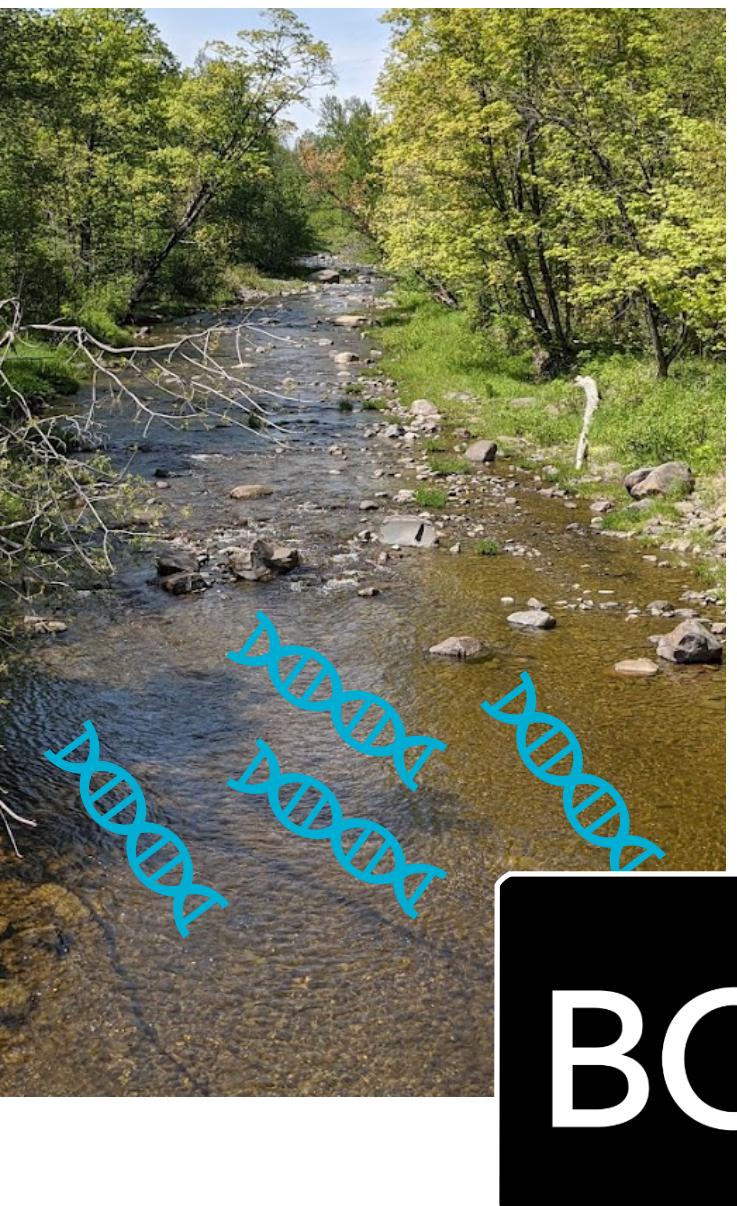
Local  
Contexts



**GIDA**  
Global Indigenous  
Data Alliance

# Biodiversity data with CARE

DNA in the environment



< eDNA Sampling v14 ⚡ ≡

 Maine-eDNA Field Sampling Survey  
Owner: umednagis  
Created: 6/17/21 4:28 AM  
Modified: 6/20/22 4:48 PM

Field form for collecting site conditions and eDNA samples (water and/or sediment). This project is part of the RII Track-1: Molecule to Ecosystem: Environmental DNA as a Nexus of Coastal Ecosystem Sustainability for Maine (Maine-eDNA) at the University of Maine. Supported by National Science Foundation award #OIA-1849227 to Maine EPSCoR at the University of Maine.

Maine-eDNA projects collect samples on traditional Wabanaki territory. Maine-eDNA is collaborating with the Local Contexts Hub to document the indigenous provenance of and rights to these data.

land acknowledgement  
in the field with  
Survey123



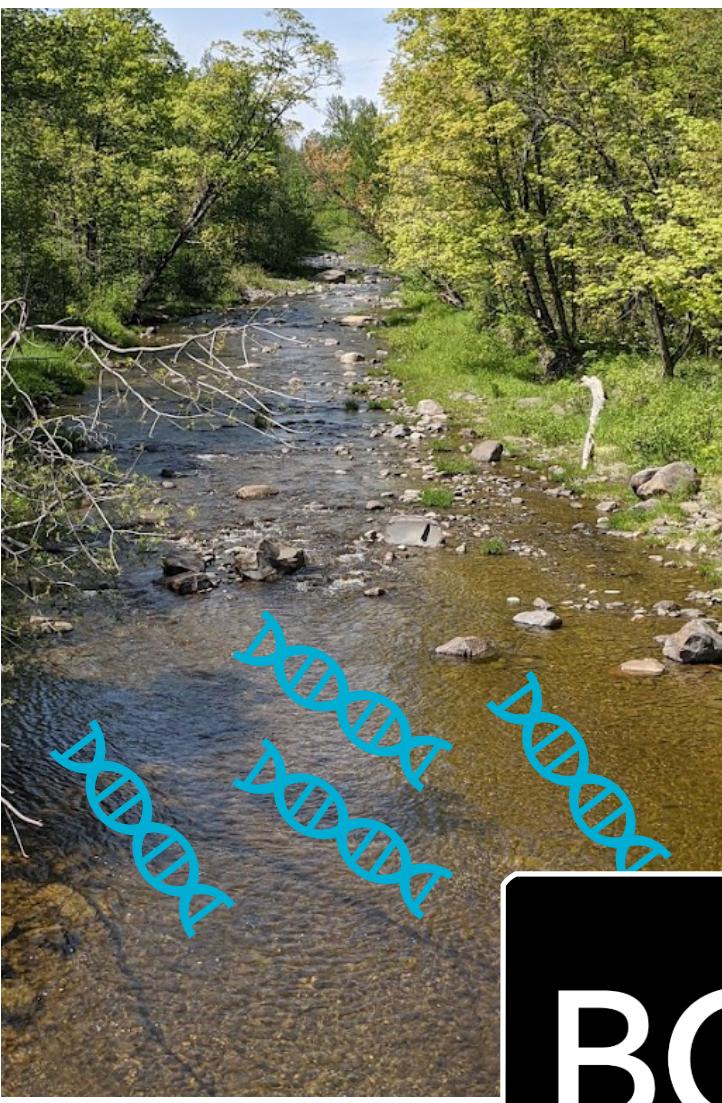
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Local Contexts

# Biodiversity data with CARE

DNA in the environment



< eDNA Sampling v14 ⚡ Ⓛ

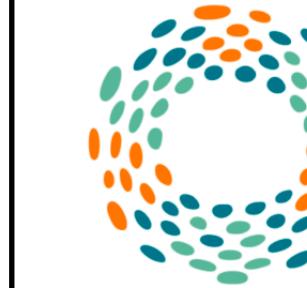


Maine-eDNA Field Sampling Survey  
Owner: umednagis  
Created: 6/17/21 4:28 AM  
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land acknowledgement  
in the field with  
Survey123

 Local Contexts

**Project Identifiers**

 **Local Contexts Project ID**  
6d34be51-0f60-4fc5-a699-bed4091c02e0

link to Local Contexts Hub  
project in the field with GUID



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Local Contexts

# Biodiversity data with CARE

Maine-eDNA Metadata

About Help Login

## Local Contexts and Maine-eDNA

Documenting Indigenous provenance through sustained partnerships.

### Open to Collaborate

Our institution is committed to the development of new modes of collaboration, engagement, and partnership with Indigenous peoples for the care and stewardship of past and future heritage collections.

Local Contexts Collaboration | Biocultural Notices and Labels

Maine-eDNA is committed to maintaining Indigenous provenance of and future interests in data collected on Indigenous lands and waters. As part of our commitment to sharing and

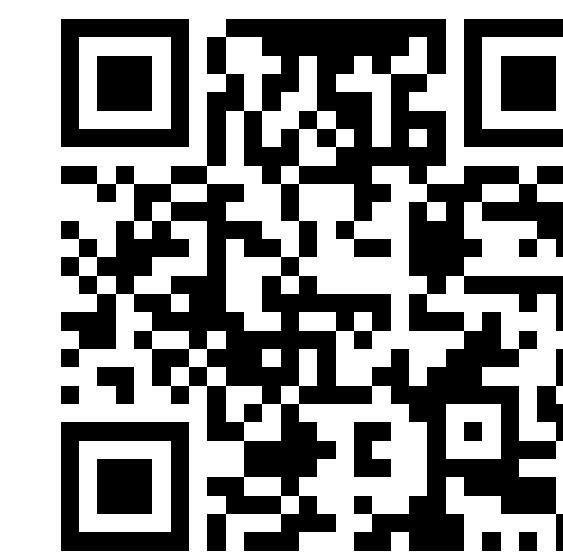
Maine-eDNA data portal



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Local Contexts



sequence data

@samp\_001\_R01  
TATTCTGGTCCTGGCTT  
ATGTGACACACGGCACCG  
TATCAATGGACATCT

@samp\_002\_R02  
GAATTCTGGTCCTGGATT  
AGGAGACACACGGCCCTG  
TGTCAATTAAATTCT

BC  
environmental  
metadata

	salinity	pH
samp_001	0.01	7
samp_002	0.03	7

# Biodiversity data with CARE

**Local Contexts Projects within Maine-eDNA**

**Index Sites (T3) Local Contexts' Project Detail (Notices and Labels)**

Affiliated Institution: Maine Center For Genetics In The Environment

<https://localcontextshub.org/projects/6d34be51-0f60-4fc5-a699-bed4091c02e0/>

The BC (Biocultural) Notice is a visible notification that there are accompanying cultural rights and responsibilities that need further attention for any future sharing and use of this material or data. The BC Notice recognizes the rights of Indigenous peoples to permission the use of information, collections, data and digital sequence information (DSI) generated from the biodiversity or genetic resources associated with traditional lands, waters, and territories. The BC Notice may indicate that BC Labels are in development and their implementation is being negotiated.

Notice Type	Biocultural (BC) Notice
Created	6/3/2022, 10:31:52 AM
Updated	7/19/2022, 5:37:44 PM



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Local  
Contexts

 **Local Contexts** 

**Project Identifiers**

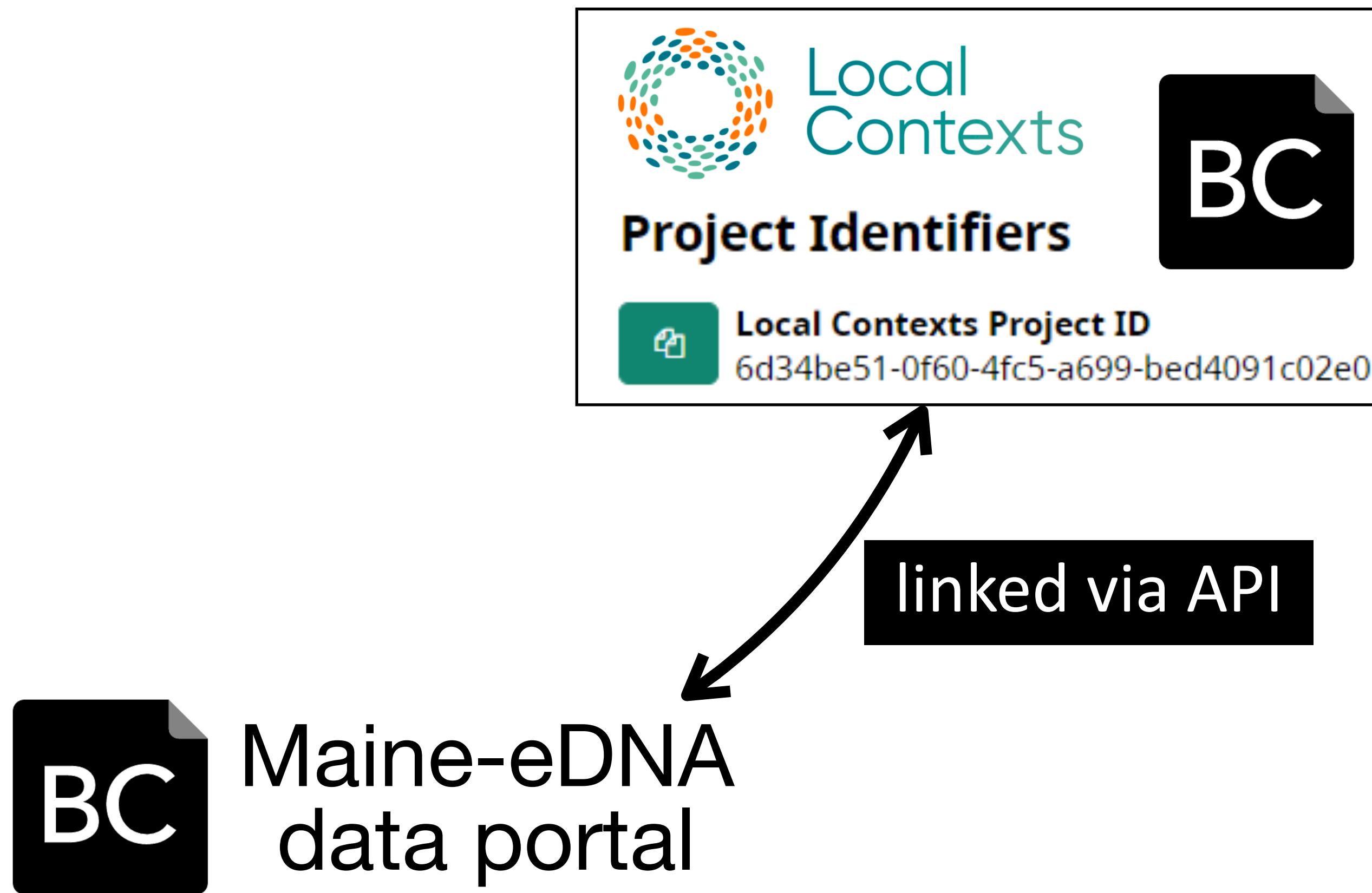
 **Local Contexts Project ID**  
6d34be51-0f60-4fc5-a699-bed4091c02e0



automatically  
generated Biocultural  
info via API integration



# Biodiversity data with CARE

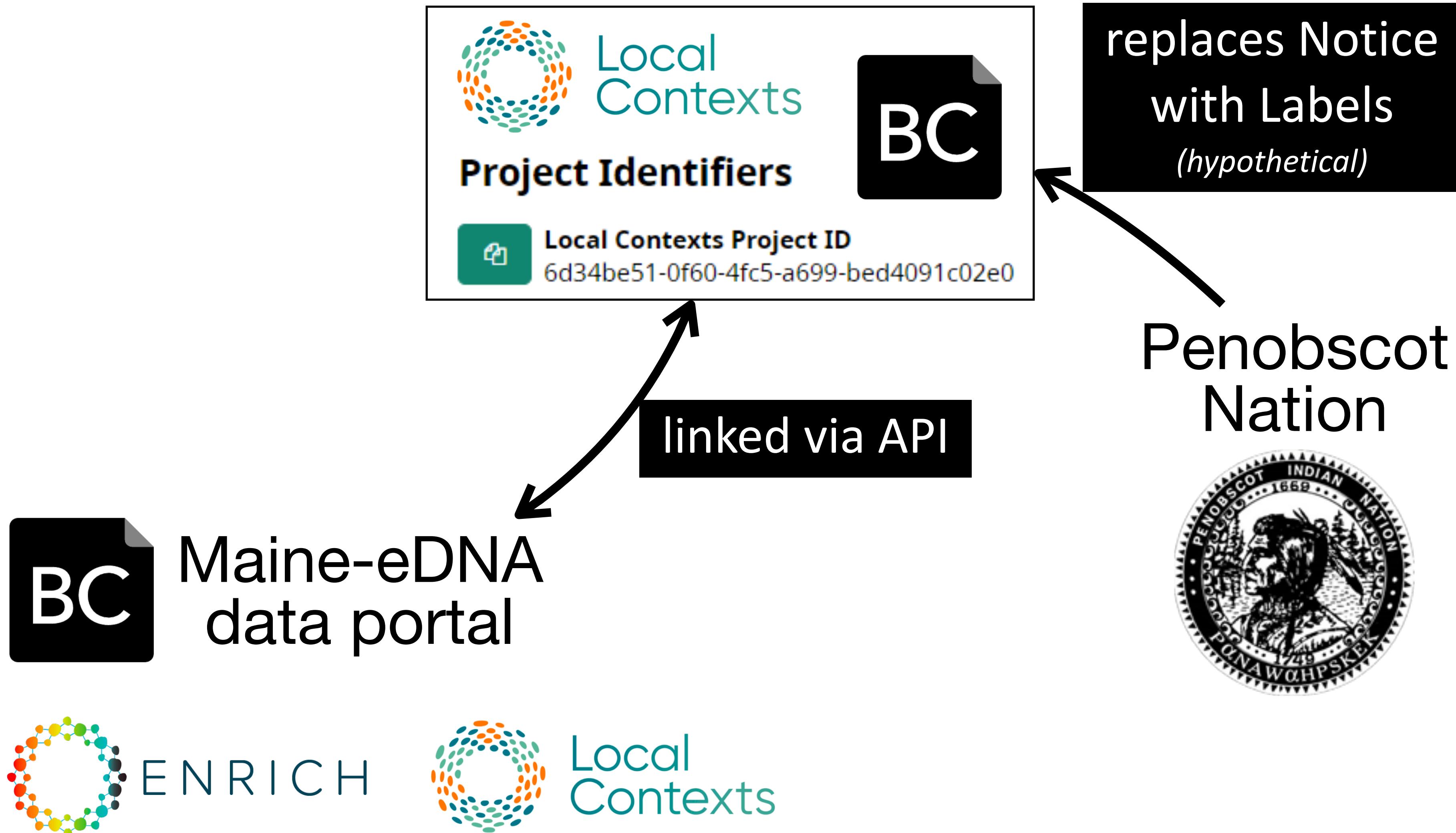


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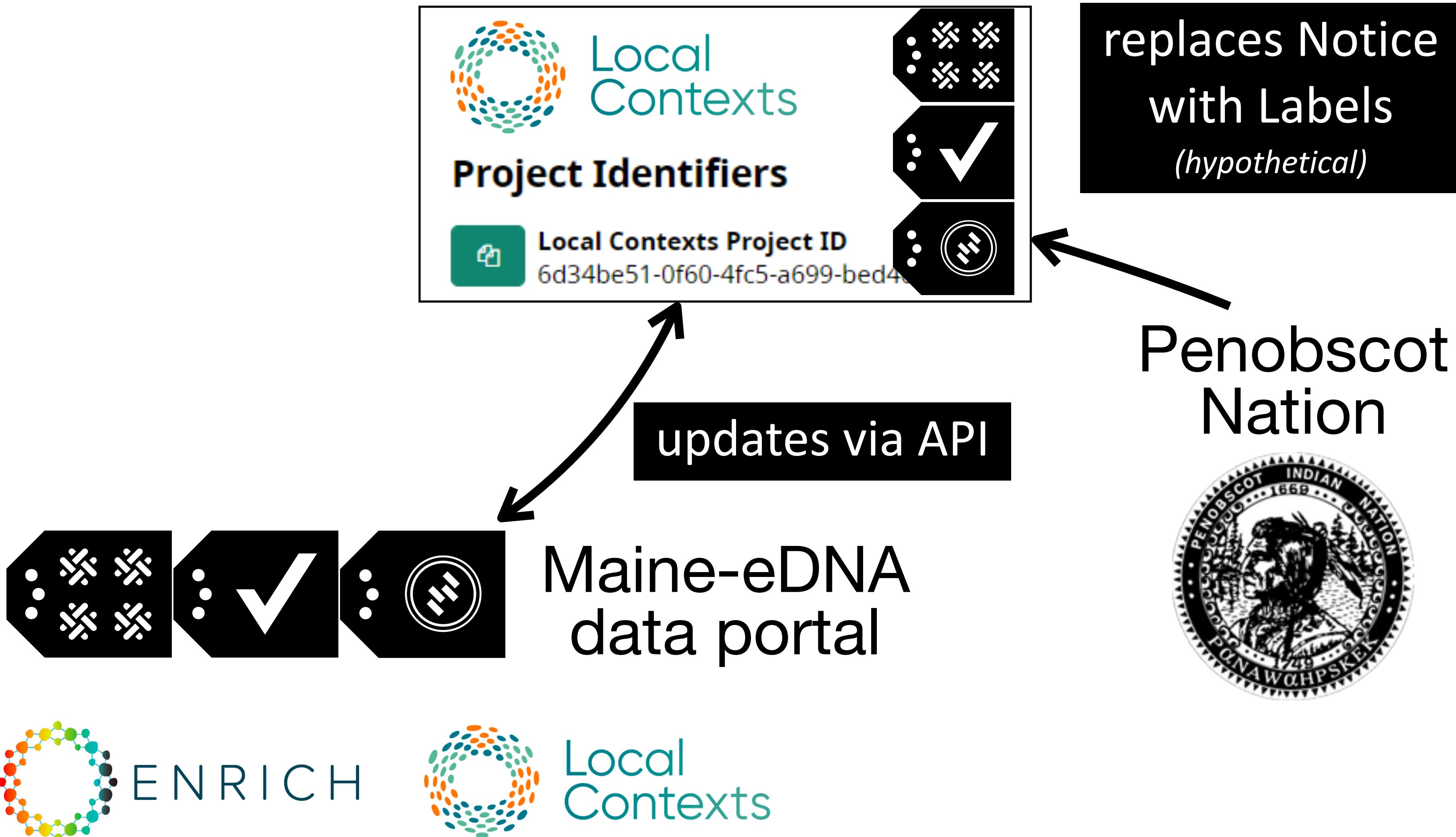


Local  
Contexts

# Biodiversity data with CARE

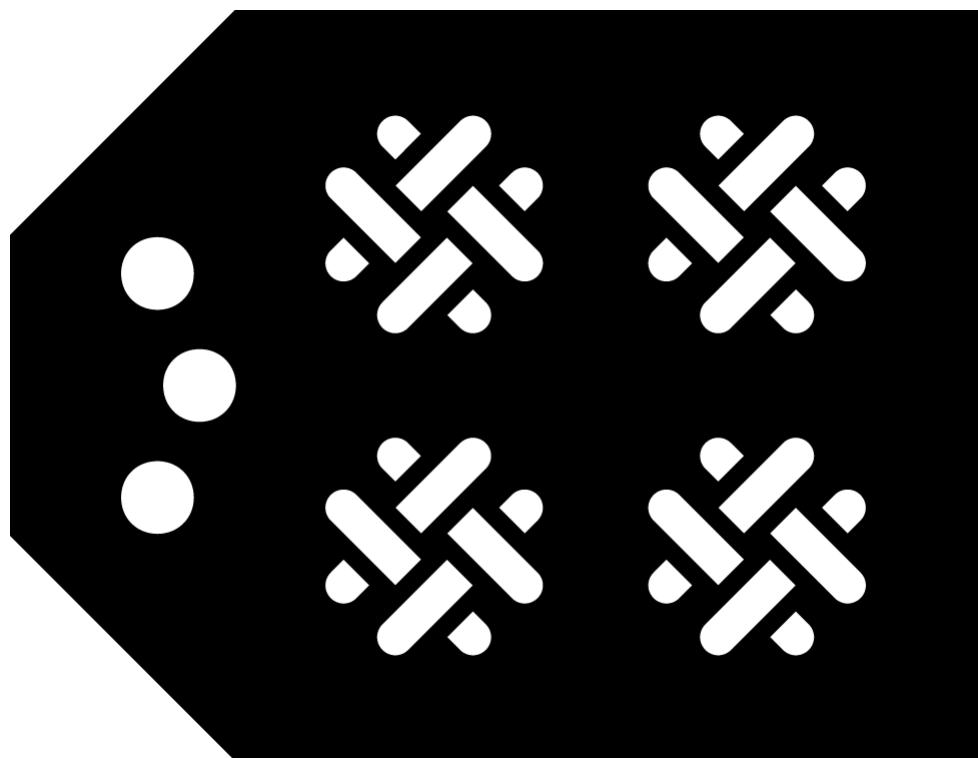


# Biodiversity data with CARE



# Indigenous data labels

*Provenance*



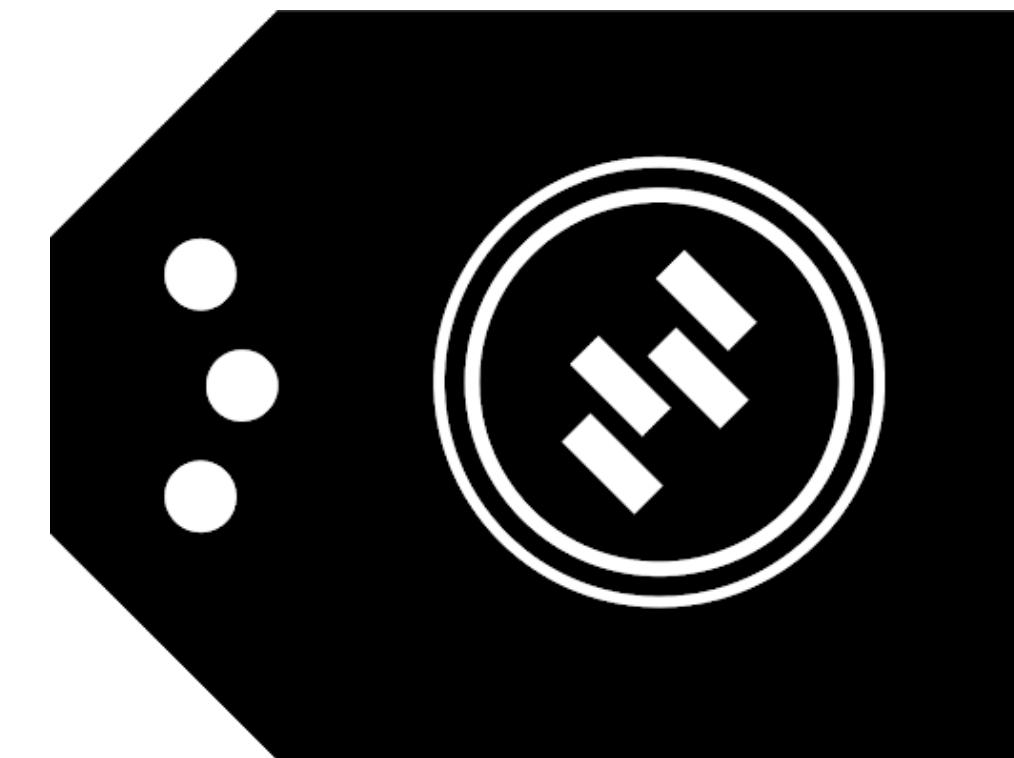
BC Multiple  
Communities

*Permission*



BC Consent  
Verified

*Protocol*



BC Research Use



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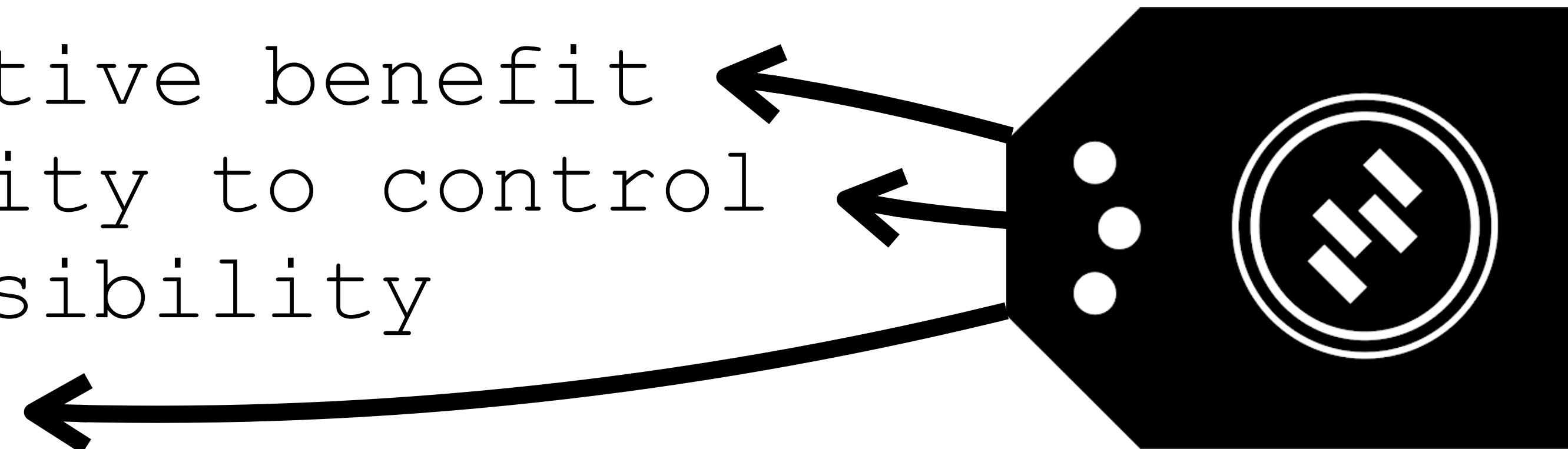
Local  
Contexts



**GIDA**  
Global Indigenous  
Data Alliance

# Indigenous data labels

**C**ollective benefit  
**A**uthority to control  
**R**esponsibility  
**E**thics



BC Research Use



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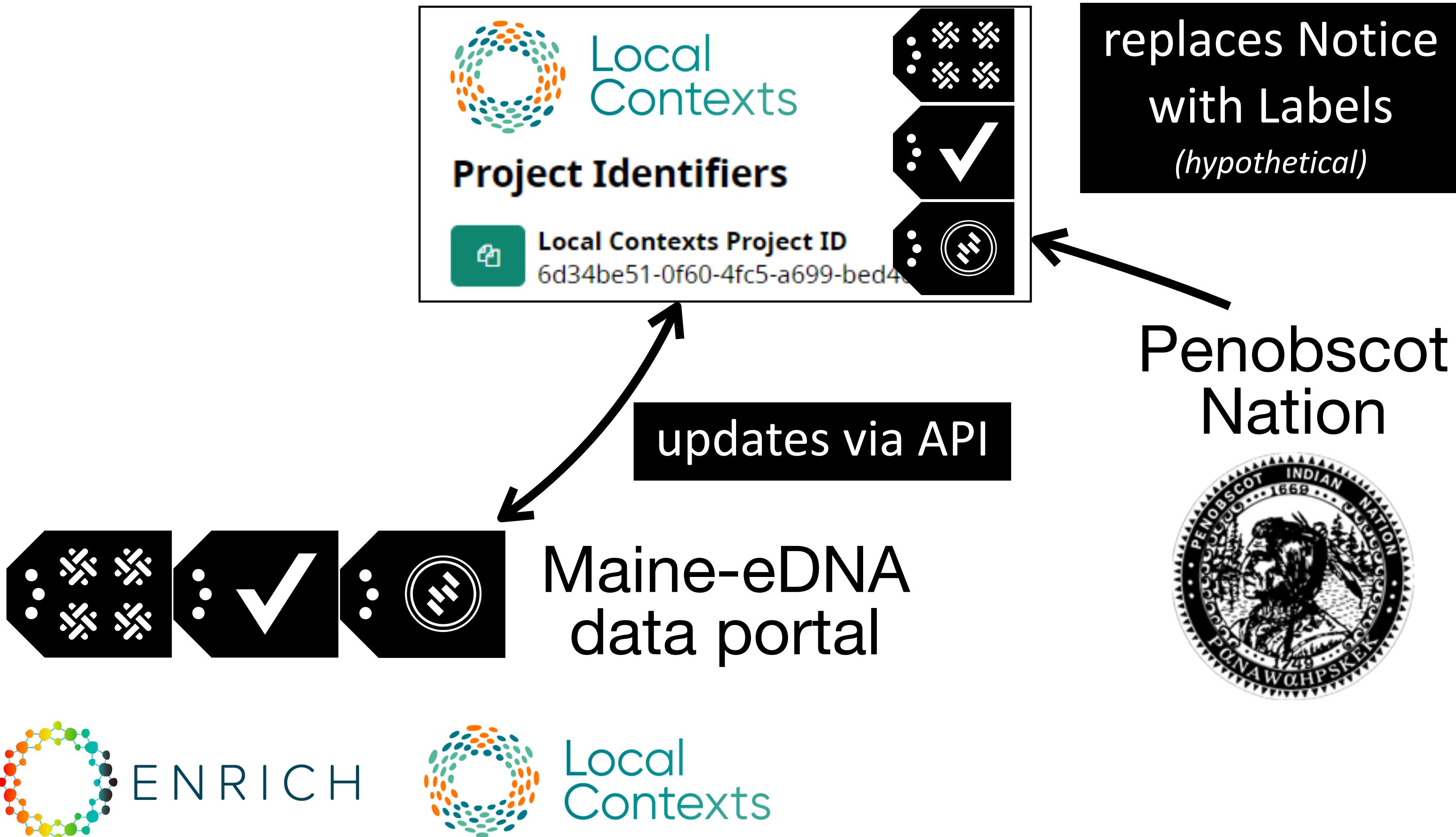


Local  
Contexts

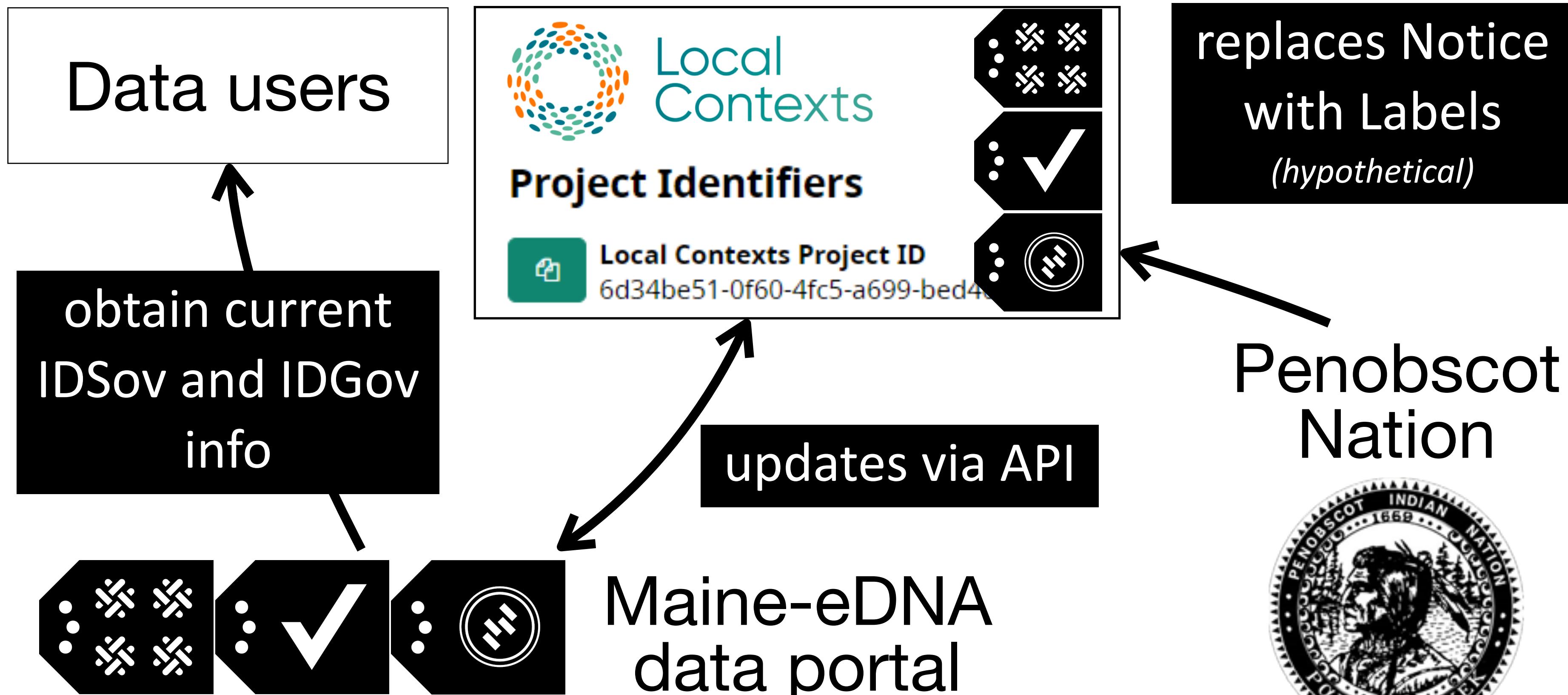


**GIDA**  
Global Indigenous  
Data Alliance

# Biodiversity data with CARE



# Biodiversity data with CARE



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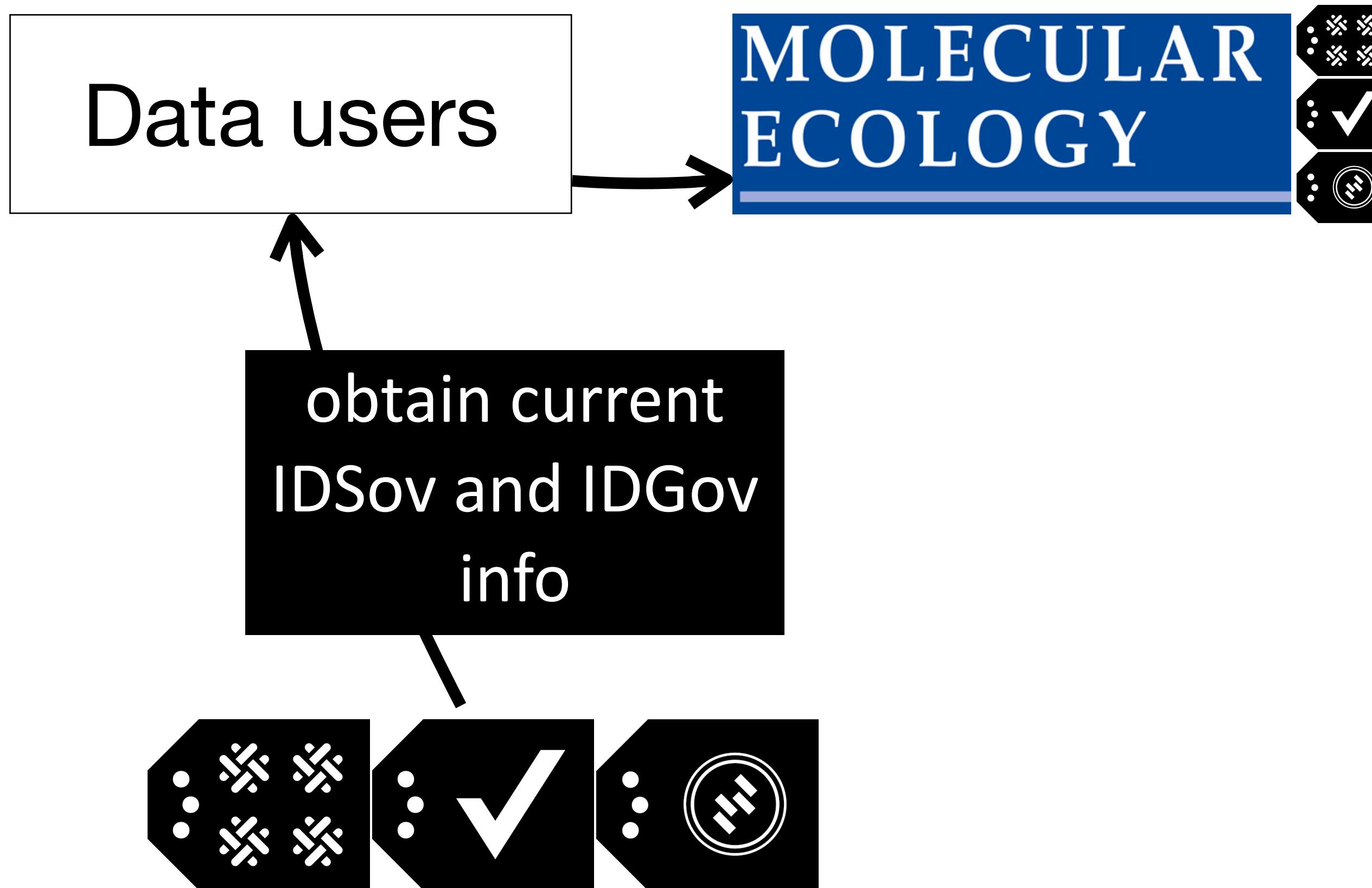


Local  
Contexts





# The road ahead



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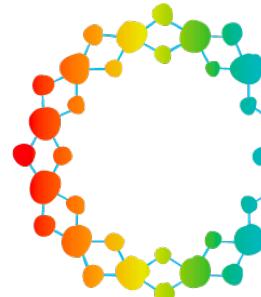
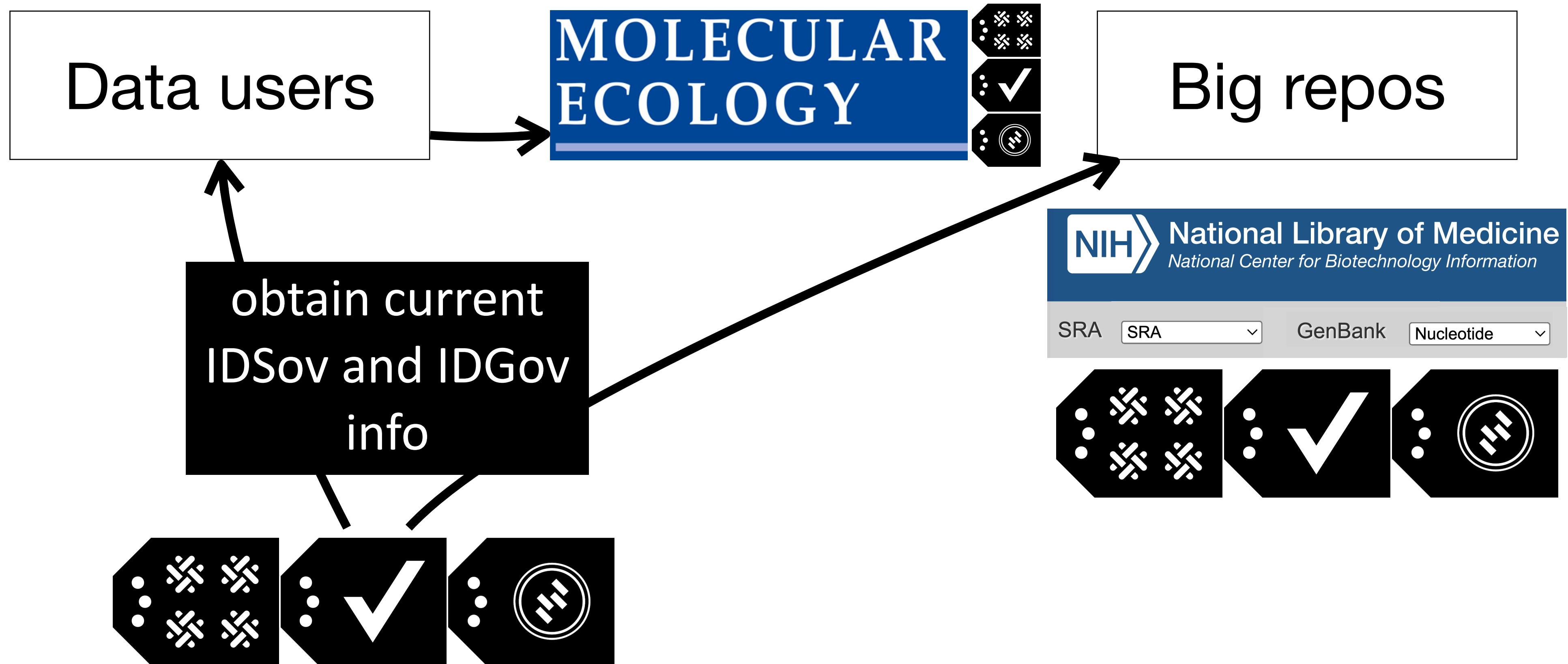
Local  
Contexts



GIDA  
Global Indigenous  
Data Alliance



# The road ahead



ENRICH



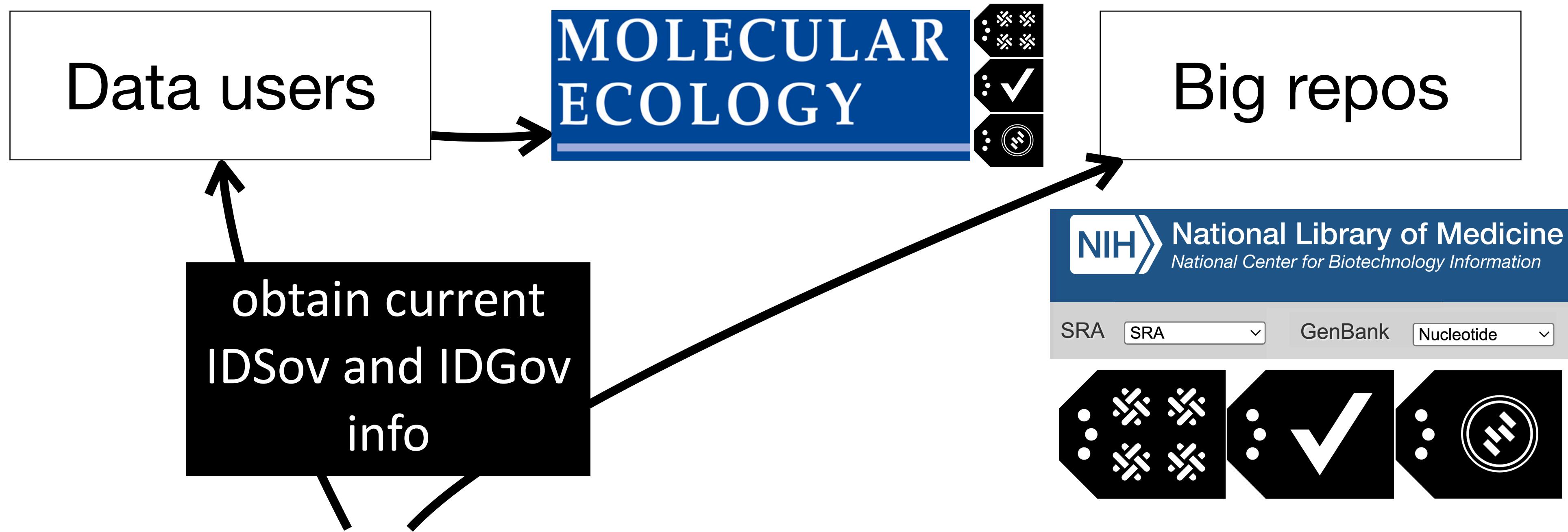
Local  
Contexts



GIDA  
Global Indigenous  
Data Alliance



# The road ahead



*Technical Implementation  
Working Group*



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Local  
Contexts

*Repositories  
Consortium*



GIDA  
Global Indigenous Data Alliance

# Insights from the process



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Local  
Contexts



GIDA  
Global Indigenous  
Data Alliance

Maui Hudson

Jane Anderson

Janette Hamilton-Pearce

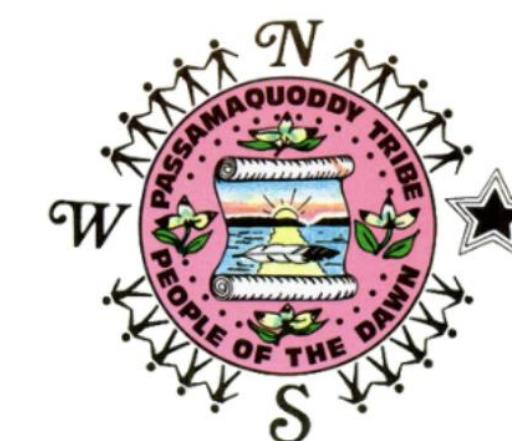
Corrie Roe

Felicia Garcia

Stephanie Russo Carroll

Riley Taitingfong

Andrew Martinez



Kendyl Reis

Chris Sockalexis

Isaac St. John

Donald Soctomah

Maine-eDNA

Darren Ranco

Beth Davis

Jen Smith-Mayo

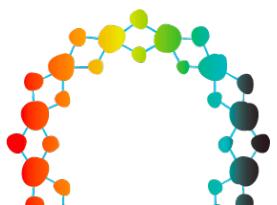
Kay Hernandez

Melissa Kimble

Andy Rominger

*it takes a  
collaborative  
team*

# Insights from the process



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Local  
Contexts



GIDA  
Global Indigenous Data Alliance

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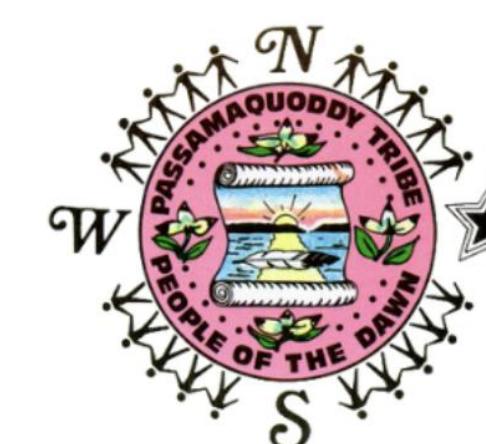
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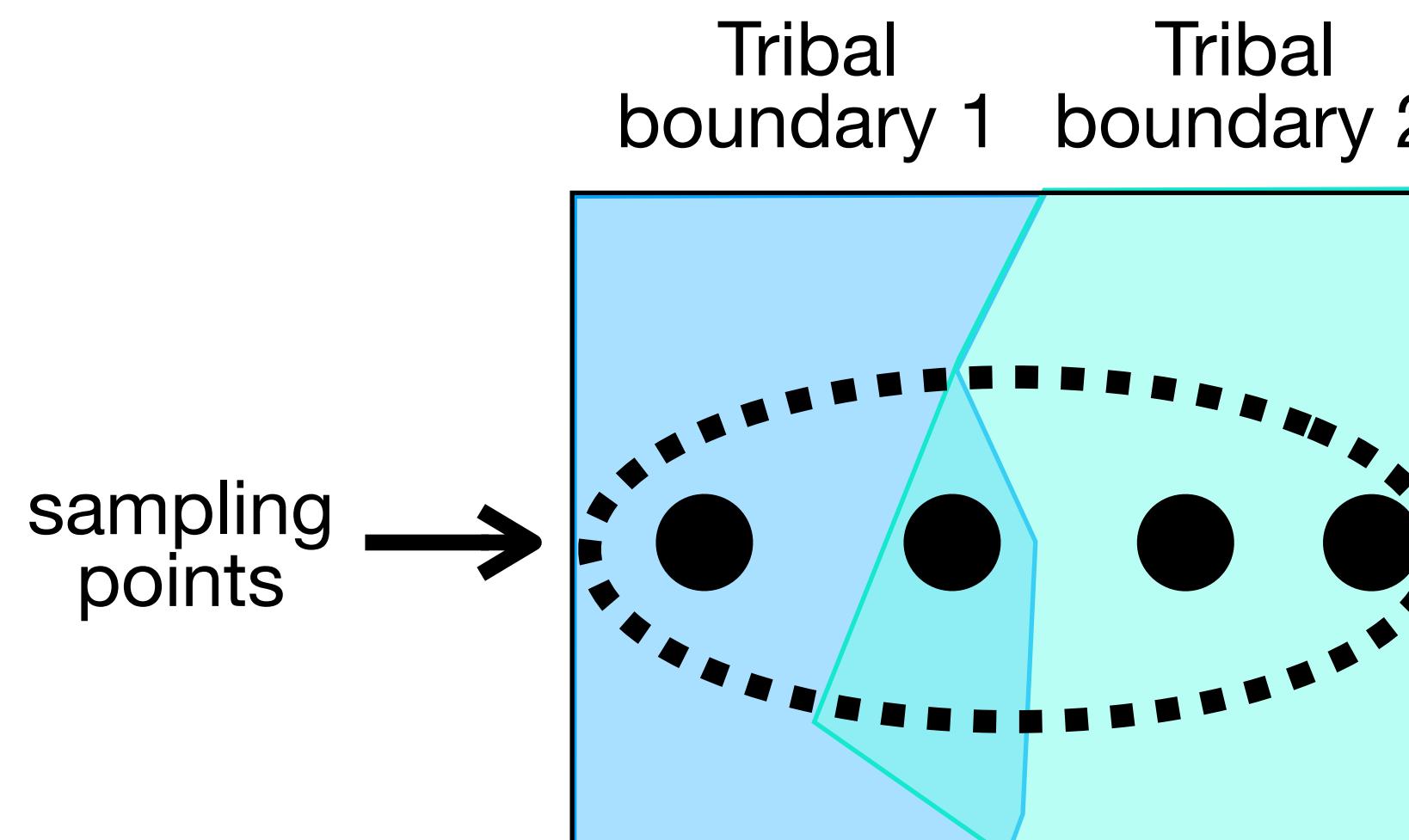
Melissa Kimble

Andy Rominger

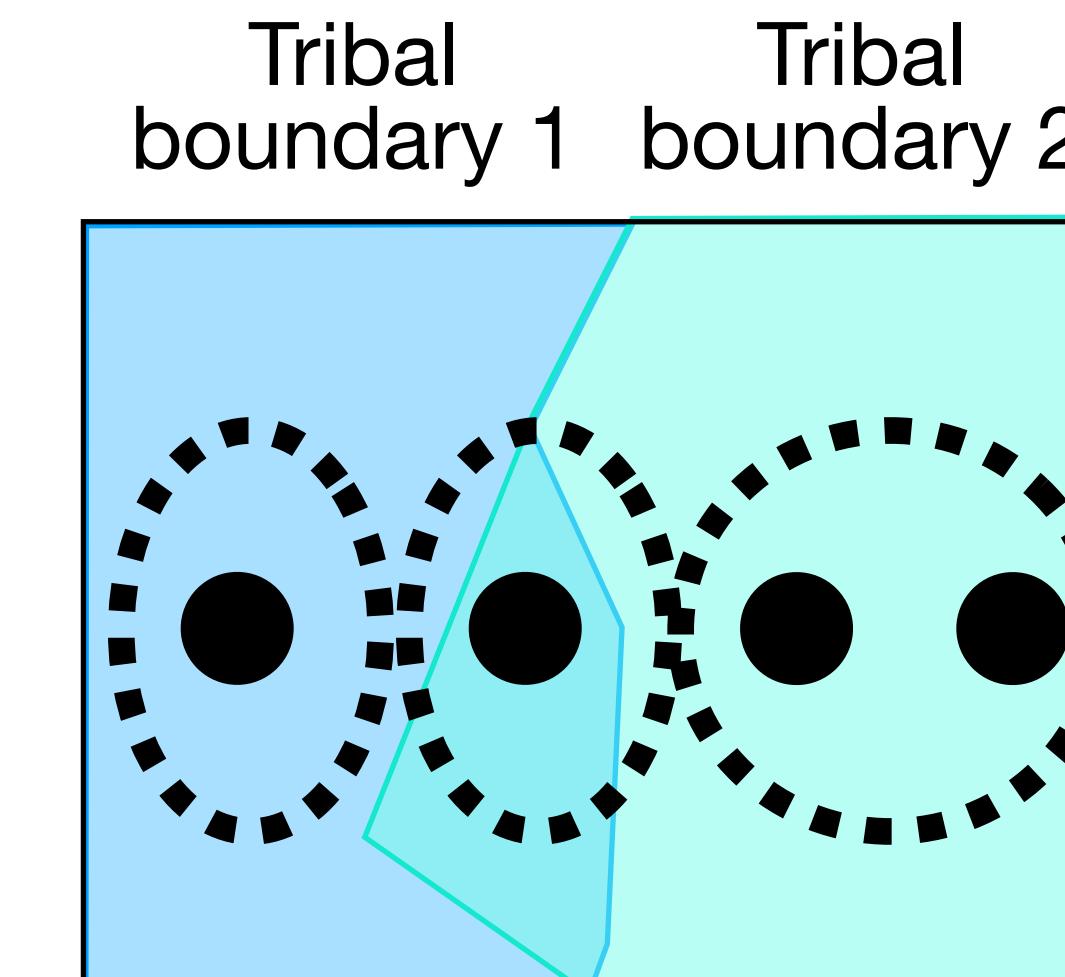
*direct  
dialogue with  
Tribes is key*

# Building relationships *with Tribes*

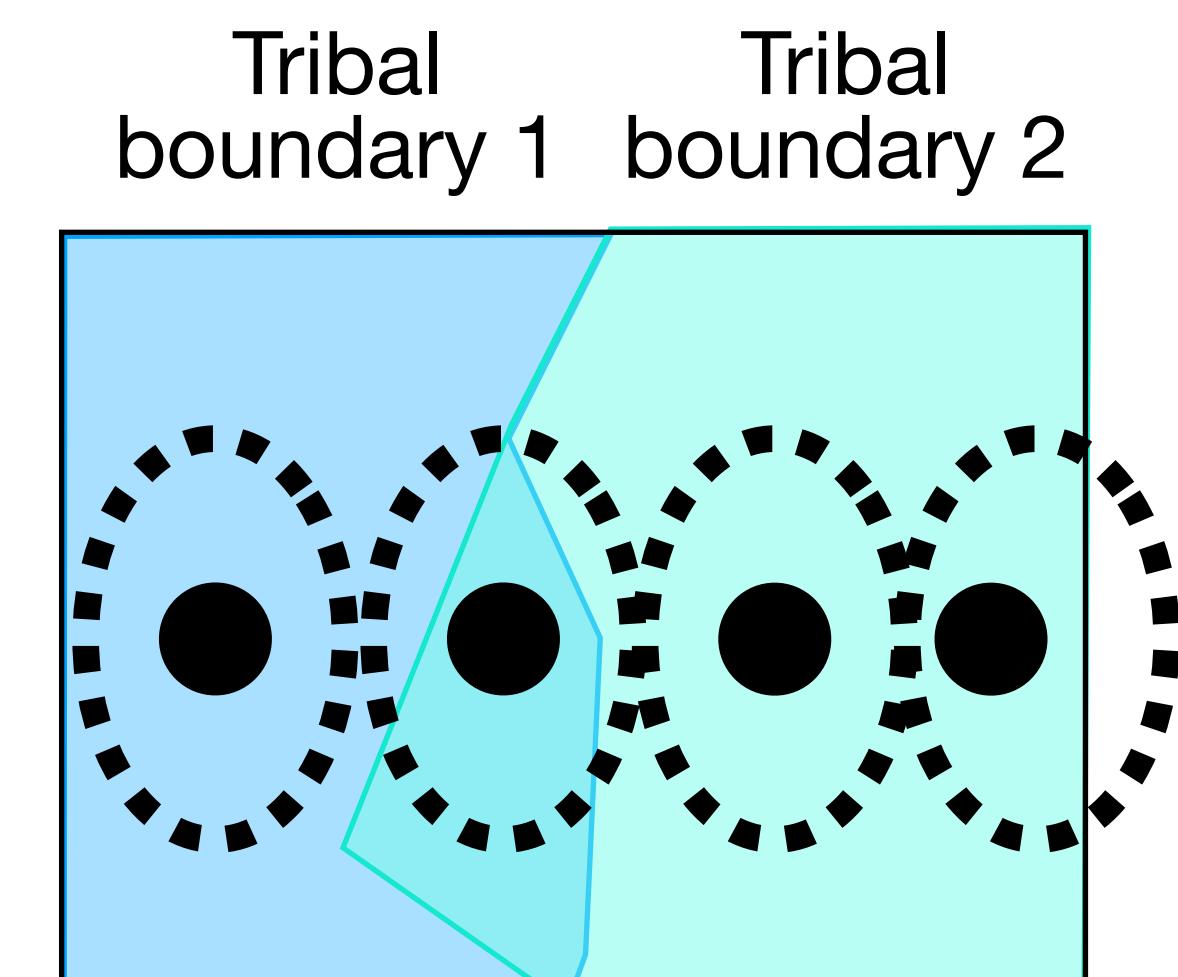
how should we communicate about your data?



one project  
for all?



a project for  
each combo?



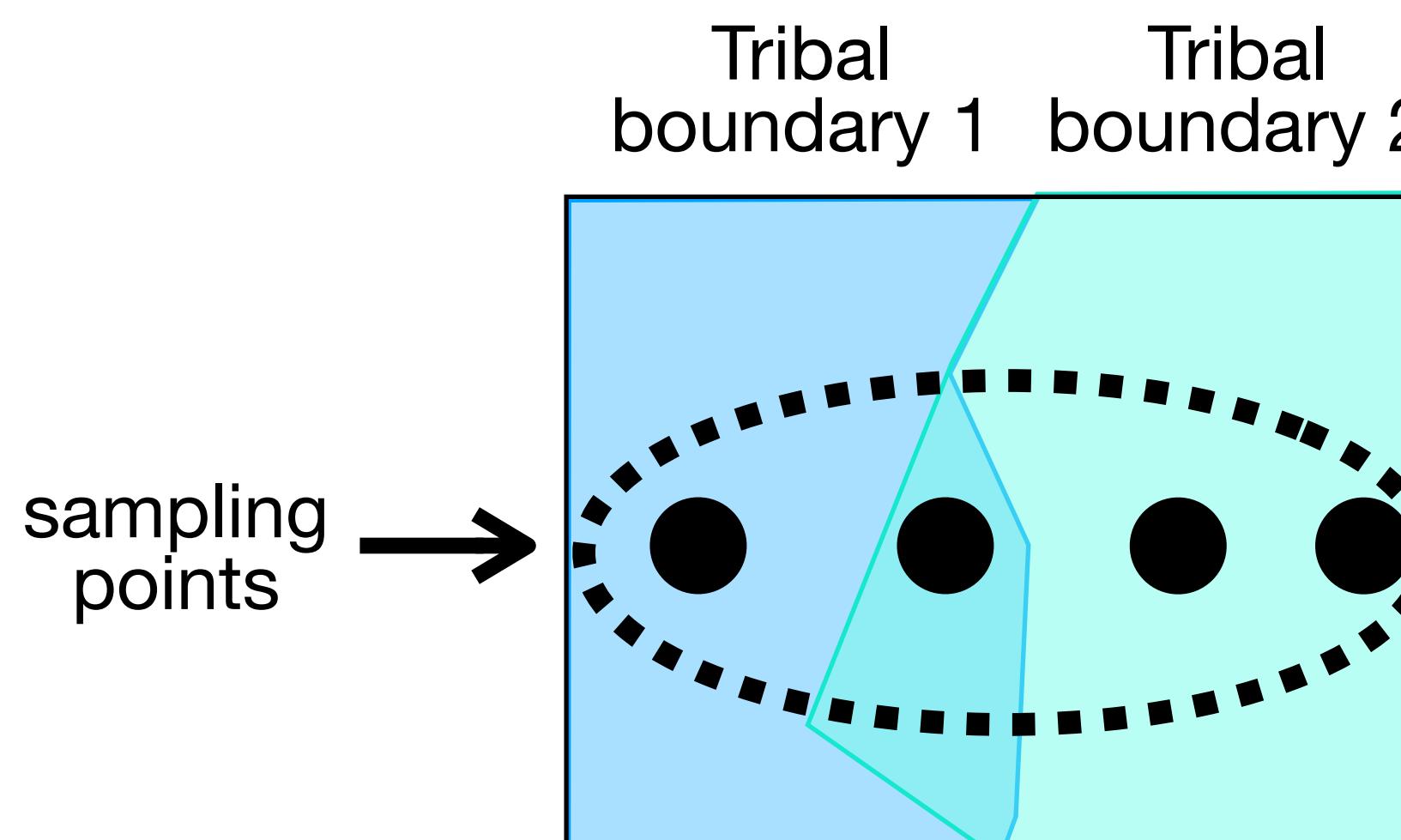
a project for  
each point?

# Building relationships *with Tribes*

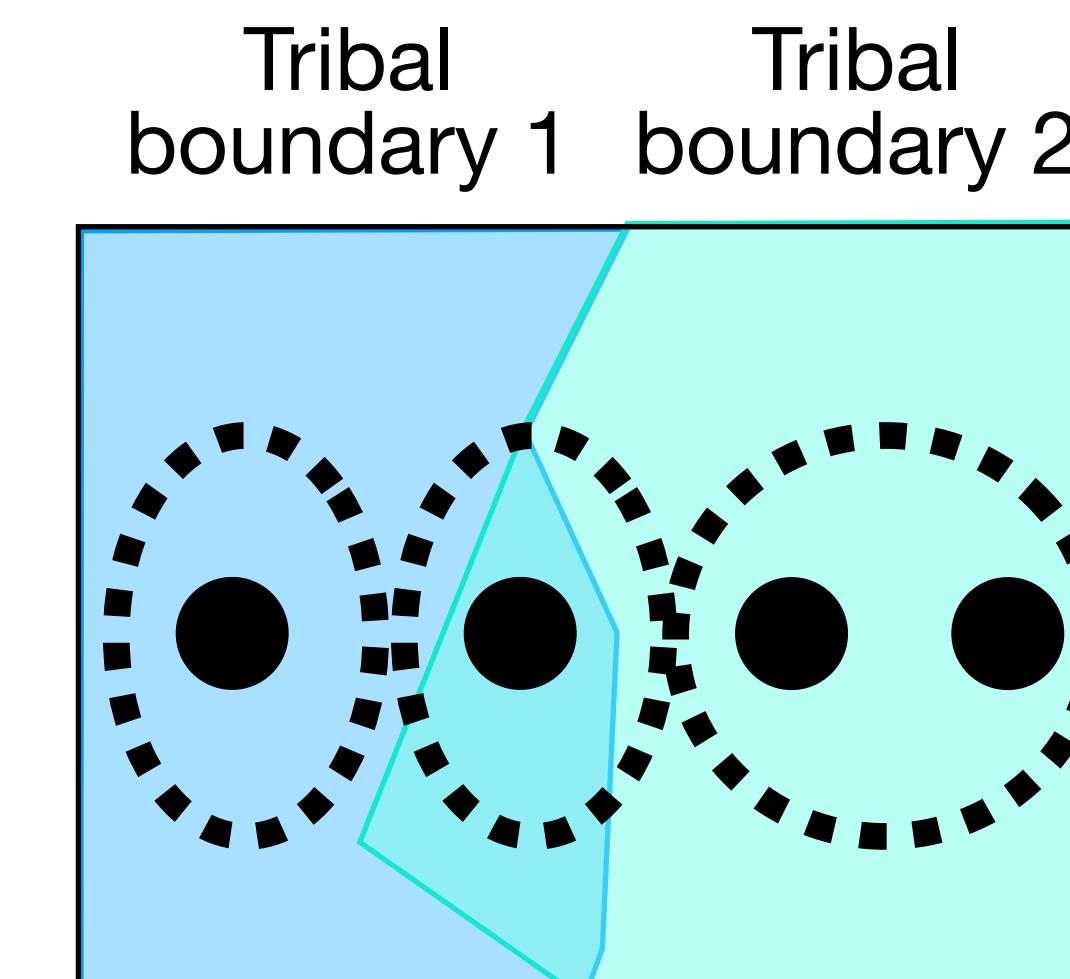


Native Land Digital

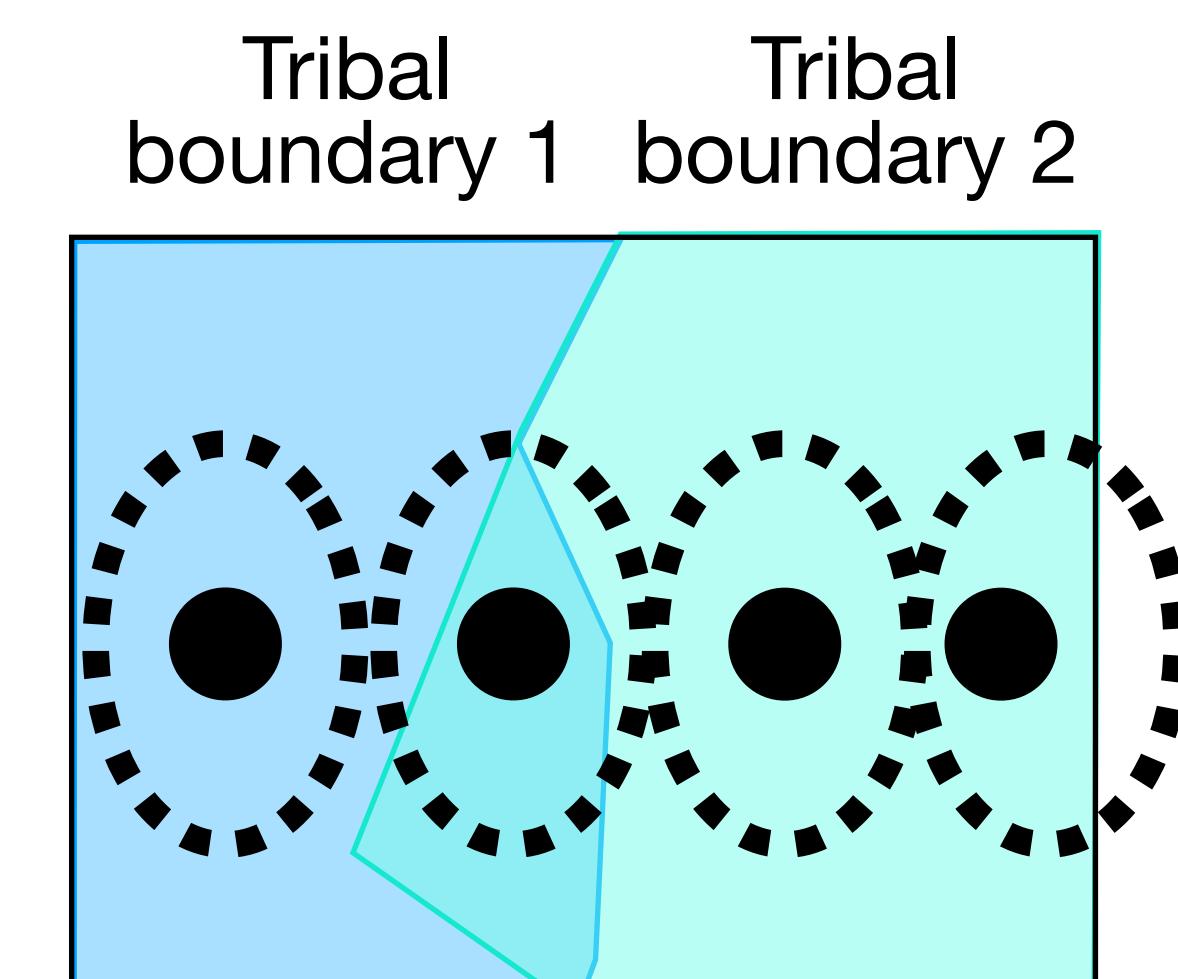
how should we communicate about your data?



one project  
for all?



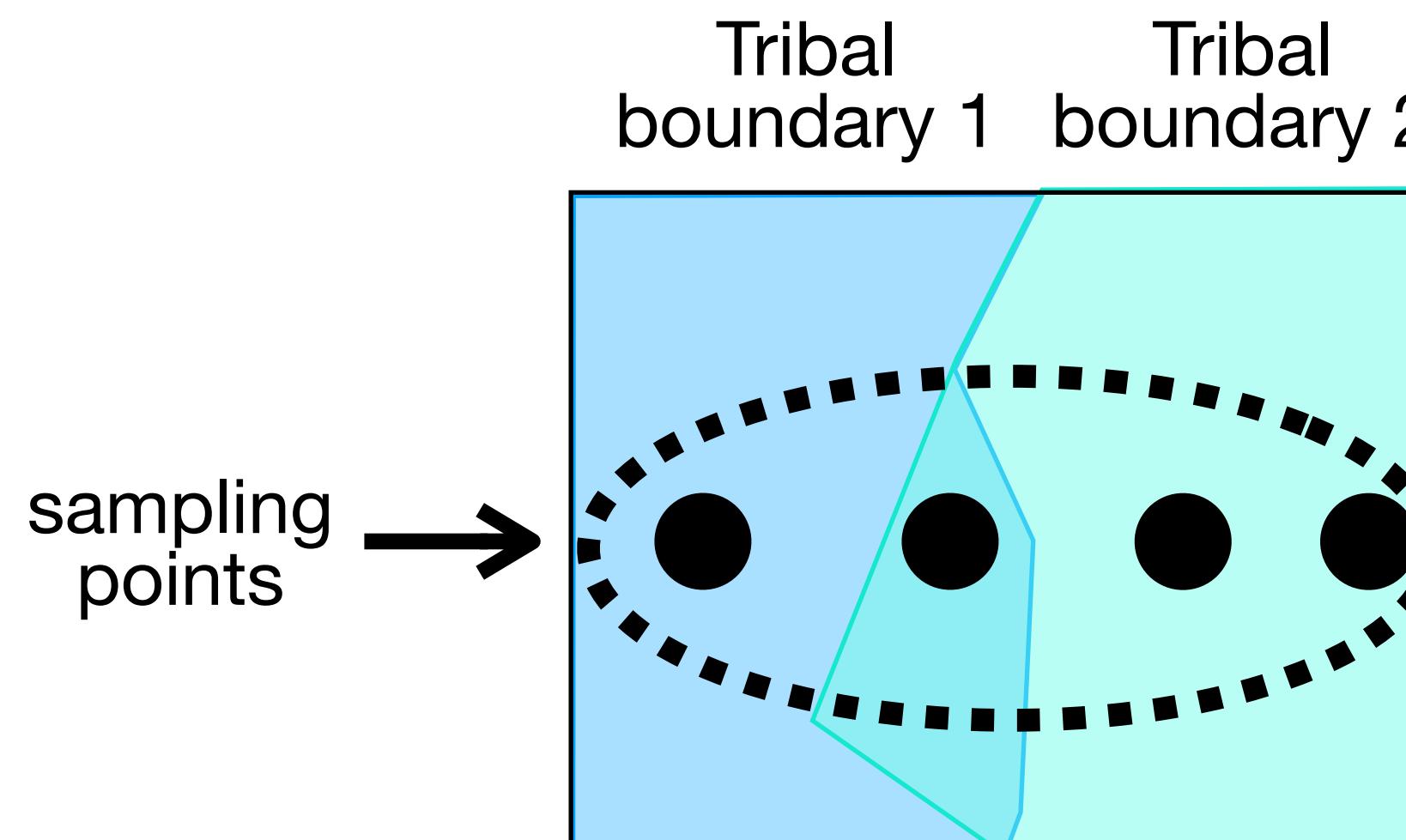
a project for  
each combo?



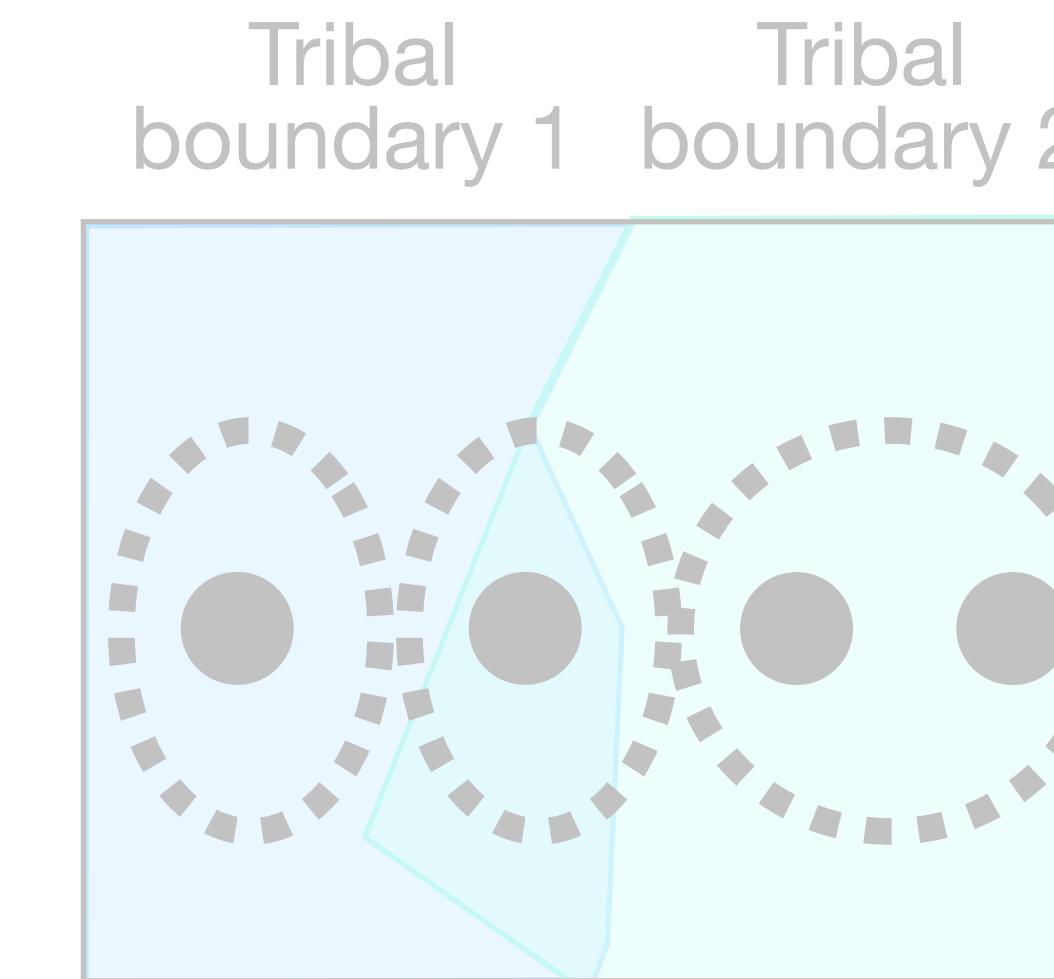
a project for  
each point?

# Building relationships *with Tribes*

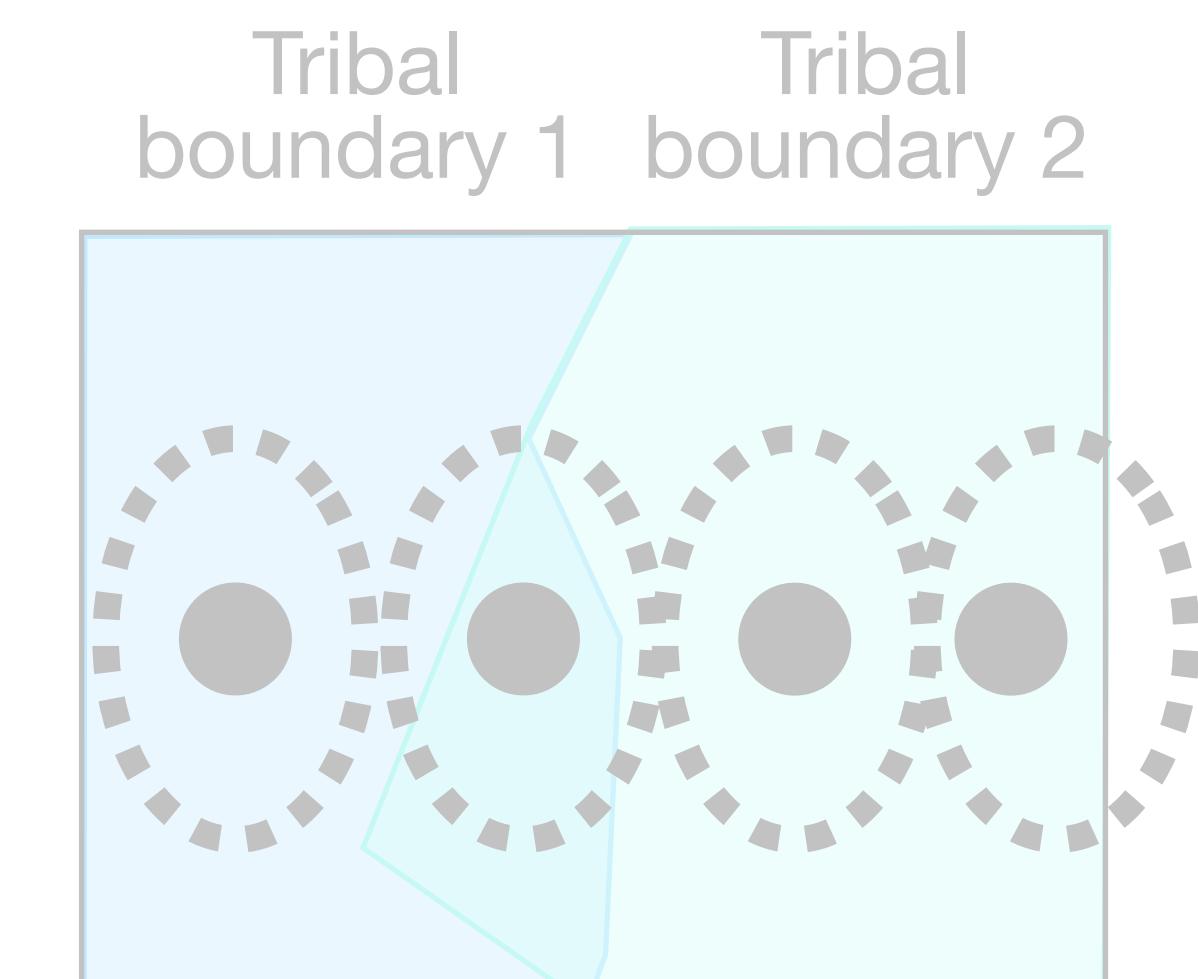
how should we communicate about your data?



one project  
for all?



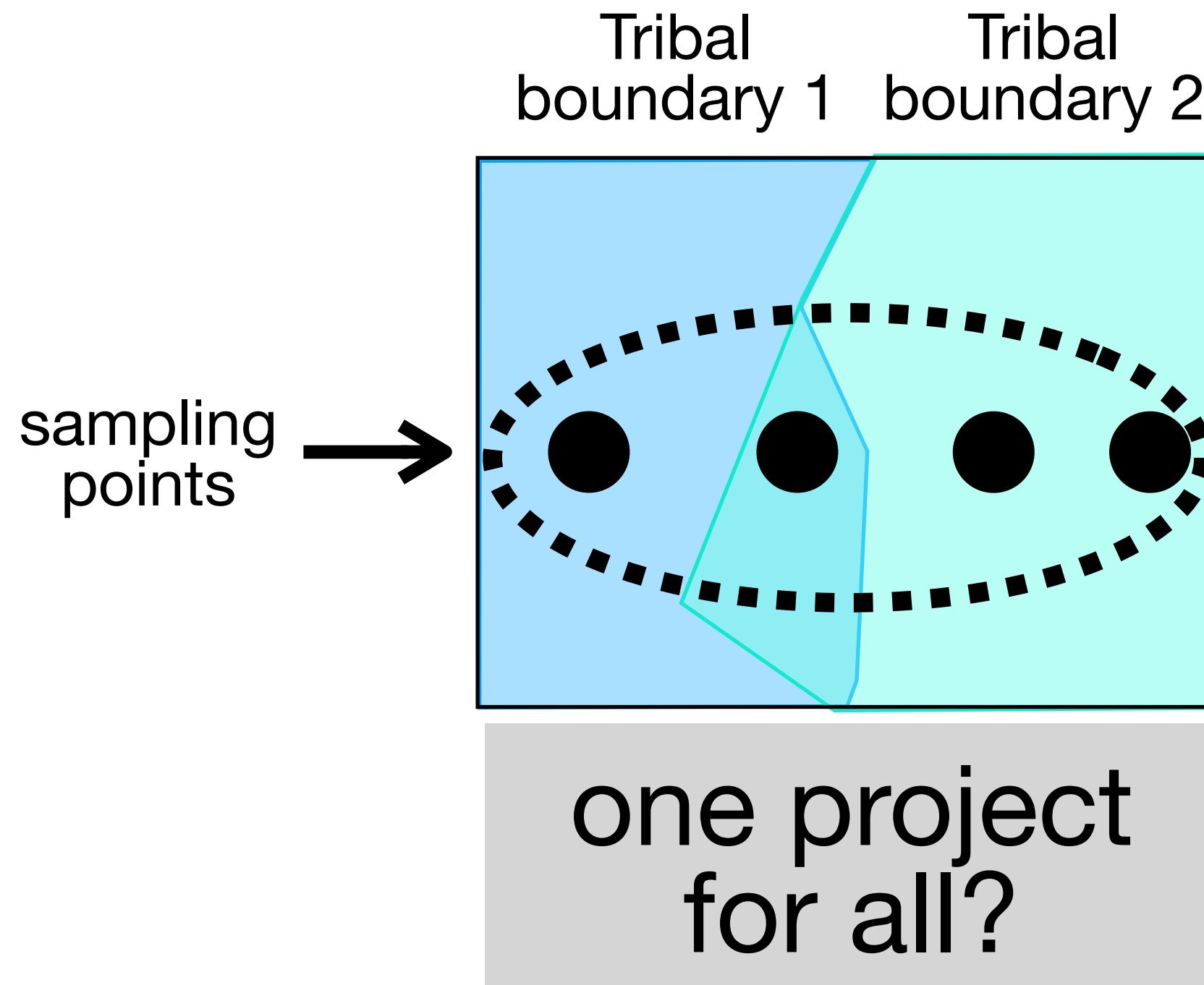
a project for  
each combo?



a project for  
each point?

# Building relationships *with Tribes*

how should we communicate about your data?



*timing is bioculturally  
relevant and should be  
communicated*

# Insights from the process



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Local  
Contexts



GIDA  
Global Indigenous  
Data Alliance

Maui Hudson

Jane Anderson

Janette Hamilton-Pearce

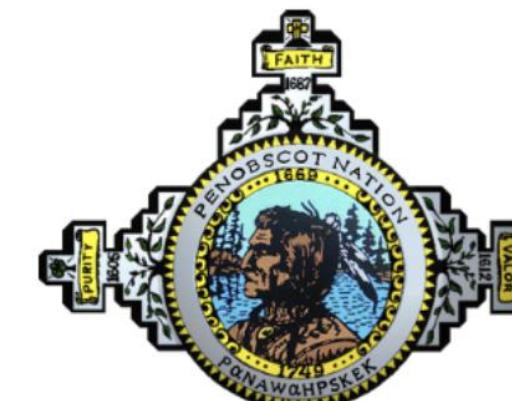
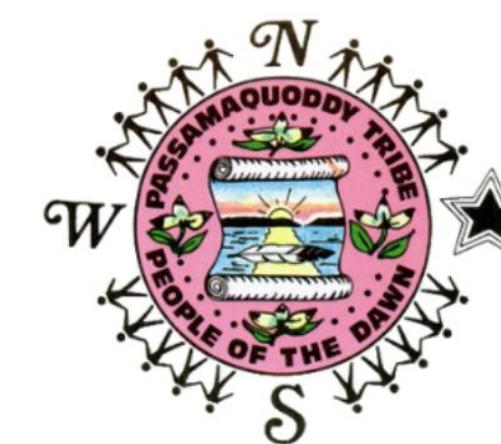
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Melissa Kimble

Andy Rominger

*settlers learn  
to listen and  
follow*

# Insights from the process



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Local  
Contexts



GIDA  
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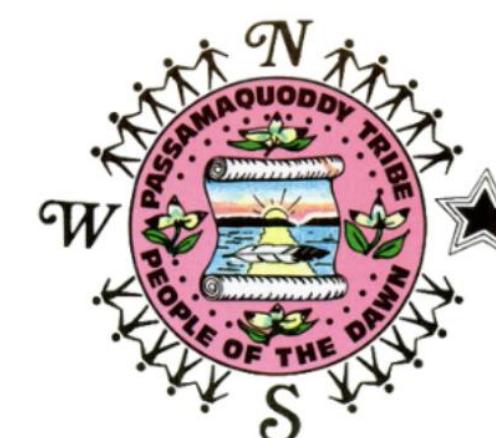
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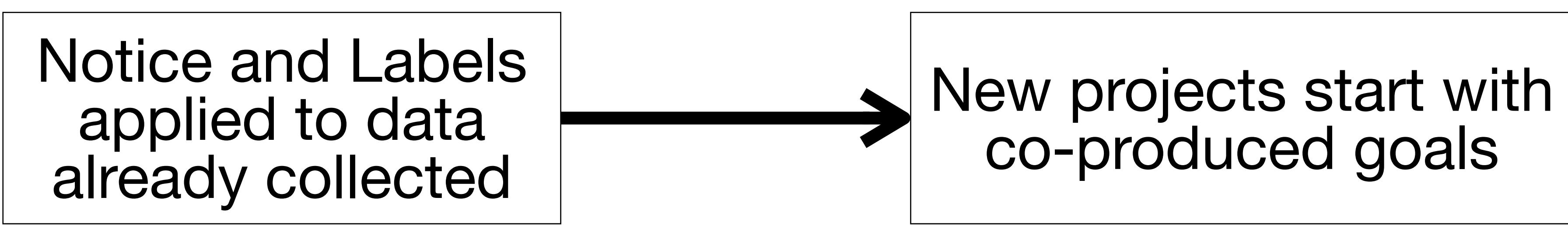
Melissa Kimble

Andy Rominger

*grant funds  
should go to  
tribal nations*

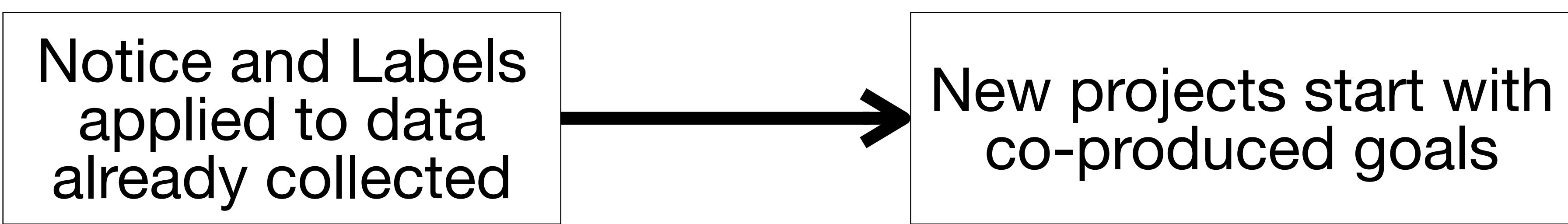
# Insights from the process

*moving from  
retroactive permission to co-production*



# Insights from the process

*moving from  
retroactive permission to co-production*



Penobscot Nation



Darren Ranco



Beth Davis

using eDNA to quantify river health

# Insights from the process

*moving from  
retroactive permission to co-production*

Notice and Labels  
applied to data  
already collected



New projects start with  
co-produced goals

*it takes time*



Penobscot Nation



Darren Ranco



Beth Davis

using eDNA to quantify river health