

**MANAGING  
MJD DATA  
ACCESS  
LEVELS AND  
FEES - WHAT  
ARE THE  
ISSUES AND  
HOW DO WE  
FIX THEM?**



**NatureServe**  
A Network Connecting Science With Conservation

# Data Access Levels and Fees

- Why are these so important to track?
- How are we tracking them now?
- What are the different access levels and fee rates around the network?
- What are the major issues with how data access and fees are currently managed?
- How do we fix these problems?

# Data Access Levels and Fees

*Why is this information so important to track?*

- Allows NatureServe to calculate estimates efficiently.
- Helps ensure consistency in cost and access levels across spectrum of clients.
- Reduces amount of unnecessary communication.
- Increased efficiency = increased capacity.

# Data Access Levels and Fees

*How is this information currently tracked and managed?*

- Formal Data Sharing Agreements
- Access Database (“DSA Tracker”).
- Institutional Knowledge

# Data Sharing Agreements

**DATA SHARING AND COOPERATIVE AGREEMENT DSA2004KY**  
between  
**KENTUCKY STATE NATURE PRESERVES COMMISSION**  
and  
**NATURESERVE**

## **I. STATEMENT OF JOINT OBJECTIVES**

A. Purpose. This is a Cooperative Agreement ("Agreement") between the Kentucky State Nature Preserves Commission (KSNPC) and NatureServe, a non-profit corporation organized under the laws of the District of Columbia, in the United States of America, for the purpose of defining the relationship and responsibilities between the KSNPC and NatureServe; defining the terms of use of data shared between the KSNPC and NatureServe; and facilitating the transfer of funds and services, as available, between the KSNPC and NatureServe on projects that promote the interests and missions of both the parties.

This Agreement replaces the Data Use Agreement signed among the KSNPC, the Association for Biodiversity Information, and The Nature Conservancy on June 22, 2000, but in no way negates or modifies any other current agreements between the KSNPC and NatureServe, or between the KSNPC and any other party.

### **B. Benefits.**

By defining the roles and responsibilities of each party to this Agreement, and by defining the terms each party will use in order to collaborate on projects, this Agreement supports NatureServe and the KSNPC's unique way of contributing to the conservation of the world's biological diversity, through: 1) the development and use of biological data standards, methodologies, and tools, 2) the standardized collection of biological data, and 3) the provision and analysis of biological data at local, national, and international scales.

An important aspect of the partnership between the KSNPC and NatureServe is the creation and use of the dataset resulting when data developed by NatureServe, and data developed by each Member Program, are compiled (hereafter referred to as the Multi-jurisdictional Dataset or MJD). Under this Agreement, NatureServe and all the Member Programs that sign a data sharing agreement with NatureServe shall be the joint custodians of the MJD, and hold joint copyright to the MJD. The benefits of creating the MJD are to:

- provide easier access to high quality, standardized data that support conservation and development planning, protection, and long-term monitoring of biological resources in the U.S., Canada, and Latin America;
- facilitate the development of multi-jurisdictional data products to promote the use of biodiversity information by clients working across jurisdictional borders;
- provide Member Programs and NatureServe with easier access to a more complete data set that will facilitate field work, conservation planning, ranking, data harmonization, product development, and other internal uses;
- gain recognition and establish the leadership position of the Member Programs and NatureServe as one of the foremost sources of standardized biological conservation information in the U.S., Canada, and Latin America;
- increase resources for the development and improvement of the data managed by the KSNPC and NatureServe; and
- attract collaborators who can 'share' data and/or methodologies, or use data in reports,

- Most current agreements were signed @2001-2004
- In addition to general conditions of how data will be exchanged and used between NatureServe and individual programs, establishes data access levels for external clients and data access fees

# Data Sharing Agreements

## Attachment 1

- Matrix that establishes the “universe” of potential clients, and the finest level of species specific and species blind data that NatureServe can release without further permission.

### Attachment 1

#### Restricted Use Data<sup>1</sup>

All use of the table below. The completed table determines what scale of data, provided from the KSNPC, requires NatureServe to gain written permission from the KSNPC before providing it to a party external to this Agreement.  
 Note: All data at the scale of county (or equivalent), with limits (3-digit ZIP), hexagon (100 square miles), and ecoregion (Shelby Division/Cherokee Level III) are considered Unrestricted Use Data. Therefore, data scales designated in the chart below should be more precise than Unrestricted Use Data.

Data Scale	Finest scale of data that can be distributed without permission:	
	Province (county or equivalent) or 1/4 sq. mile or Section (3 sq. miles) or Town Range (20 sq. miles) or USGS 7.5' Quad (36-39 sq. miles) or other scale	Write in appropriate scale below for each data user.
Data User	Name of Element Provided	Only Element Type <sup>2</sup> Provided
Example #1	1 sq. mile	1/4 sq. mile
Example #2	1/4 sq. mile	Province
Other NatureServe Member Programs	Quad	Quad
The Nature Conservancy	Quad	Quad
Other nonprofit org. (specify exceptions below)	Quad	Quad
U.S. and Canadian Federal Agencies - National Offices (specify exceptions below)	Quad	Quad
DOI - U.S. Forest Service	Quad	Quad
DOI - U.S. Fish & Wildlife Service	Quad	Quad
DOI - National Park Service	Quad	Quad
DOI - U.S. Geological Survey	Quad	Quad
Department of Defense	Quad	Quad
Bureau of Land Management	Quad	Quad
Environmental Protection Agency	Quad	Quad
Others	Quad	Quad
U.S. and Canadian Federal Agencies - Regional offices (specify exceptions below)	Quad	Quad
Private for-profit organizations, including consultants (specify exceptions below)	Quad	Quad
Academic institutions, Professors or Students (specify exceptions below)	Quad	Quad

Sara Hines

KSNPC  
 authorized representative  
 (printed name)

*Sara Hines* 2/11/04  
 KSNPC  
 authorized representative  
 (signature)

<sup>1</sup> Note that the restrictions on data use are not tied to data licensing fees; information provided in Attachment 3 determines what scale of data requires a data license fee.

<sup>2</sup> Element Type = Vascular, Invertebrate, Vascular Plant, Non-vascular Plant, Natural Community

# Data Sharing Agreements

## Attachment 3 Data Use License Fee

### G. One Year Data Access Fee

Identify the 'scale of data' and the 'type of license' in order to determine the appropriate base fee. Add the base fee and total square mile rate using the total area of your jurisdiction. Then adjust this subtotal using the factors listed below.

Scale of Data	Type of License	Base Fee - single dataset	Square Mile Rate
Quadrangle (7.5" USGS)		\$1,400	N/A
Precise (includes point and polygon data, as well as data fuzzed to a square mile)	Single Unit License (<11 people)	\$25,000	N/A
	Multiple Unit License (11-50)	\$25,000	N/A
	Unlimited License (>50 people) (refined for non-commercial use only)	\$25,000	N/A

Step	Factor	Fee Adjustment
1	Non-profit and Federal Agency Discount	Subtract 10%. With permission, fees may be waived for non-profit organizations.
2	Factor for Geographic or Element Scope	Pro-rata based on percentage of area or number of quadrangles.*
3	Data access for 2 years (including a data refresh after one year)	Add 50% to year 1 total to get year 2 cost (reflects 50% saving in year 2).

\*For example, if a multi-state request were being delivered for a linear project such as a pipeline and the request included delivering data from 5 of a state's 20 counties the adjustment would be -75%. Delivering data from 10 quads out of 1000 quads in a state would be a -99% adjustment. A minimum cost per state is set at \$500.

Requests for site-specific element occurrence location data for narrowly defined project areas wholly within the state of Kentucky are processed by the Kentucky Natural Heritage program. Maps of the project area are required for this service, which is performed at the rate of \$45/hour, with a \$45 minimum for text or electronic files for standard two-week turnaround. Faster service at the hourly rates of \$67.50 for one-week, or \$90.00 for 48-hours is offered. Undefined project areas involving more than a few square miles will not have specific location data returned, but possibly quad level or other scale we determine is appropriate for initial project scoping.

The KSNPC hereby certifies that the above/attached are standard fees and/or rates that will be charged to all KSNPC clients that request similar products or services.

Sara Hines  
KSNPC  
authorized representative  
(printed name)

  
KSNPC  
authorized representative  
(signature)

## Attachment 3

- Establishes the fee rate for NatureServe providing access to precise data to a client under a 1-year Data License.

# Data Sharing Agreements

*How is this information managed?*

- Access Database – DSA Tracker

data\_sharing\_agreement

### Data Sharing Agreement - Data Entry Form

NATION:  Substation Code:  Substation Name:

Sign Date:  Contact:

Status:  Revision Notes:

Core:

#### Data Permission Guidelines:

User Type	Species Specific	Species Blind
Native/State Monitor Program	<input type="text" value="Grant"/>	<input type="text" value="Grant"/>
The Status Conservancy	<input type="text" value="Grant"/>	<input type="text" value="Grant"/>
Non-Governmental (non-profit)	<input type="text" value="Grant"/>	<input type="text" value="Grant"/>
Federal Agency - National	<input type="text" value="Grant"/>	<input type="text" value="Grant"/>
Federal Agency - Regional	<input type="text" value="Grant"/>	<input type="text" value="Grant"/>
Private (consulting fees)	<input type="text" value="Grant"/>	<input type="text" value="Grant"/>
Academics	<input type="text" value="Grant"/>	<input type="text" value="Grant"/>

#### Data Fee Guidelines:

User Type	Scale	Price	Quote
Government, Non-Profit	122,500 (10% discount), With permission fees may be waived for non-profit	\$1,260 (10% discount), With permission fees may be waived for non-profit	



sign_id#	sign_name	Status	sign_dt	cost_center	cost_amt_us	cost_amt_us	cost_amt_us	cost_amt_us
01	Alaska	Done	3/7/82		145,000	145,000	145,000	145,000
02	Alabama	Done	3/18/79		Private	Private	Private	Private
03	Arizona	Done	7/20/74		1.00.00	Private	1.00.00	Private
04	Arkansas	Done - Not Rec	6/26/79		Private (Government) agreed that if National	Grant	Grant	Grant
05	California	Done	9/18/79		Grant	Grant	Grant	Grant
06	Colorado	Done	3/18/79		Grant	1.00.00	Grant	1.00.00
07	Connecticut	Done	10/7/84		Nature reserve must get permission to provide data	49.00.00	49.00.00	49.00.00
08	District of Columbia	Unpaid for work						
09	Delaware	Done	2/24/2000		It is not in the agreement but Delaware does	1/8.00.00	1/8.00.00	1/8.00.00
10	Florida	Done	10/30/84		Private does not provide more than 20 records	Grant	Grant	Grant
11	Georgia	Done	9/1/78		1/8.00.00	1.00.00	1/8.00.00	1.00.00
12	Hawaii	Done	4/6/70		Grant	Grant	Private	Private
13	Idaho	Done	3/6/74		NOT: for species specific data, data not in	1/8.00.00	Private	1/8.00.00
14	Illinois	Done	6/18/79		For species blind data, data identifying info	1/8.00.00	Private	Grant
15	Indiana	Done	1/1/79		Section	Private	Section	Private
16	Iowa	Done	3/22/79		1.00.00	Private	1/8.00.00	Private
17	Kansas	Done	3/18/79		1.00.00	Private	1.00.00	Private
18	Kentucky	Done	2/15/79		Grant	Grant	Grant	Grant
19	Louisiana	Done	3/15/74		US provided a list of "confidential" data	Other Specify	Other Specify	Other Specify
20	Maine	Done - email on						
21	Maryland	Done	9/30/74		1/8.00.00	Private	1/8.00.00	Private
22	Massachusetts	Done	10/11/73		Other Specify	Other Specify	Other Specify	Other Specify
23	Michigan	Done - email on						
24	Minnesota	Done	9/11/79		Release provided 20 data to other north	Private	Private	Grant
25	Mississippi	Done	9/15/74		Section	Section	Private	Private
26	Missouri	Done	3/28/74		Private	Private	Private	Private
27	Montana	Done	9/22/74		Private	Private	Private	Private
28	Nebraska	Done	9/29/79		Private data can be released unless it is in	Private	Private	Private
29	Nevada	Done	6/18/79		Private	Private	Private	Private
30	New Hampshire	Done	10/23/74		See change	See change	See change	See change
31	New Jersey	Unpaid for work						
32	New Mexico	Done	6/18/74		data cannot be released by other search	Grant	Grant	Grant
33	New York	Done	1/12/74		Private	Private	Grant	1.00.00
34	North Carolina	Done	1/21/79		Private	Private	Section	Section
35	North Dakota	Done	6/18/79		Private	Private	Private	Private
36	Ohio	Done	3/18/74		Private	Private	Private	Private
37	Oklahoma	Done	6/18/79		1.00.00	1/8.00.00	1.00.00	1/8.00.00
38	Oregon	Done	6/22/79		Private	Private	Private	Private
39	Pennsylvania	Done - email on						

# Data Access Levels

*What levels of data access do programs grant across the network?*

	Federal (Natl Office)	NGO/Non-Profits	Private Sector
Precise	13	7	3
Between Precise and Quad	17	22	18
Quad	18	17	21
Between Quad and Cty/HUC8	2	2	2
County/HUC8	6	6	6
Unavail (no DSA)	10	12	16

# Data Access Fee Rates

*What fees for data access do programs charge across the network?*

<b>Amount (Federal)</b>	<b>No. of Programs</b>
\$0	7
\$500 or less	17
\$500 to \$3,000	7
\$3,000 to \$5,000	2
\$5,000 to \$10,000	5
\$10,000 to \$20,000	3
$\geq$ \$20,000	5
case by case	15
unavail	3

# Data Access Fee Rates

*What types of fee rates are used across the network?*

- Most fit into 3 basic categories:
  - Flat fees (@ 22 programs)
  - Formula based fees (@ 13 programs)
  - Case-by-case basis (@ 15 programs)

# Data Access Fee Rates

## *Flat Fees*

- Example: \$600 for entire state (California)
- Issue: How to pro-rate?
  - Does fee apply regardless of size of dataset or should it be adjusted? Easy to apply if this is clear, but usually it is not...

# Data Access Fee Rates

## *Fee Formulas*

- Typically Geographic or Per-record based.
- Example (Geo): \$25/quad; \$10K Max (Louisiana)
- Example (Per-record): \$0.50/record; \$65 Min., \$6,000 Max (Oregon)
- Example (Both): \$120 plus \$35/county or \$25/taxa, whichever is cheaper (Minnesota)
- Generally best method from MJD perspective b/c unambiguous and automatically pro-rated.

# Data Access Fee Rates

## *Case-by-Case Fees*

- NatureServe specifically asked to contact program on project-by-project basis, or specified fee range is too vague to calculate without contacting program.
- Issues:
  - Need to contact programs every time even to do estimates.
  - Have to be careful about consistency across similar clients over time.

# MJD Project Estimates

*Problems calculating estimates: some you can control, and some you **can't***

- Have to query/extract EO data to calculate fee rate.
  - For formula based rates, usually have to extract the data from the central database before an estimated fee can be determined.

# MJD Project Estimates

*Problems calculating estimates: some you  
**can** control*

- Unclear how/if to pro-rate subsets of data.
  - Example 1: Program fee = \$1,000. Client only wants data for plants. Should fee be adjusted by the percentage of total records or percentage of geographic area, or is fee \$1,000 regardless of how much data is provided?
  - Example 2: Program fee = \$25/quad. Client submits a project area they want data for. Is fee based on total number of quads the project area hits, or total number of quads that contain EO records they'll be getting.

# MJD Project Estimates

*Problems calculating estimates: some you  
**can** control*

- Not always clear from DSA's how data access fees should be applied at different scales or at what specific scale they no longer apply.

Scale of Data Requested	Program Fee from DSA
Precise Locations	\$15,000
5 sq. mi. grid	???
Quarter-quad	???
Quad	\$1,000
12-digit HUC	???
10-digit HUC	???
County/8-digit HUC	Free

# MJD Project Estimates

## *Problems calculating estimates: some you **can** control*

- Not clear from DSA's if specific access levels for a particular client can be interpreted to equate to different but equivalent spatial breakouts.
- Example: KY allows NatureServe to release quad level data to USFS without special permission. USFS submits a request for 12 digit HUCs that includes KY. Since most 12 digit HUCs are about the same size as quadrangles, is it ok to release this information as well?

# MJD Project Estimates

*Problems calculating estimates: some you  
**can** control*

- DSA's do not address Source Features very well.
  - Agreements do outline that they will be provided in data exchange and they are addressed in general guidelines of how spatial data can be used.
  - Are not specifically addressed in the fee rate tables at all.
  - Example: If a program charges \$0.50/EO, and someone asks for Source Features, would it be \$0.50 for every EO that is represented by each Source Feature?

# MJD Project Estimates

*Under the current system, few requests come in that we don't still have to contact many programs to be able to calculate an accurate estimate.*



# MJD Project Estimates

## Worst-Case Example:

### **A. Client wants precise EO data for 75 species for the entire U.S.**

- NatureServe must taxonomically reconcile list
- All EOs must be extracted from central Geodatabase
- Fees must be calculated for each program that uses a formula
- For programs using flat rate, must be determined if fee should be pro-rated
- For programs with case-by-case rate, all must be contacted

### **B. Estimate is too high; client changes mind and wants data for the 75 species at the 10-digit HUC scale**

- Not clear how DSA rates apply to HUC10 scale for most programs; must go back and contact everybody.

### **C. Client declines request.**

- NatureServe has spent 40 hours that will not be recovered generating estimates.

# MJD Project Estimates

*What is one thing that we can control that would greatly ease the burden of generating data fee estimates?*

- Clearly documenting the full spectrum of data access levels for various clients and the fee rates that apply at those levels.

# Sharepoint Data Access Management System

## *Vision for Sharepoint Data Access Management System*

- On-line system where programs could set their data access levels and fee rates, and keep updated as needed.
- Would replace Attachments 1 and 3 of paper agreements as “official” policies.
- Programs could only edit their own information but would be able to view other programs access levels and fee rates.

# Sharepoint Data Access Management System

## Conceptual Mockup

What level of data do you permit NatureServe to release to USFS as unrestricted?

Level (choose 1)

- a. Precise
- b. 1 sq. mi.
- c. 5 sq. mi.
- d. 10 sq. mi.
- e. 25 sq. mi.
- f. 50 sq. mi.
- g. 100 sq. mi.
- h. County/HUC-8

What fee do you want NatureServe to charge federal clients for access to your data at the following scales? If no fee indicate \$0.

Level                      Amount (enter for each)

- |                |    |
|----------------|----|
| a. Precise     | \$ |
| b. 1 sq. mi.   | \$ |
| c. 5 sq. mi.   | \$ |
| d. 10 sq. mi.  | \$ |
| e. 25 sq. mi.  | \$ |
| f. 50 sq. mi.  | \$ |
| g. 100 sq. mi. | \$ |

How do you wish NatureServe to pro-rate your data for federal clients when a subset of data is requested? If no fee indicate \$0.

Pro-rate method

- a. Do not pro-rate
- b. Based on total number of EOs included
- c. Based on total portion of state included
- d. Based on total number of taxa involved



# Sharepoint Data Access Management System

## *Benefits of Sharepoint System*

- Would allow NatureServe to generate accurate estimates with less effort and communication
- Would make it easier for access levels and fee rates to be kept up-to-date.
- Would allow programs to make changes as needed without having to sign formal paper contracts/amendments.
- Would allow programs to see what other programs are doing when reconsidering their own data access and fee policies.

# Sharepoint Data Access Management System

## *Additional Potential Functionality*

- MJD “Contacts Database”?
- Data Request Notification/Management System?
- Other?

# Sharepoint Data Access Management System

## *Sharepoint Site Design: Next Steps*

1. Network buy-in/feedback
2. Possible speed bump: Programs will have to sign paper DSA amendment that authorizes the Sharepoint site as replacement for paper attachments 1 and 2
3. Site design
4. Implementation

# Sharepoint Data Access Management System

*Open Discussion: We Want Your Feedback!*

- Good idea/bad idea?
- Design suggestions?
- Functionality ideas?
- Potential issues?

