September 2018

Environmental Quality Council
Joe Kolman

FINAL REPORT TO THE 66TH MONTANA LEGISLATURE

NATURAL HERITAGE PROGRAM TRACKS PLANTS, ANIMALS; SEARCHES FOR FUNDING

NATURAL HERITAGE PROGRAM

ENVIRONMENTAL QUALITY COUNCIL

Before the close of each legislative session, the House and Senate leadership appoint lawmakers to interim committees. The members of the EQC, like most other interim committees, serve one 20-month term. Members who are reelected to the Legislature, subject to overall term limits and if appointed, may serve again on an interim committee. This information is included in order to comply with 2-15-155, MCA.

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Environmental Quality Council
Legislative Environmental Policy Office

Executive Summary

This report is a summary of the work of the Environmental Quality Council (EQC) specific to the council's 2017-2018 work pertaining to funding options for the Natural Heritage Program within the state library. Members received additional information and public testimony on the subject, and this report is an effort to highlight key information and the processes followed by the EQC in reaching its conclusions. To review additional information, including audio minutes and exhibits, visit the EQC website: www.leg.mt.gov/eqc.

The Legislature in 1983 created the Montana Natural Heritage Program (MTNHP) as part of the Natural Resource Information System (NRIS) of the Montana State Library. As defined in law, the program acquires information related to the flora, fauna, and biological community types in the state. The program primarily serves the Departments of Environmental Quality, Natural Resources and Conservation, Fish, Wildlife, and Parks, Transportation, and Agriculture. It also works for the university system, as well as the Forest Service, the Bureau of Land Management, the U.S Fish and Wildlife Service, and the Natural Resources Conservation Service. Data acquired by the program are used in environmental reviews by the private and public sectors for permitted activities including mining, timber sales, subdivisions, utility and pipeline corridors, oil and gas developments, and highway construction.

The EQC studied the history of the program and its funding structure.

Findings

1. State agencies and others rely on data collected and presented by the MTNHP.
2. Most agencies required to conduct environmental reviews under the Montana Environmental Policy Act use MTNHP data.
3. The funding structure of the MTNHP is complex and money is allocated through a variety of sources.
4. Funding to support the core work of the MTNHP has declined and the program relies on special project funding to maintain the program.
5. To sustain the program, MTNHP staff estimates about another $300,000 per year is needed.

Recommendations

1. The EQC requests that Gov. Steve Bullock propose an increase in funding of $600,000 over the biennium for the program and submit that request to the 2019 Legislature. (Appendix A)

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NATURAL HERITAGE PROGRAM

INTRODUCTION

The creators of the Montana Environmental Policy Act touted the legislation as a tool to promote development of natural resources in an environmentally sound manner bolstered by facts, not emotion. The original act spoke of man and nature living in "productive harmony."

The need for information prior to action is crucial to fulfilling the directive of the lofty and optimistic policy. Gathering data is the cornerstone of the environmental review process outlined in the law. The environmental review required by MEPA requires state agencies to evaluate actions before acting. The process should ensure that permitting and other agency decisions affecting the human environment are informed decisions.

A decade after the passage of MEPA, a Council on Management organized by Gov. Ted Schwinden found that natural resource agencies needed better coordination and access to growing amounts of data. The 1983 Legislature created the Natural Heritage Program, an entity with a mission of "information acquisition, storage, and retrieval for data relating to the flora, fauna, and biological community types of Montana."[1]

The legislation noted that 33 other states already had heritage programs and that the program would "eliminate costly duplication and enhance the efficiency of natural resource data collection and to provide a valuable source of that information for state government, industry, and other groups."[2]

Among other things, an environmental review requires a description of the quantity and quality of the vegetative cover. The types of terrestrial, avian, and aquatic life, as well as their habitats must be listed, including any that may be unique, endangered, or fragile.

The bill passed the House 73-22 and the Senate 48-0 and created a committee to study the proposed implementation of the program. It also directed the EQC to ride herd on the committee and the department of administration, which was originally placed in charge of the program.[3]

From that came legislation in 1985 supporting the movement of the program to the State Library, citing its mission to disseminate information without bias. Funding came from a variety of sources, including a Resource Indemnity Trust grant, license fees collected by Fish, Wildlife, and Parks, federal funds, and money from the Nature Conservancy. Writing in support of the bill, EQC Chairman Dennis Iverson said time and money could be saved in several ways:[4]

- the information systems could head off conflicts over environmental impacts at an early stage of resource development, before heavy investments close off options;

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[1] Chapter No. 650, L.1983.
[2] Ibid.
[3] The Heritage Program was the first step in creating a natural resource information system, a comprehensive system of natural resource data. Often referred to as NRIS, the Natural Heritage Program is part of that system.
[4] Legislative history, House Bill No. 860, 1985.

- the information systems could help coordinate duplicate data gathering and studies, such as when two agencies look at a resource for different purposes;
- the information systems could ensure that decision makers have the best information available when they consider resource developments, and that the information comes at the lowest cost and at the quickest speed as possible;
- the information systems could identify gaps in our resource data, perhaps allowing well-planned research to efficiently close the gaps and avoid expensive "brush-fire" studies after developments have been proposed; and
- the information systems will not require major changes in existing agency operations but should identify ways in which interagency coordination and efficiency can be improved.

Other supporters of the legislation included ASARCO, the Montana Audubon Council, Walleyes Unlimited, Trout Unlimited, Burlington Northern, Inc., and the Montana Mining Association. Supporters said that easy access to natural resource data would reduce the cost to industry for environmental review and obtaining permits, and comprehensive environmental reviews would head off litigation over projects. They also said compiling existing data and gathering new data might keep species from being listed as endangered. It passed the House 98-2 and the Senate 50-0.

"We believe House Bill 860 offers a sound approach to gathering and storing information and will assist the mining industry [to] solve potential environmental problems," wrote Gary Langley, the executive director of the mining association.[5]

Over the next decade, Natural Heritage Program data was used to fulfill an increasing number of requests for information from state and federal agencies and others. It expanded into electronic mapping and ventured into providing information over the internet.[6]

MTNHP Today

The Natural Heritage Program has information on about 3,800 animal species, 4,500 plant species, and 120 biological communities.[7] That information is the source for the various products the program offers.

The Montana Field Guides are the most popular feature of the Heritage Program website. Almost 256,000 people used the guides last year for an average of 56 hours of use each work day. The field guides include information on the identification, distribution, listing status, and ecology of the animals, plants, lichens, and biological communities that call Montana home. For example, the entry for the Western Meadowlark allows the user to see several photos, examine the state bird's range, hear an audio recording of its distinctive song, see its breeding and overwintering habitat, and read associated literature.

[5] Legislative history, House Bill No. 860, 1985.
[6] NRIS History, 1982 to 1998. Jon Sesso, now a senator, was director of the NRIS program from 1988 to 1992.
[7] These numbers represent only a portion of the species present in the state. The program recently obtained funding from the Department of Natural Resources and Conservation to compile information on invasive species.

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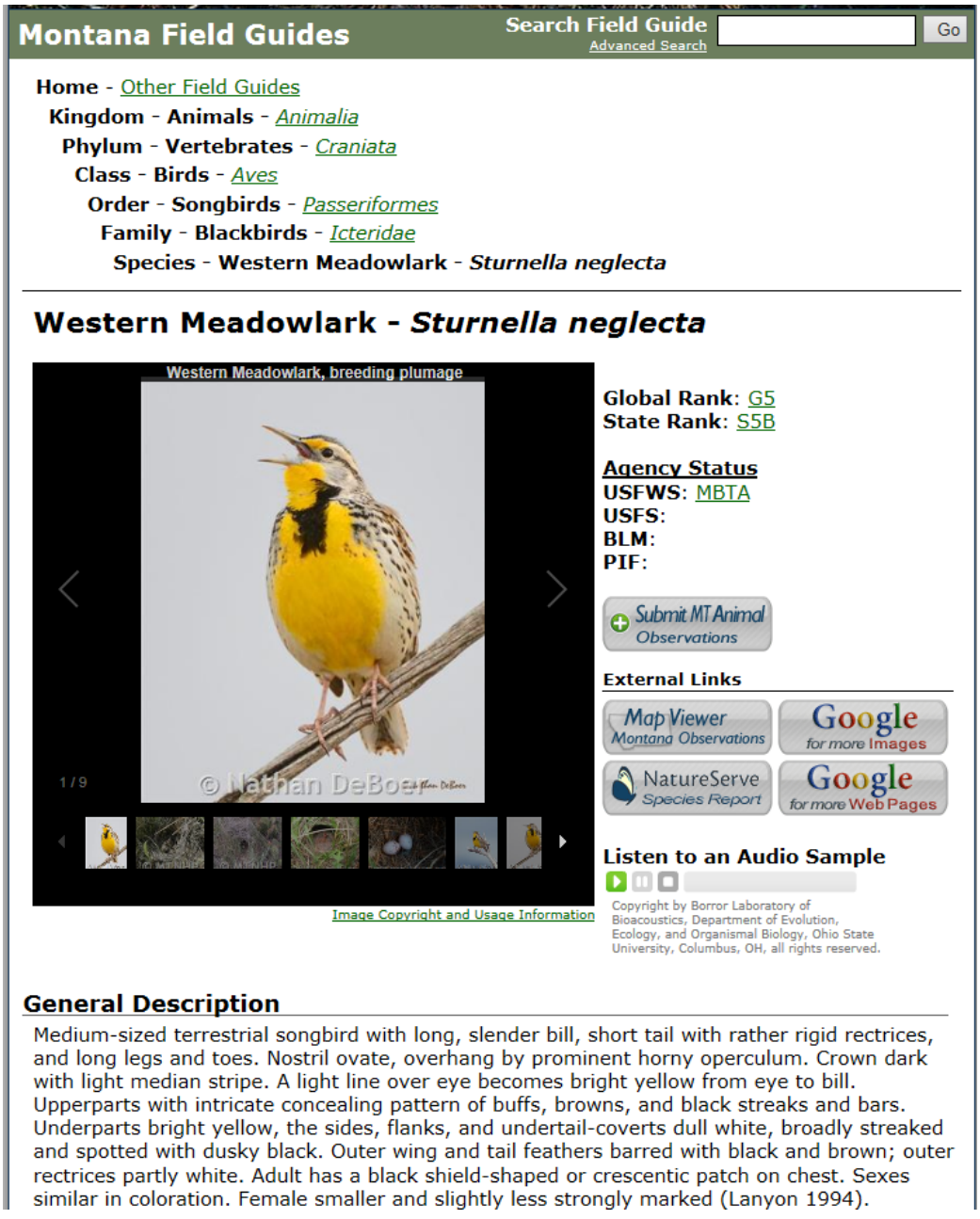
Species information is mapped. The electronic Map Viewer also features information on land cover, land management, and wetlands. Last year, the map viewer was used an average of almost 17 hours every workday.

Starting in January 2017, the program increased the automation of environmental summaries. An agency conducting an environmental review simply selects the proposed project area on the electronic map. The resulting report includes results for that geographic area including species occurrences, structured surveys of species, land cover, land management, and biological reports associated with plant and animal observations. About four reports a day are done this way.

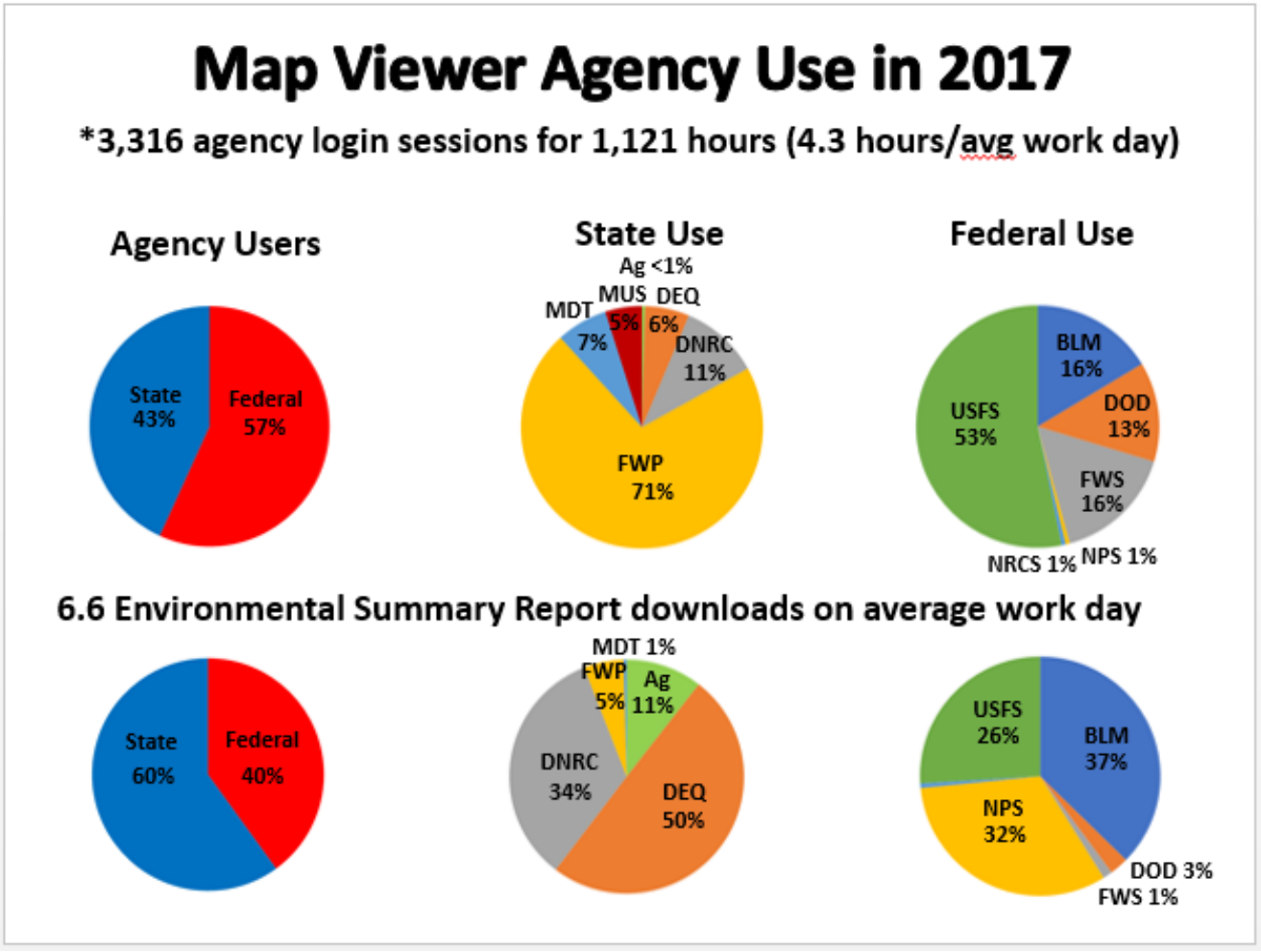


The program also fields at least 10 information requests each day that involve extra expertise from staff.

As the use of the program grew, so did its staff. It started with four people in 1985 and now employs 16, including biologists, botanists, ecologists, and zoologists. Montana's program is one of about 80 similar programs in North and South America. Unlike Montana, the majority operate within a natural resource agency, according to a 2016 survey. At the time, the survey showed Montana and Colorado with the most employees of programs in the western states.

Usage

The 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 use 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.



In September 2017, representatives of the DEQ, the Helena/Lewis and Clark National Forest, and the Department of Agriculture told the EQC how they use the MTNHP data. A private environmental consultant also testified.

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.

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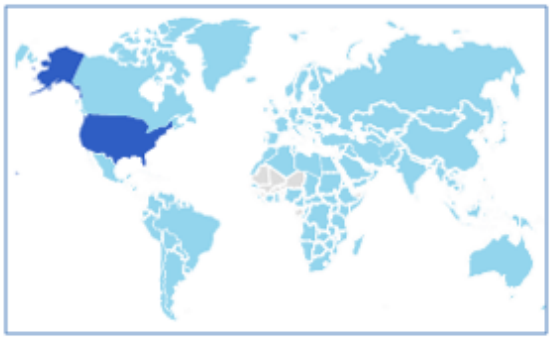
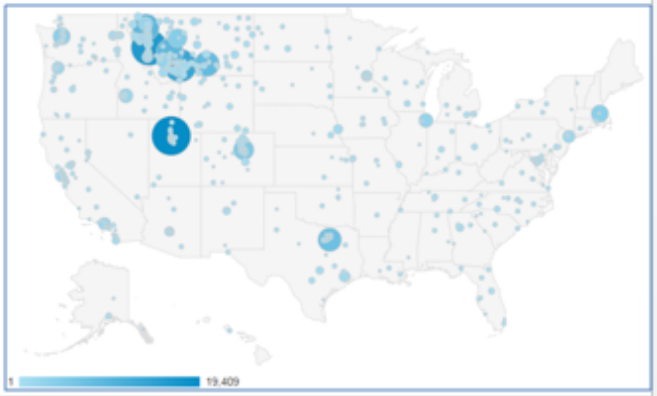
Field Guide Use in 2017

- 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

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%)

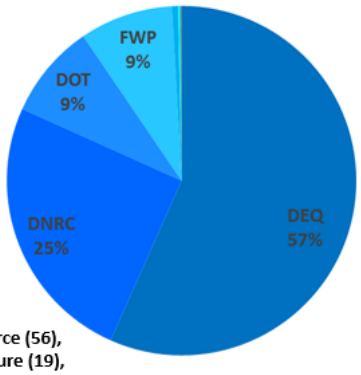




State agencies most likely use MTNHP information to comply with the Montana Environmental Policy Act. (MEPA). An attached pie chart breaks down more than 9,700 agency filings over the last five years.

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.

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

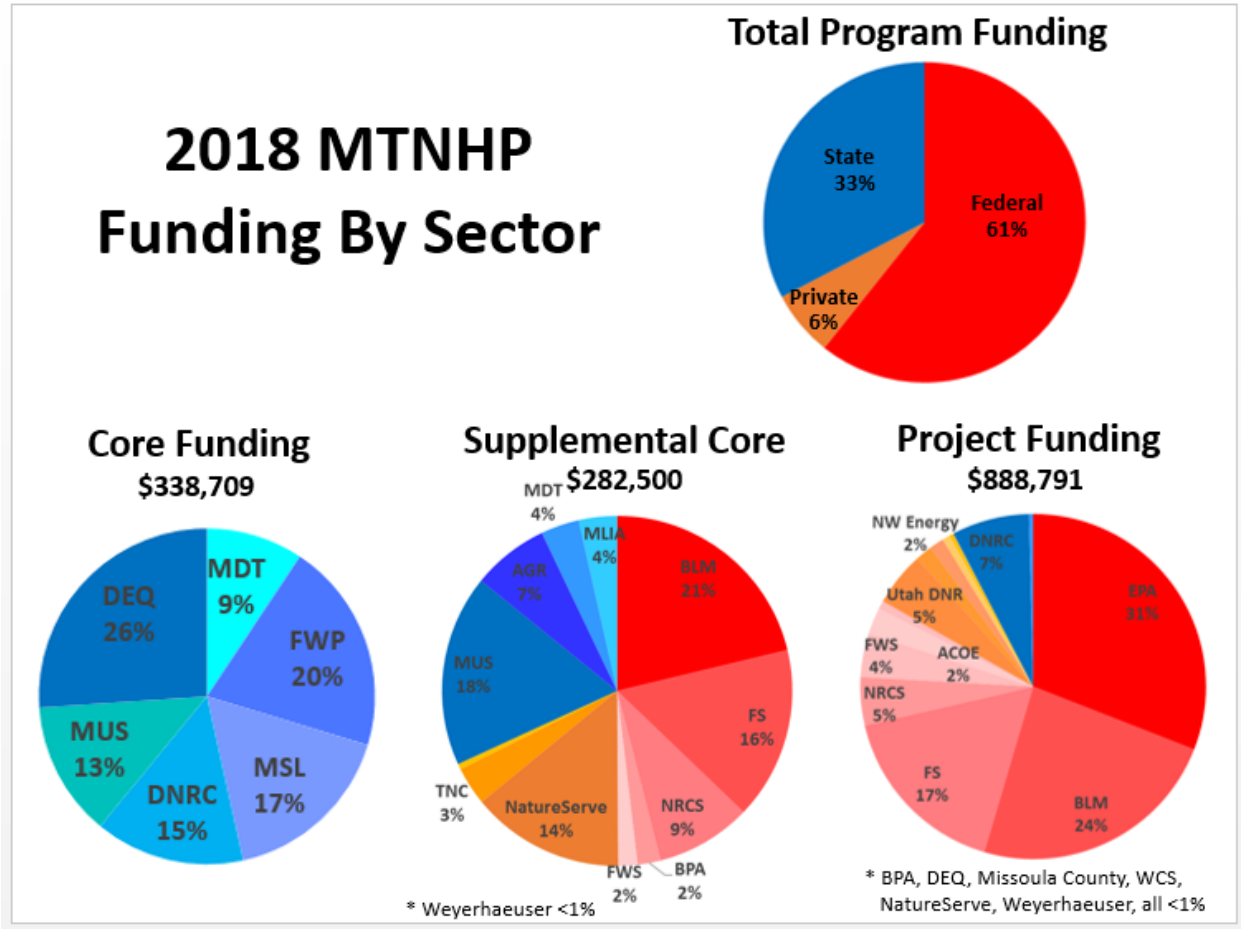


*Department of Commerce (56), Department of Agriculture (19), Department of Justice (3), Department of Livestock (2), and Montana University System (1) all <1%

Funding

The 1983 Legislature proposed an appropriation of $500,000 a biennium to fund the Natural Resource Information System (NRIS) and the MTNHP. The bill tapped revenue from the electric energy producer's license tax provided for in 15-51-101, MCA. In the end, the legislature appropriated $500 and created an advisory committee to further study the implementation of NRIS and MTNHP.[8]

In 1985, acting on recommendations from the advisory committee and the EQC, the Legislature moved the programs to the State Library, citing its mission to disseminate information without bias. Funding came from



a variety of sources, including a Resource Indemnity Trust grant, license fees collected by Fish, Wildlife, and Parks, federal funds, and money from the Nature Conservancy.[9]

That 1985 legislation laid the groundwork for ongoing funding. It provided that the library, along with the Departments of Natural Resources and Conservation; Fish, Wildlife, and Parks; Environmental Quality;

[8] Chapter No. 650, L. 1983. The Heritage Program was the first step in creating a natural resource information system, a comprehensive system of natural resource data. Often referred to as NRIS, the Natural Heritage Program is part of that system.

[9] NRIS History, 1982 to 1998.

Agriculture; and Transportation could obtain public and private funding. The state Historical Society and the university system also were included.[10]

The library contracted with the Nature Conservancy, which was one of the early backers of the MTNHP, to run the program. The Nature Conservancy also provided funding. In 2006, the University of Montana took over the contract.

The current annual budget is about $$1.5 million from a variety of sources.

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 MTNHP:

> "a program of information acquisition, storage, and retrieval for data relating to the flora, fauna, and biological community types of Montana."[11]

This is the part of the MTNHP that state and federal agencies as well as private industry use to complete environmental studies.

Supplemental Core Funding. MTNHP 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.[12] Other contributors to this funding area include NatureServe, which is an umbrella organization for programs like MTNHP around the world; the Nature Conservancy; and Weyerhaeuser, a timber and land management company.

Project Funding. The MTNHP 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 MTNHP, they do require specific deliverables and work that is in addition to the core services.

[10] Legislative history, House Bill No. 860, 1985.
[11] 90-15-102, MCA.
[12] The Montana land information account is funded by fees for recording documents filed in county clerk offices. 7-4-2637, MCA.

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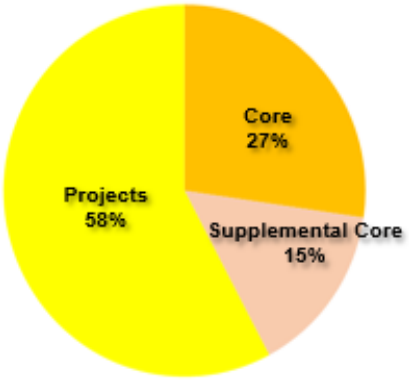
Funding Composition Comparisons

FY13-17 Average

$1,694,015 Total



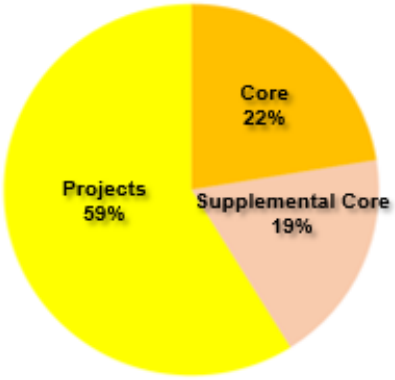
$715,651 Core

$462,680 MSL
$252,971 Sup

$978,364 Project

FY 18

$1,510,000 Total



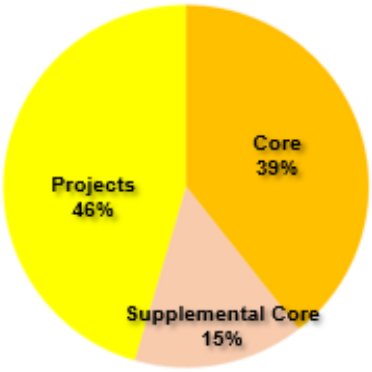
$621,209 Core

$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