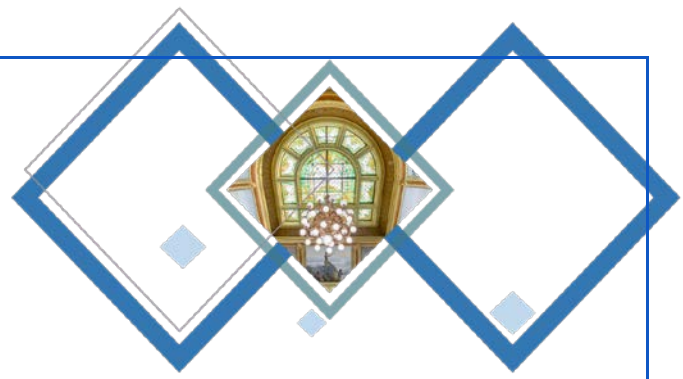**March 21, 2018**

Environmental Quality Council

Joe Kolman, Legislative Environmental Analyst

FUNDING THE NATURAL HERITAGE PROGRAM

STUDY

The 2017-18 Environmental Quality Council is examining the Natural Heritage Program, a program that gathers and disseminates information on plants, animals, and habitat. In September 2017, the Council reviewed a history of the Heritage Program. In January 2018, the EQC examined some of the funding of the program. At that meeting the EQC asked for more information about usage. Attached is information on usage and funding.

FUNDING

Attached is a comparison of how Montana's Natural Heritage Program stacks up against similar programs in western states. Included is total funding for the programs as well as a percentage of how much funding is provided by each state.

The attached pie charts show the program funding by type as well as by source. The program is funded three ways:

Core Funding. Agreements with DFWP, DNRC, DEQ, the Department of Transportation, and the university system as well as general fund dollars appropriated to the library go toward the services outlined in the original legislation for NHP:

> "a program of information acquisition, storage, and retrieval for data relating to the flora, fauna, and biological community types of Montana."[1]

As the EQC heard in September, this is the part of the NHP that state and federal agencies as well as private industry use to complete environmental studies.

Supplemental Core Funding. NHP obtains supplemental funding for core services, although that funding is not guaranteed year to year. Federal partners that provide money for this include U.S. Forest Service, Bureau of Land Management, the Natural Resources Conservation Service, the Bonneville Power Administration, and the U.S. Fish and Wildlife Service. State-based agencies that supply additional core funding are the University of Montana, the Department of Agriculture, and the state library through its oversight of the Montana land information account.[2] Other contributors to this funding area include NatureServe, which is an umbrella organization for programs like NHP around the world; the Nature Conservancy; and Weyerhaeuser, a timber and land management company.

---

[1] 90-15-102, MCA.

[2] The Montana land information account is funded by fees for recording documents filed in at county clerk offices. 7-4-2637, MCA.

Project Funding. The NHP takes on specific projects such as conducting field surveys for rare plants or animals, entering invasive species data into a central database, or mapping sage brush communities. While specific projects fit into the overall mission of NHP, they do require specific deliverables and work that is in addition to the core services.

USAGE

The attached pie charts show the usage of the map viewer for 2017. Broken out by user, government agencies use the tool about four hours every workday. Other users account for another six hours of average daily use. Likely included in that us are thousands of requests for information on wetlands and land cover. The MTNHP data is part of the National Wetlands Inventory managed by the federal government, so the program is unable to track that use. Local, state, and federal governments also receive quarterly updated data, meaning their use cannot be tracked either.

Agencies also use the environmental summary report, which automatically generates a report of plants, animals, lichens, and ecological systems in a given area. Almost seven of those are downloaded each work day.

State agencies most likely use MTNHP information to comply with the Montana Environmental Policy Act. (MEPA). An attached pie chart breaks down more than 9,700 agency filings over the last five years.

There are no agency statistics for use of the field guide, which provides information about specific animals, plants, lichens, and ecological systems. It is likely the tool most used by the public. In 2017, there were more than 285,000 unique users. Just more than one-third of those users were from Montana.
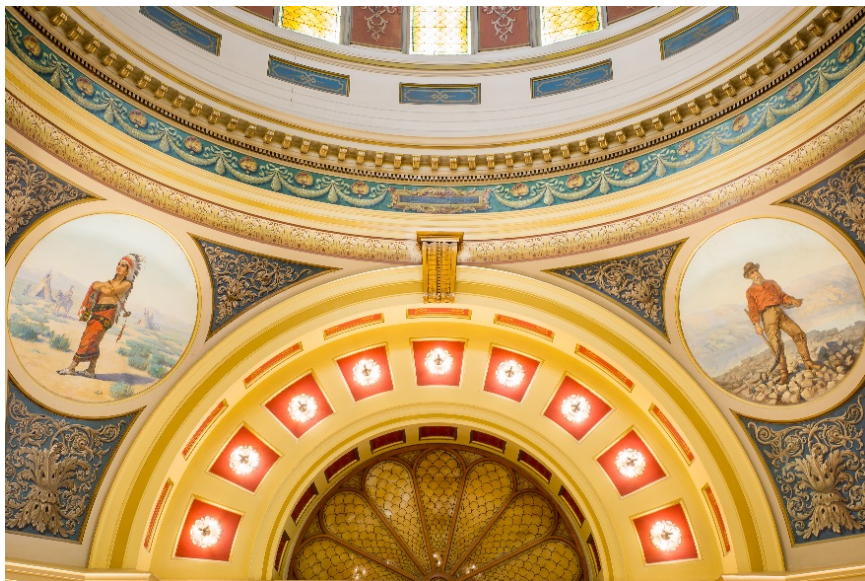
OPTIONS

As always, the status quo is an option. Other funding options the EQC may consider include:

• General fund appropriations to the state library for the Natural Heritage Program;

• For state agencies, establishing a fee for each computer that is able to access state library resource information, including the Natural Heritage Program; or

• Amending state law to allow agencies to charge a fee to a permit applicant where a MEPA analysis is required.

Natural Heritage Program Funding and Data Use Overview

http://mtnhp.org

Jennie Stapp, Montana State Librarian, jstapp2@mt.gov
Bryce Maxell, Program Coordinator bmaxell@mt.gov

Montana Funding in Context of 19 Western U.S. Heritage Programs

| Program	% State Funding	% Leveraged Funding	State Core Funding	Total Funding
NV	100	0	$900,000	$900,000
OK	100	0	Not reported	Not reported
AZ	98	2	$456,680	$466,000
SD	97	1	Not reported	Not reported
CA	65	6	$455,000	$700,000
ND	57	42	$228,000	$400,000
WA	50	27	$362,500	$725,000
UT	48	52	$83,136	$173,200
NE	47	53	$352,500	$750,000
KS	38	61	$247,000	$650,000
TX	35	65	$297,500	$850,000
ID	29	37	$96,570	$333,000
MT	**29 (12th)**	**71 (7th)**	**$435,000 (4th)**	**$1,500,000 (4th)**
AK	10	90	$150,000	$1,500,000
WY	8	80	$144,000	$1,800,000
OR	5	80	$35,000	$700,000
CO	2	92	$50,000	$2,500,000
HI	0	99	Not reported	Not reported
NM	0	97	$0	$1,000,000

* Data from 2016 NatureServe Network Survey, prior to FY18 SB 216 funding cuts.

Montana Funding in Context of 19 Western U.S. Heritage Programs

Program	% State Funding Core Data Processing	% Federal Funding Core Data Processing	% Private Funding Core Data Processing	% Project Funding	Total Funding
NV	100	0	0	0	$900,000
OK	100	0	0	0	Not reported
AZ	98	1	1	0	$466,000
SD	97	0	1	0	Not reported
CA	65	5	1	0	$700,000
ND	57	1	17	24	$400,000
WA	50	1	1	25	$725,000
UT	48	52	0	0	$173,200
NE	47	15	1	37	$750,000
KS	38	0	1	60	$650,000
TX	35	65	0	0	$850,000
ID	29	0	0	37	$333,000
MT	**29 (12th)**	**9 (5th)**	**3 (5th)**	**59 (7th)**	**$1,500,000 (4th)**
AK	10	10	0	80	$1,500,000
WY	8	8	7	65	$1,800,000
OR	5	5	0	75	$700,000
CO	2	2	3	87	$2,500,000
HI	0	0	99	0	Not reported
NM	0	0	1	96	$1,000,000

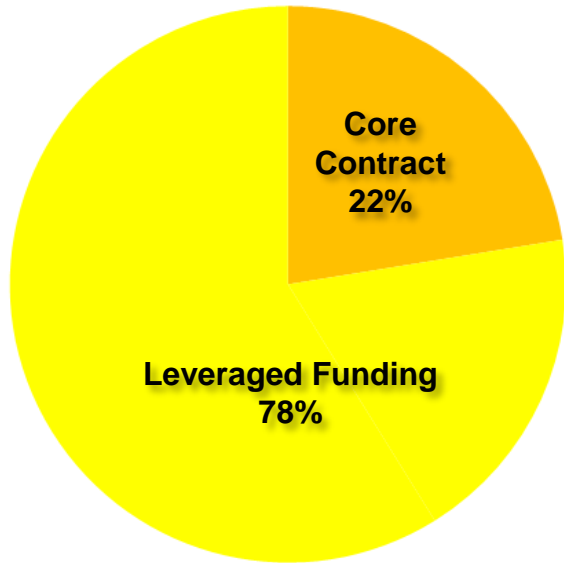* Data from 2016 NatureServe Network Survey, prior to FY18 SB 216 funding cuts.

MTNHP Core Contract Funding
10 year history
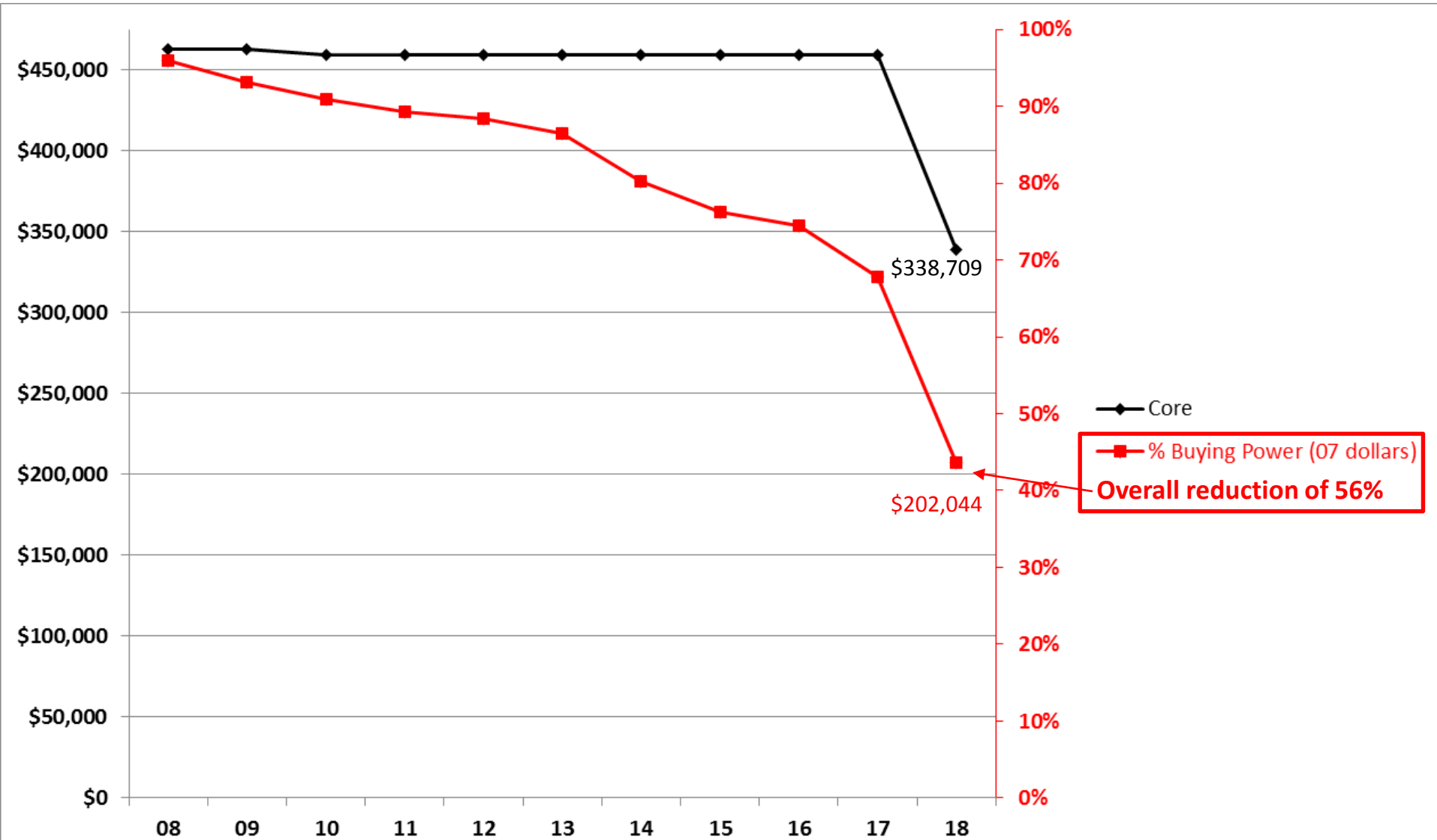
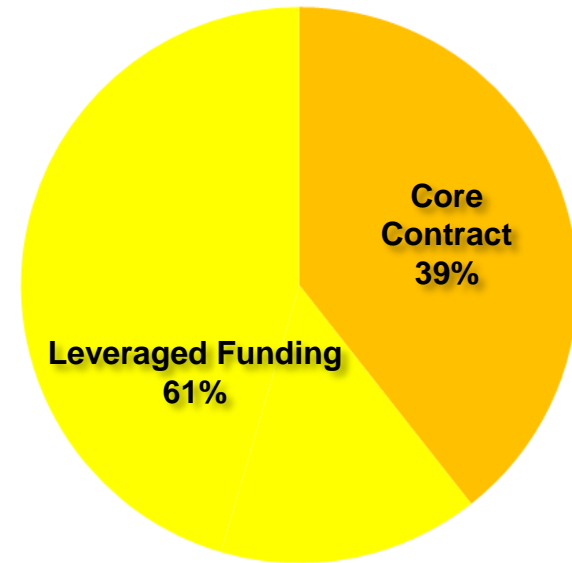# A reminder on funding needs:

FY18

$1,510,000 Total

$338,709 Core Contract
$1,171,291 Leveraged

+ $311,291 Core Contract Funding

And ongoing present law adjustments

Sustainable
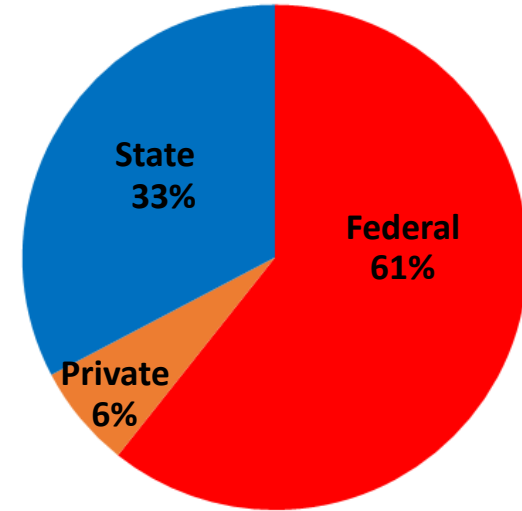
*$1,650,000 Total

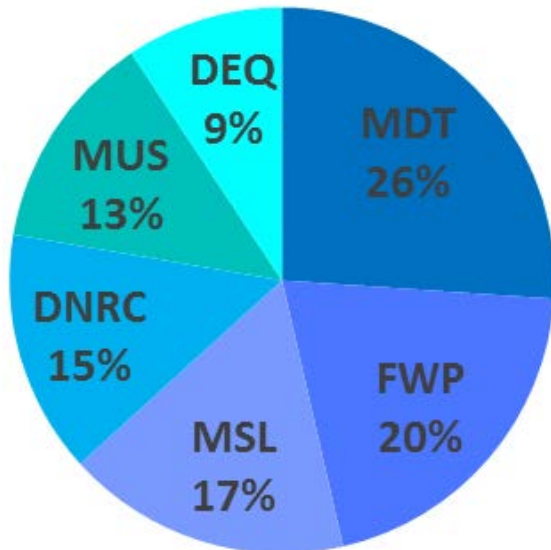$650,000 Core Contract
*$1,000,000 Leveraged

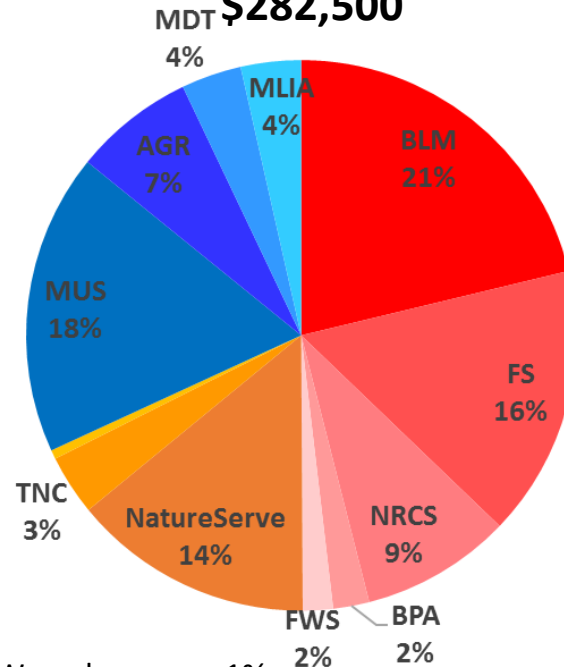*Projects are taken on as needed to meet partner needs
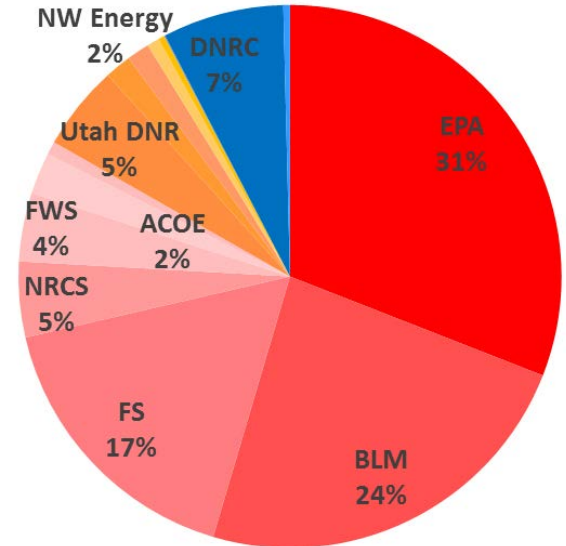
2018 MTNHP Funding By Sector

Total Program Funding

- State 33%
- Federal 61%
- Private 6%

Core Funding
$338,709

- MDT 26%
- DEQ 9%
- MUS 13%
- DNRC 15%
- MSL 17%
- FWP 20%

Supplemental Core
$282,500

- MDT 4%
- MLIA 4%
- AGR 7%
- BLM 21%
- MUS 18%
- FS 16%
- NRCS 9%
- TNC 3%
- NatureServe 14%
- FWS 2%
- BPA 2%

* Weyerhaeuser <1%

Project Funding
$888,791

- NW Energy 2%
- DNRC 7%
- Utah DNR 5%
- EPA 31%
- FWS 4%
- ACOE 2%
- NRCS 5%
- FS 17%
- BLM 24%

* BPA, DEQ, Missoula County, WCS, NatureServe, Weyerhaeuser, all <1%
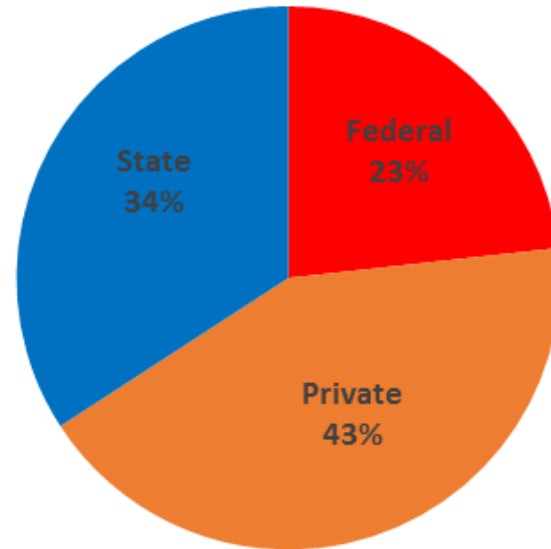
Usage information

- **Map, network and other services**
  - **MTNHP provides information in a variety of web formats including web map services, online documents and downloadable datasets. MTNHP can provide limited usage statistics for these resources but since we do not track individual users we do not have the detailed statistics we have for other applications.**
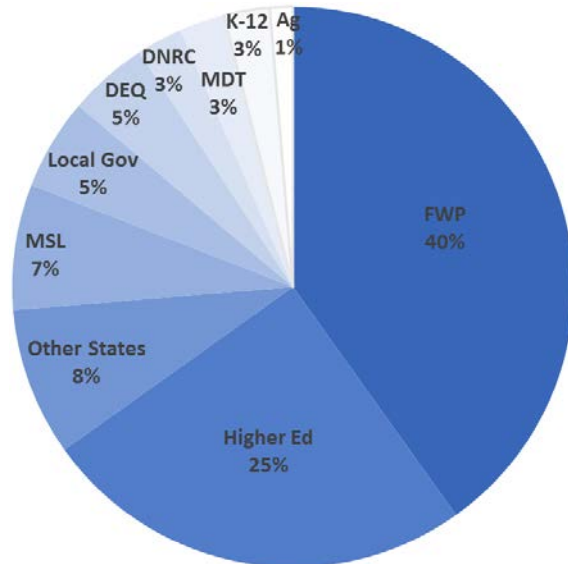
Usage information

- **Usage examples:**
  - **January 2018 web map service usage:**
    - Wetlands 132,103 map views, including Map Viewer use
    - Land Cover 45,501 map views, including Map Viewer use
  - **MTNHP Wetlands data feeds the National Wetlands Inventory which is managed by Fish and Wildlife Service. We have no means to track use of this data nationally.**
  - **More than a dozen state and federal agencies and county/city governments receive quarterly dataset updates. We have no ability to track their local use**
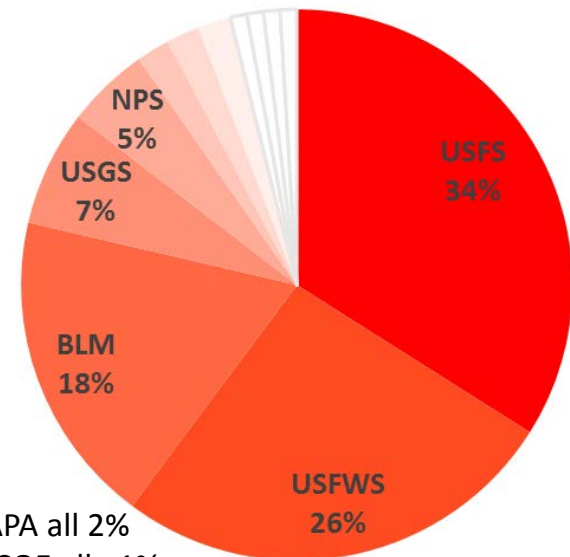
Average Mediated Requests in Recent Years

- ~3,300 mediated requests for GIS data or science expertise per year
- 10-15 mediated requests on average work day
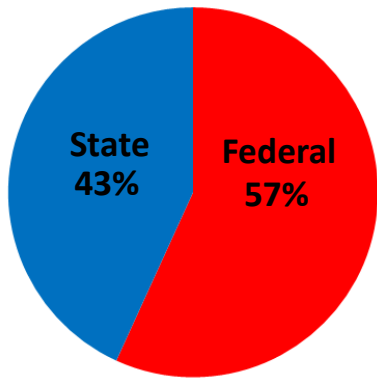

State Use

Federal Use

State 34%
Federal 23%
Private 43%

FWP 40%
Higher Ed 25%
Other States 8%
MSL 7%
Local Gov 5%
DEQ 5%
DNRC 3%
MDT 3%
K-12 3%
Ag 1%

USFS 34%
USFWS 26%
BLM 18%
USGS 7%
NPS 5%

* DOD, NRCS, WAPA all 2%
** BIA, BPA, EPA, ACOE all ≤1%

Map Viewer Agency Use in 2017

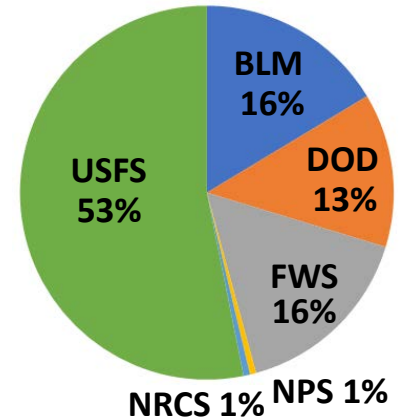***3,316 agency login sessions for 1,121 hours (4.3 hours/avg work day)**
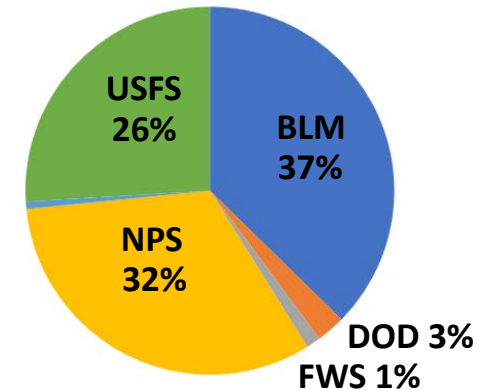
Agency Users

State 43%
Federal 57%

State Use

Ag <1%
MUS 5%
DEQ 6%
MDT 7%
DNRC 11%
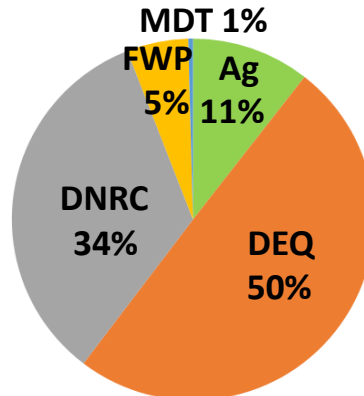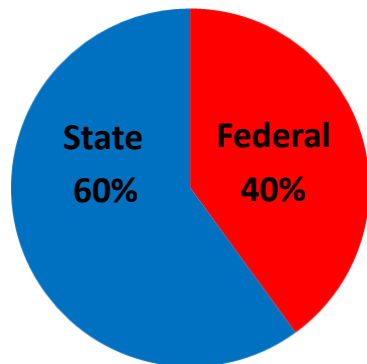FWP 71%

Federal Use

BLM 16%
DOD 13%
USFS 53%
FWS 16%
NRCS 1%
NPS 1%
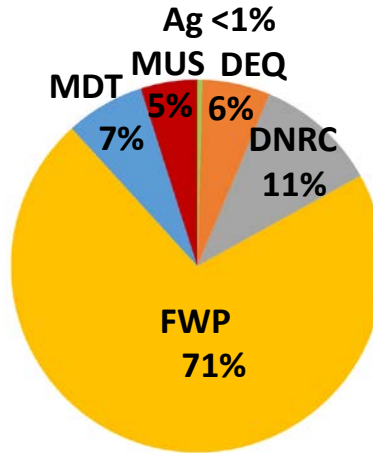
6.6 Environmental Summary Report downloads on average work day

State 60%
Federal 40%

MDT 1%
FWP 5%
Ag 11%
DNRC 34%
DEQ 50%

USFS 26%
BLM 37%
NPS 32%
DOD 3%
FWS 1%

Field Guide Use in 2017

- **56 hours of use each work day (89% U.S., 35% Montana)**

- **285,550 unique users and 1.3 million page views (100,000 Montana users)**

- **30 custom field guide downloads per day**

- **No agency statistics**

Top 10 Cities – No. Users

	City	Users	
1.	Salt Lake City	19,409	(6.41%)
2.	Missoula	16,165	(5.34%)
3.	Bozeman	13,148	(4.35%)
4.	(not set)	10,044	(3.32%)
5.	Kalispell	9,238	(3.05%)
6.	Helena	9,208	(3.04%)
7.	Billings	8,257	(2.73%)
8.	Dallas	7,067	(2.34%)
9.	Denver	5,030	(1.66%)
10.	Great Falls	4,255	(1.41%)

1   19,409
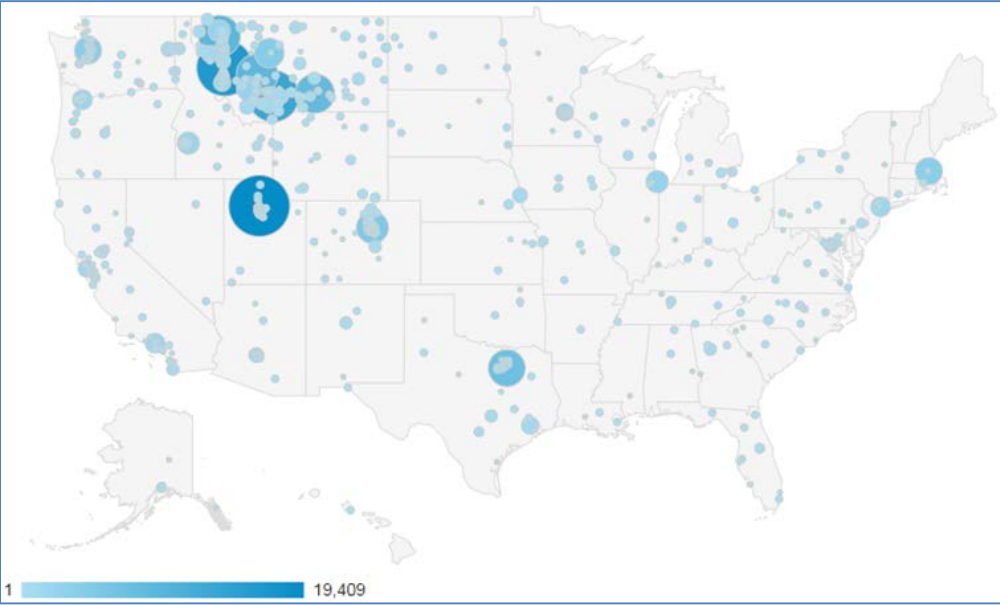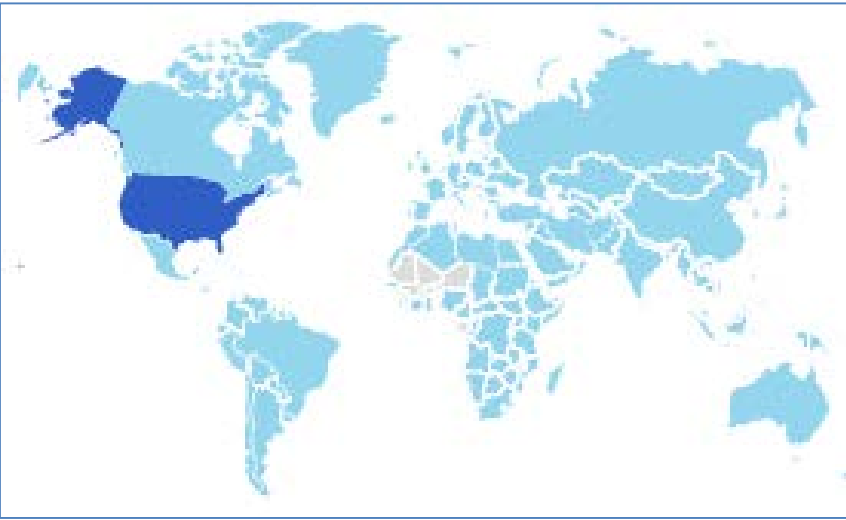
MEPA Filings by State Agency
9,708 filings in the last 5 years

DEQ
57%

DNRC
25%

DOT
9%

FWP
9%
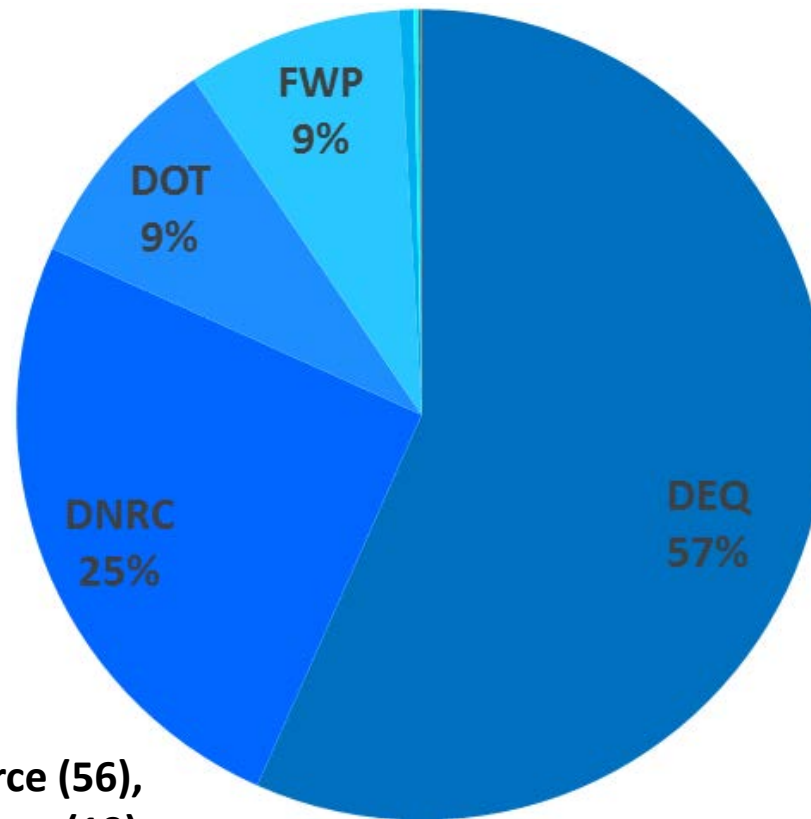
*Department of Commerce (56),
 Department of Agriculture (19),
 Department of Justice (3),
 Department of Livestock (2), and
 Montana University System (1)
 all <1%

Funding Definitions

- ## CORE FUNDING –

    MSL CORE - STATE FUNDING CONTAINED IN THE BIENNIAL CONTRACT BETWEEN MSL AND UM FOR ESSENTIAL CORE SERVICES

    SUPPLEMENTAL CORE - FUNDING PROVIDED BY PARTNERS TO PROVIDE ESSENTIAL CORE SERVICES IN THE BIENNIAL MSL-UM CONTRACT.

    CORE FUNDING ENSURES THAT THE MONTANA NATURAL HERITAGE PROGRAM IS "A PROGRAM OF INFORMATION ACQUISITION, STORAGE, AND RETRIEVAL FOR DATA RELATING TO THE FLORA, FAUNA, AND BIOLOGICAL COMMUNITY TYPES OF MONTANA" (MCA 90-15-102). IT IS USED TO COMPILE DISTRIBUTION AND STATUS INFORMATION ON SPECIES AND BIOLOGICAL COMMUNITIES AND MAKE THAT INFORMATION READILY AVAILABLE TO AGENCIES AND THE PUBLIC FOR USE IN ENVIRONMENTAL REVIEWS. THE BASIC ADMINISTRATIVE AND OPERATIONS COSTS ARE ALSO COVERED BY CORE FUNDING.
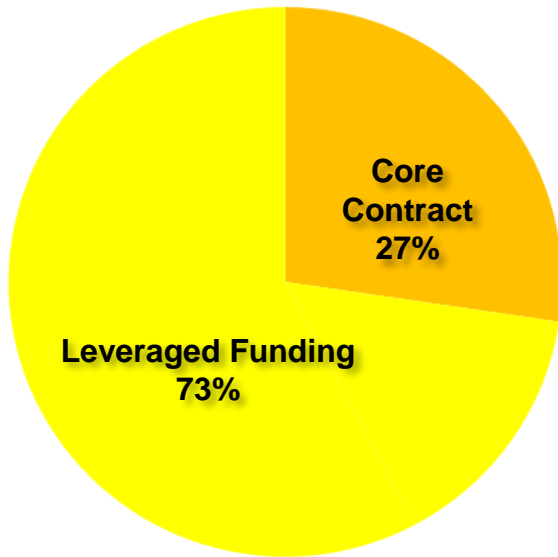
- ## PROJECT FUNDING –

    FUNDING THAT SUPPORTS THE OVERALL MISSION OF THE PROGRAM BUT ENTAILS SPECIFIC DELIVERABLE PRODUCTS FOR PARTNERS SUCH AS CONDUCTING FIELD SURVEYS FOR RARE PLANT OR ANIMAL SPECIES, ENTERING INVASIVE SPECIES DATA INTO CENTRAL DATABASES, OR MAPPING SAGEBRUSH COMMUNITIES TO SUPPORT GREATER SAGE-GROUSE MANAGEMENT.
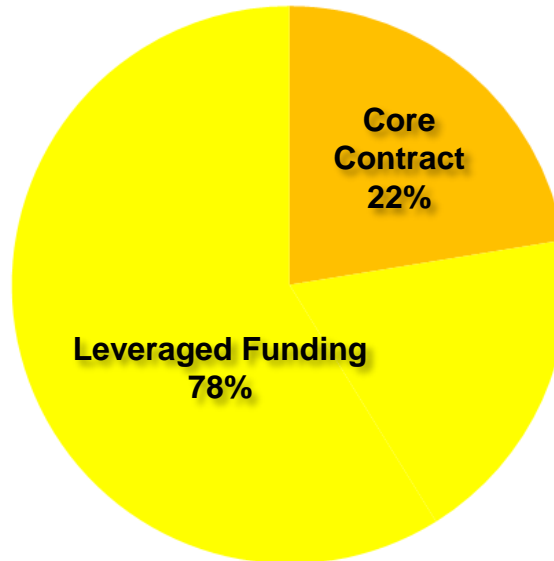
Funding Composition Comparisons

FY13-17 Average
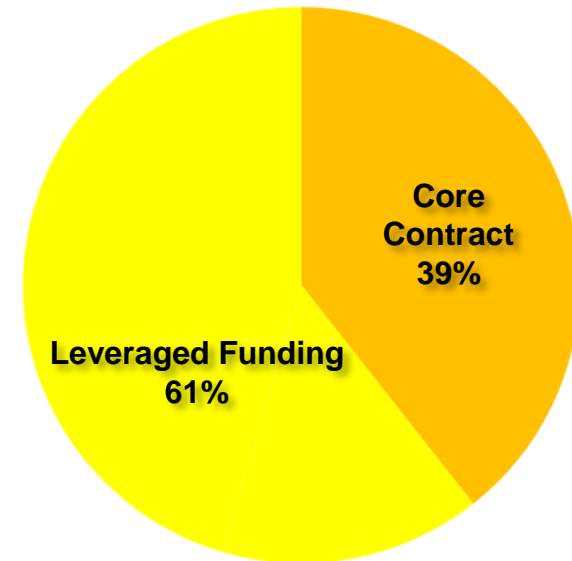
$1,694,015 Total

Core Contract 27%

Leveraged Funding 73%

$462,680 Core Contract
$1,231,335 Leveraged

FY 18

$1,510,000 Total

Core Contract 22%

Leveraged Funding 78%

$338,709 Core Contract
$1,171,291 Leveraged

Sustainable

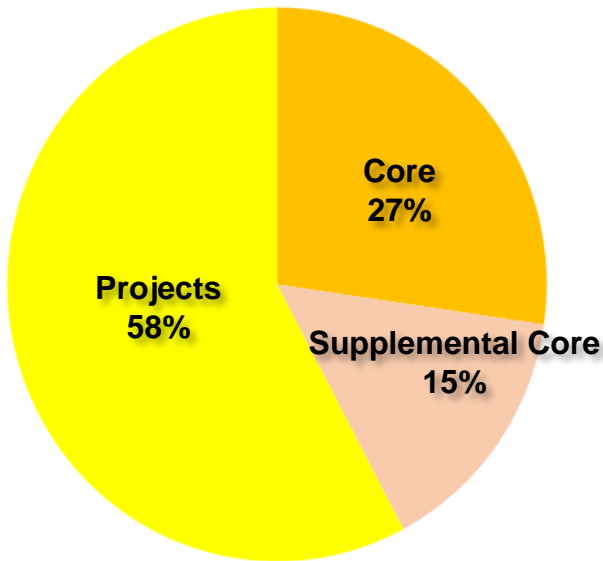***$1,650,000 Total**

Core Contract 39%

Leveraged Funding 61%

$650,000 Core Contract
*$1,000,000 Leveraged

*Projects are taken on as needed to meet partner needs

Funding Composition Comparisons
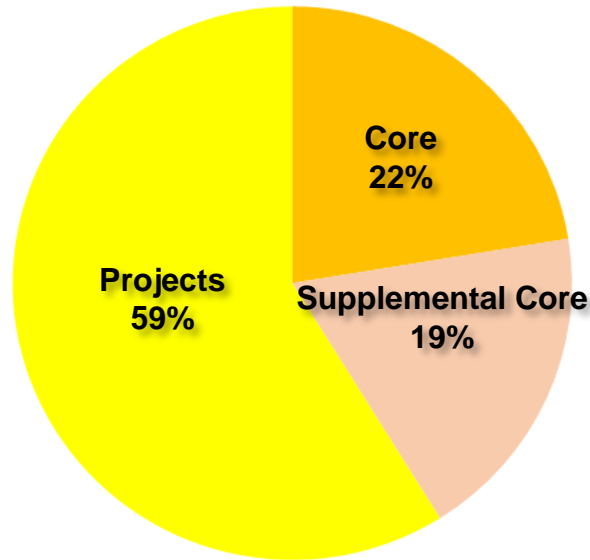
FY13-17 Average

$1,694,015 Total

$715,651 Core

$462,680 MSL

$252,971 Sup

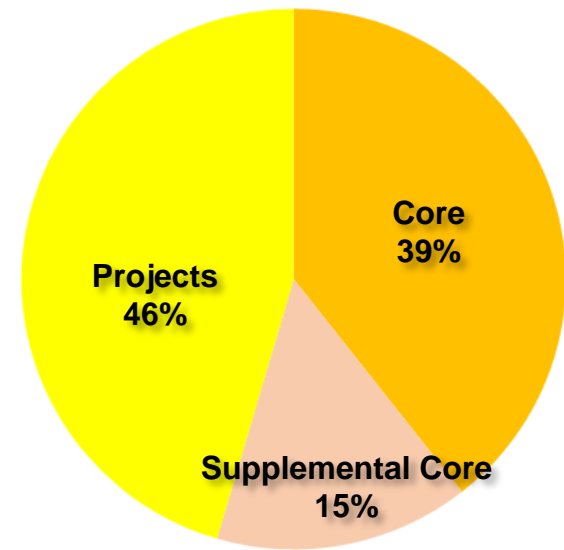$978,364 Project

FY 18

$1,510,000 Total

$621,209 Core

$338,709 MSL

$282,500 Sup

$888,791 Project
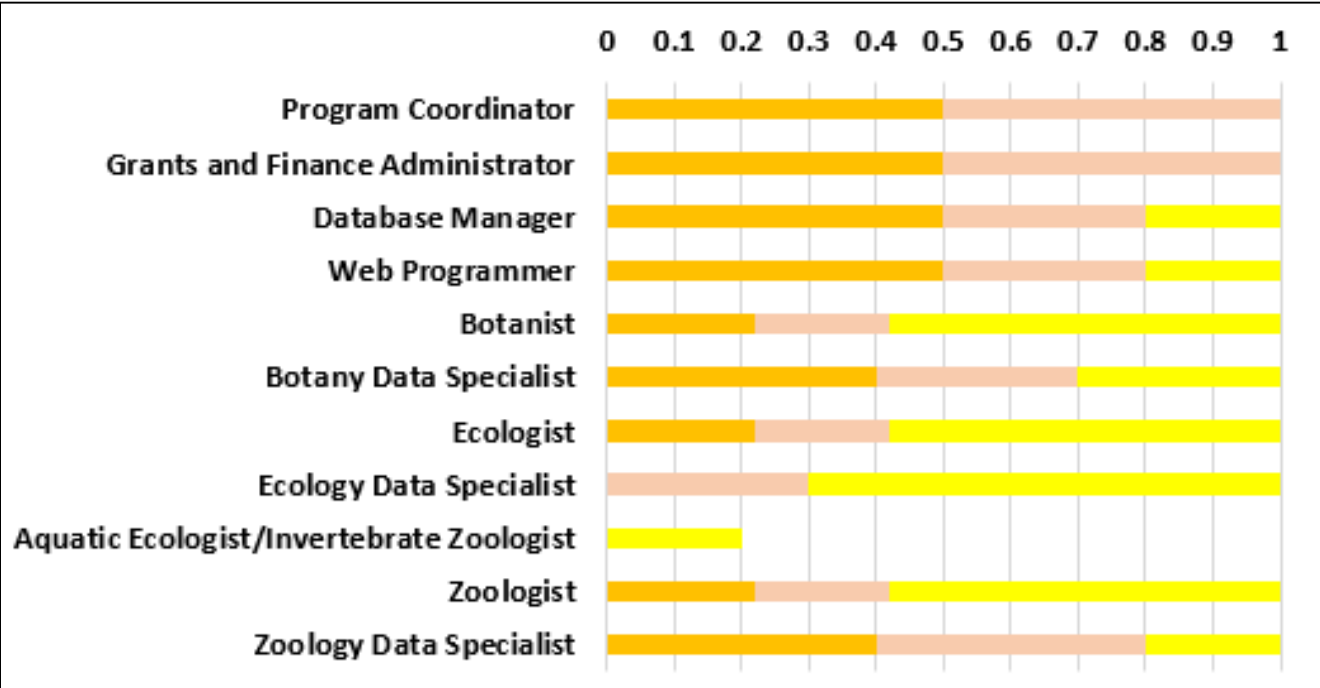
Sustainable

*$1,650,000 Total

$900,000 Core

$650,000 MSL

$250,000 Sup

*$750,000 Project

*Projects are taken on as needed to meet partner needs

2018 Core Staff Funding Mix

Sustainable Core Staff Funding Mix

MSL Core
Supplemental Core
Project