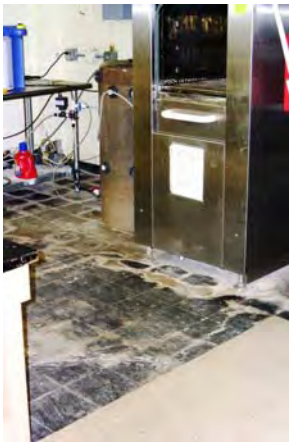

State Laboratories

An analysis of state laboratory facilities related to wildlife, livestock, agriculture, and public health

A report to the
Legislative Economic Affairs Interim Committee
2009 - 2010 Interim
October 2010
Prepared by Hope Stockwell

SJR 14: State Laboratories

An analysis of state laboratory facilities related to wildlife, livestock, agriculture, and public health

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Appendices

Overview

Senate Joint Resolution No. 14 (Appendix A), assigned to the Economic Affairs Interim Committee, authorized an interim study of state-operated laboratories that provide testing and services related to wildlife, livestock, agriculture, and public health. In light of space and budget constraints faced by some of the laboratories, SJR 14 directed that:

- existing laboratory facilities be reviewed;
- areas of potential overlap or similarity of testing procedures be identified;
- the possibility of consolidating laboratories be explored, as well as the pros and cons of doing so; and
- potential arrangements for the sharing of laboratory space be examined.

In July 2009, the Economic Affairs Interim Committee assigned .1 FTE, or 275 hours, to complete the SJR 14 study. Given that laboratories operated by state agencies are located in several Montana cities, and to best utilize available time and resources, the SJR 14 study initially focused on the review of the following laboratories that provide testing and services related to wildlife, livestock, agriculture, and public health:

- Veterinary Diagnostic Lab, Bozeman, operated by the Department of Livestock
- Wildlife Laboratory, Bozeman, operated by the Department of Fish, Wildlife, and Parks
- Analytical Lab, Bozeman, operated by the Department of Agriculture
- Public Health Laboratory, Helena, operated by the Department of Public Health and Human Services
- Environmental Laboratory, Helena, operated by the Department of Public Health and Human Services

Senate Joint Resolution No. 14, assigned to the Economic Affairs Interim Committee, authorized an interim study of state-operated laboratories that provide testing and services related to wildlife, livestock, agriculture, and public health.

In the review of those laboratories, the focus of the SJR 14 study was further refined to making recommendations for addressing the facility and funding problems faced by the Veterinary Diagnostic Lab, which prompted the writing of SJR 14, and the conditions of the Wildlife Laboratory where additional biosecurity measures are needed.

In March 2010, at the request of the Department of Agriculture's Administrator of Agricultural Sciences, the Economic Affairs Interim Committee agreed to also look at the conditions of the State Grain Lab in Great Falls and the Montana State University Seed Lab in Bozeman. However, upon review of staff analysis, which is included in this report, and after receiving further comment from department and MSU staff, the committee decided not to pursue further action related to these facilities.

Background

The writing of SJR 14 was prompted by the news in April 2008 that the Veterinary Diagnostic Lab (VDL) faces the loss of its accreditation with the American Association of Veterinary Laboratory Diagnosticians, Inc. (AAVLD) due to ongoing concerns about the condition of the facility and its funding. The VDL conducts testing related to livestock, wildlife, and human health, including tests for brucellosis, chronic wasting disease, and rabies, and milk and egg inspections. Without accreditation, the credibility of the VDL's testing procedures is at risk, potentially impacting producers' sale and movement of livestock[1] and revenue for other lab functions.[2]

Veterinary diagnostic lab, Bozeman
Photo by Hope Stockwell

On April 21, 2008, after visiting the VDL, the AAVLD accreditation committee wrote a letter (Appendix C) to VDL Director Dr. A.W. Layton saying, "This laboratory has been provisionally accredited for many years. Progress toward achieving full accreditation is slow. While [VDL] faculty and staff are supportive of achieving the goal of adequate facilities and a quality system, they are hampered by inadequate resources. If significant progress . . . is not made by February 2009, accreditation of the Montana Veterinary Diagnostic Laboratory will be withdrawn."

The VDL is housed on the Montana State University Campus in a building constructed in 1961, which has been remodeled over the years. Dr. Layton says the facility lacks the space and functionality needed for the VDL to keep up with the demands of international trade, e.g., testing of cattle for brucellosis and increasingly stringent biosecurity procedures. Dr. Layton says there are few options for expansion in the

[1] Memo from Dr. A.W. Layton, Director of the Veterinary Diagnostic Lab, to the Economic Affairs Interim Committee, December 8, 2009. (Appendix B)

[2] Phone conversation with Barbara Powers, AAVLD accreditation committee member, September 30, 2009.

existing structure, because it also houses teaching and research faculty for the MSU College of Agriculture and the MSU Seed Lab. Thus far, the VDL has been creative in creating new laboratory space, putting testing equipment in closets, and more recently, converting Dr. Layton's office into a lab.

The writing of SJR 14 was prompted by the news that the Veterinary Diagnostic Lab faces the loss of its accreditation with the American Association of Veterinary Laboratory Diagnosticians, Inc. due to ongoing concerns about the condition of the facility and its funding.

Concern about the VDL's long-term funding situation — the ratio of testing and livestock per capita fees to general fund allocation — has also been raised in the context of providing a more adequate facility and maintaining a high level of testing and services.

After receiving the April 2008 letter from the AAVLD, then-Board of Livestock member Becky Weed wrote a memo (Appendix D) to Dr. Layton and Christian MacKay, executive officer of the Department of Livestock, regarding the initiation of a lab planning discussion with the Board of Livestock. In her memo, Weed stated that a recent visit by the Governor's Office of Budget and Program Planning to the VDL was "informative for all, but it confirmed our sense that making a case for assistance from the General Fund is much more compelling to the Budget Office if it [sic] done in the context of specific, clearly justified demands, coupled with a solid rationale for a multi-year outlook for the lab."

Dr. Layton says that the SJR 14 study was requested in response to the situation and as a way to show the AAVLD that the VDL was attempting to address the organization's concerns and stipulations for maintaining accreditation. On July 17, 2009, the AAVLD accreditation committee again wrote to Dr. Layton, informing him that it had extended the VDL's provisional accreditation until December 31, 2010. In the letter (Appendix E), the committee requested a report from Dr. Layton on the SJR 14 study, as well as an update on the VDL's budget and personnel, at the committee's meeting in October 2010.

Existing Facilities

State laboratories involved in the SJR 14 study were asked to submit inventories of facility space, equipment, personnel, and salaries, as well as to provide "wish lists", examples of current coordination efforts with other state laboratories, and suggestions for additional coordination. Inventories submitted by the Veterinary Diagnostic, Wildlife, Analytical, Environmental, and Public Health Labs are included in Appendix F.

Site Visits

Legislative staff visited six state laboratories, as well as lab space used by the MSU Department of Veterinary Molecular Biology, to compare and contrast facilities, equipment, mission, and operations. The difference between them is marked, though opportunities for possible consolidation and continued coordination/cooperation emerged. The greatest opportunity for consolidation appears to exist between the VDL and the Wildlife Lab due to some similarities in mission and existing cooperative agreements and the fact that both are in Bozeman. As such, much of the following analysis focuses on those two facilities.

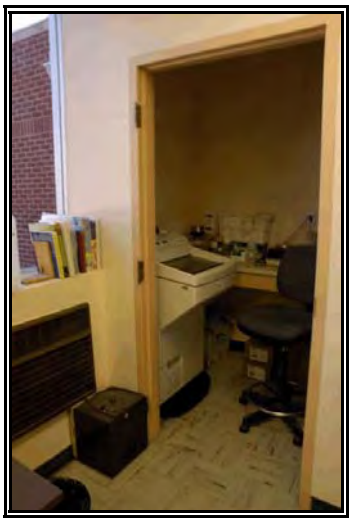
The greatest opportunity for consolidation appears to exist between the VDL and the Wildlife Lab due to some similarities in mission and existing cooperative agreements and the fact that both are in Bozeman.

Veterinary Diagnostic Lab - Department of Livestock

The VDL conducts testing for livestock, wildlife, and human health, including tests for brucellosis, chronic wasting disease, avian influenza, and rabies, and milk and egg inspections. The total number of tests has increased dramatically in recent years, largely due to increased testing of cattle for brucellosis. In 2005, the VDL conducted 35,832 livestock tests compared to 183,299 in 2009. The number of wildlife tests more than doubled in that same time period. (Appendix G)

A site visit on August 19, 2009, revealed an aged facility that presents daily challenges to work efficiency, especially in the face of increasing workload. The physical infrastructure appears severely lacking, though Dr. Layton says the laboratory has great equipment.

Quarters for lab personnel and equipment are cramped. Closets are used for lab space. The facility's heating and cooling systems are largely inadequate for the laboratory's sensitive equipment. In the Virology Lab, for example, there is no cooling system in a room that houses several freezers with compressors that generate a lot of heat. The door to that room has been removed (pictured right), so that the air conditioning unit in the wall across the lab (pictured left) can blow cool air into the room. The building also has exterior walls made almost entirely of windows that Dr. Layton says use up valuable space and make regulating indoor temperatures difficult.



A/C Unit, VDL

Freezer room, VDL

Photos by Hope Stockwell

Biosecurity is also a concern. Inadequate space and a poorly designed floor plan require personnel to transport potentially infectious agents throughout the facility during testing processes. And the VDL lacks an in-house Biosecurity Level-3 (BSL-3) space.

BSL-3 provides a high level of containment for work with infectious agents, complete with its own air handling and exhaust systems and specific decontamination and security procedures, to prevent the transmission of pathogens. The VDL has access to a BSL-3 lab, built and operated by MSU next door. However, that facility lacks the equipment the VDL needs. To use it, the VDL would have to move its equipment into the BSL-3 area. But once the testing was complete, BSL-3 decontamination protocols would prevent the VDL from removing its equipment. This makes use of this BSL-3 space palatable only in an extreme emergency.

The usefulness of a BSL-3 lab isn't limited to emergencies if it and the proper equipment are available. The Public Health Lab operated by DPHHS conducts all of its tuberculosis testing in a BSL-3 lab in Helena. Meanwhile, Colorado State University's Veterinary Diagnostic Laboratories routinely conduct testing for brucellosis, anthrax, foot and

mouth disease, avian and swine influenza, tularemia, and Q fever in its BSL-3 facility. Lab Director Dr. Barbara Powers says this is to ensure that no pathogen escapes.

Colorado just completed construction of a new veterinary diagnostic lab, including 2,000 square feet of BSL-3 space, in response to its own poor accreditation review by the AAVLD several years ago. Powers is a member of the AAVLD accreditation committee and visited Montana's VDL in November 2007. Powers says Montana's VDL is in much the same condition that Colorado's had been: an aging facility that can't adequately provide for the safety of its personnel or its specimens, which threatens the accuracy of its diagnostics.[3]

Beyond biosecurity, the VDL has additional infrastructure issues.

- The electrical system is inadequate. The Milk Lab, for instance, trips breakers when it uses certain combinations of equipment at the same time. There is also a lack of electrical outlets and backup power. The facility has two small generators to power critical equipment during an outage, but otherwise keeps extension cords on hand in the various labs.
- In the necropsy area, the hoist system for carcass transport doesn't extend outside; personnel must manually lift and remove a carcass from the vehicle dropping it off.
- The MSU long range campus development plan envisions demolishing the building that houses the VDL in the next 10 to 25 years.

A member of the AAVLD accreditation committee visited Montana's VDL and said the lab is in much the same condition that Colorado's had been: an aging facility that can't adequately provide for the safety of its personnel or its specimens, which threatens the accuracy of its diagnostics.

By area, other concerns at the VDL include:

- Receiving area:
  - not enough space for handling of incoming samples; extra storage needed;
  - area is not isolated, samples must be brought through reception leaving possibility of contamination of reception area;

[3] Phone conversation, September 30, 2009.

- exhaust hood is improperly designed, doesn't enclose fumes, and is unusable;
- counter tops are wooden and porous, possible sanitation hazard;
- the ceiling leaks;

- Necropsy room:
  - the incinerator is 13 years old and the firebrick inside needs regular maintenance; when current repairman retires, Dr. Layton is unsure who will have the skills to continue;
  - there is no facility to hold a live animal overnight;
  - existing cattle chute is unused and could be converted to more storage space or a small in-house BSL-3 facility;
  - ceiling in tissue sample preparation area leaks;
- Bacteriology Lab:
  - no insulation in outer wall;
  - closet has been converted into additional lab space;
- Histology Lab:
  - ongoing difficulty with fumes and air handling;
- Milk Lab:
  - as FDA increases testing requirements, more space is needed;
  - a biosecurity cabinet has a gap between the bottom of the cabinet and the counter on which it sits, potentially allowing fumes, etc., to escape;
- Facility wide:
  - all ADA requirements are not met; an ADA-compliant bathroom was recently added;
  - more office space is needed.

Asbestos also is a consideration throughout the facility. Worn and cracked asbestos floor tiles in the main hallway have been replaced. However, in the Media Prep Room, where testing kits are prepared, asbestos tiles were removed but never replaced (pictured left). Wood cabinets in the same room are aged and peeling (pictured right).

Media prep room, VDL
Photos by Hope Stockwell

Wildlife Laboratory - Department of Fish, Wildlife, and Parks

The Wildlife Laboratory administers the state wildlife health monitoring and epidemiology programs. This includes evaluation and aging of furbearer species and targeted disease surveillance among several species, e.g., chronic wasting disease, brucellosis, and avian influenza. The Wildlife Lab also supports large wildlife capture operations, investigations into human-wildlife conflicts, and other investigations/services as needed.

The Wildlife Lab is located across the street from the VDL (see map, Appendix H) but is a much smaller facility, consisting of office space, a necropsy room, walk-in cooler/freezer, a small cabinet-sized pharmacy located in a closet, storage, and a room housing a centrifuge, blood collection containers, and a deep freeze.

As part of the disease monitoring program, staff prepare and mail thousands of testing kits to hunters to collect blood samples from elk, moose, and other animals. The resulting samples are then sent to the VDL for analysis, as the Wildlife Lab doesn't have the equipment to do so itself.

The Wildlife Lab uses its necropsy room extensively in wildlife-related investigations. Neil Anderson, director of the Wildlife Lab, says FWP conducts 90% of its own necropsies, including those related to poaching cases. The other 10% are sent to the VDL. (The Wildlife Lab also uses the incinerator at the VDL for carcass disposal.)

Necropsy room, Wildlife Lab
Photo by Hope Stockwell

Of particular concern, Director Anderson says that while his lab has the potential to see the same kind of pathogens the VDL handles, the Wildlife Lab lacks any type of biosecurity. Anderson says his lab conducts necropsies on animals that have died from unknown causes and occasionally comes across pathogens that may be human health concerns (possibly anthrax, plague, and others). The lab is open to regional staff and the public, and because of inadequate work space, Anderson says, necropsies are conducted in an area where staff, work-study students, and the public could be exposed to these pathogens.

Of particular concern, Director Anderson says that while [the Widlife] lab has the potential to see the same kind of pathogens the VDL handles, the Wildlife Lab lacks any type of biosecurity.

Besides his concerns about biosecurity, Director Anderson outlined what he perceives as the facility's short- and long-term needs in the Wildlife Laboratory Inventory included in Appendix F.

A legislative staff site visit on August 19, 2009, revealed that the Wildlife Lab, built in 1988 behind the regional FWP office building, is aging and running out of room for staff, equipment, and storage. The lab's main room doubles as a mailing area/break room and houses microscopes and a freezer for specimens.

The following facility concerns were observed by legislative staff during the site visit:

- Front office:
  - the foundation has settled under this corner of the building, resulting in cracks in three walls;
- Necropsy room:
  - exhaust hood is not enclosed — pulls air, including potential pathogens, across staff as they work;
  - hoist doesn't extend fully into the walk-in deep freeze, requiring staff to manually carry carcasses, including grizzlies;
  - the walk-in deep freeze and cooler are a regional facility, meaning they store carcasses from a large geographic region; space is at a premium.

Analytical Lab - Department of Agriculture

The Analytical Lab shares a facility and equipment with the MSU Agriculture Experiment Station on the MSU campus, providing testing for a fee to researchers, ranchers, the public, and other parties. The Analytical Lab analyzes pesticide residues in surface and ground water, soil, vegetation, animal tissue, and clothing and verifies product ingredients in pesticides, animal feed, and fertilizer. These tests are conducted for state and national regulatory agencies.

Analytical Lab, Bozeman
Photo by Hope Stockwell

A site visit on August 19, 2009, found that space is at a premium at this facility, e.g., closets have been converted for lab space. However, Director Heidi Hickes says the building — a remodeled 1952 structure — meets all of the lab's analytical and staffing needs. Hickes says the building is the right size, is in the right location, and has been invested in heavily over the years to meet the needs of expanding analytical requirements — including the addition of air-conditioning in all working rooms and specialized venting and electricity. Hickes says the Analytical Lab is not seeking, nor does it need, to move to another location.

The long-term future of the building is in question, however. MSU College of Agriculture Dean Jeff Jacobsen says that the university's long range campus development plan (Appendix I) envisions moving the Analytical Lab and Agriculture Experiment Station from their current location to a new, yet to be constructed facility and yet to be determined location, in the next 10 years.

Feed samples, Analytical Lab
Photos by Hope Stockwell

Feed and fertilizer sample prep and analysis lab

Environmental and Public Health Labs - Department of Public Health and Human Services

The Department of Public Health and Human Services operates two labs in the Cogswell Building in Helena, the Environmental Lab on the first floor and the Public Health Lab on the second floor.

The Environmental Lab provides a host of services related to public health, many involving water safety, including testing public water supplies for compliance with EPA standards and checking private well samples for the presence of nitrates and metals such as arsenic, lead, and copper. The Environmental Lab also houses organics and chemical terrorism labs that can test for the presence of cyanide, gasoline, and pesticides in water and blood samples.

The Public Health Lab provides testing for newborn screening and food safety, including salmonella, and many infectious agents, such as tuberculosis, influenza, parasites, West Nile, HIV, hepatitis, and sexually transmitted diseases. In its BSL-3 facility, the Public Health Lab can also conduct tularemia, anthrax, and brucellosis testing as

needed. The VDL sends positive anthrax samples here for confirmation testing. DPHHS, meanwhile, has agreements with the VDL and Analytical Labs to use their facilities and equipment in Bozeman if the DPHHS labs are incapacitated by an emergency.

Both the Environmental and Public Health Labs have undergone renovations since 2003, largely to modernize the facilities, improve air handling and temperature controls, and add the BSL-3 area. The final stage of construction was to be finished in August 2009 but wasn't completed until June 2010.

Inside the BSL-3 room at the Public Health Lab
Photo by Hope Stockwell

Both the Environmental and Public Health Labs have undergone renovations since 2003, largely to modernize the facilities, improve air handling and temperature controls, and add the BSL-3 area.

The labs' director, Anne Weber, says the labs are in good shape after the renovations, except that there have been lingering problems with the new exhaust and air handling systems, such that the labs are unable to maintain constant temperature controls, a problem for their sensitive equipment. Weber has been working with the contractor and the state Architecture and Engineering Division, which has oversight of the remodeling contract, to resolve these problems.

Given the constantly changing nature of laboratory technology and testing requirements, Weber says, the renovated labs have been designed for maximum flexibility. This includes the installation of rolling cabinets and counter tops that can be moved if the space needs to be redesigned in the future.

State Grain Lab - Department of Agriculture

The State Grain Lab (SGL) in Great Falls tests the quality and condition of more than 20 commodities grown in Montana, including wheat, barley, mustard, peas, and lentils. As staff of the only federally licensed inspection facility in the state, grain lab workers traveled nearly 50,000 miles between July 2009 and March 2010, providing elevators and producers with the sampling and testing services required to ship grain for federal contracts. Producers also use the SGL as an independent, third-party service to confirm the results of tests conducted by elevators. The workload at the SGL is seasonal and associated with the harvest season; peak activity begins in July and extends until December. The SGL fulfills the department's statutory requirement to maintain an official protein testing laboratory. The test results are regularly provided to the Montana Wheat and Barley Committee for use in marketing Montana's grain to foreign buyers.

State Grain Lab, Great Falls
Photo by Hope Stockwell

As staff of the only federally licensed inspection facility in the state, grain lab workers traveled nearly 50,000 miles between July 2009 and March 2010, providing elevators and producers with the sampling and testing services required to ship grain for federal contracts.

The SGL's main building is an approximately 8,000 square foot structure, built in 1935. A major remodel is getting under way to improve workflow and make energy upgrades. The estimated $630,000 project will be funded primarily with $525,000 appropriated by the 2009 Legislature and $70,000 from the Montana Wheat and Barley Committee. The committee, which is attached to the department, often assists the SGL with facility and equipment purchases using assessments charged per bushel of wheat and barley.

The majority of the SGL's work is with elevators and producers in north-central and northeastern Montana. However, timely services in the northeast are hampered by distance. To meet customer demand for

increased services in that area, the SGL plans to hire an inspector in Plentywood in June 2010. The position would be part-time to start, with hopes to expand to full-time during harvest. An SGL customer in Plentywood has offered a low-cost space to house the inspector. Once fully functional, the location would require approximately $50,000 in equipment. The SGL expects to seek financial assistance from the Wheat and Barley Committee and the Montana Pulse Crop Advisory Committee (peas, lentils, chickpeas, fava beans).

Certified inspector checks a wheat sample for quality
Photos by Hope Stockwell

Dockage machines at State Grain Lab separate wheat from chaff

Seed Lab at MSU-Bozeman

The Seed Lab is statutorily required and operated by MSU as a part of the MSU Agriculture Experiment Station in Bozeman. As an MSU lab the Seed Lab is outside the scope of the SJR 14 study. However, legislative staff analyzed its conditions and those of the SGL at the request of Greg Ames, administrator of the Agricultural Sciences Division of the Department of Agriculture. The EAIC approved this request at its March 30, 2010, meeting.

The request to analyze the Seed Lab was due to its ongoing funding difficulties. In the spring of 2009, the Seed Lab laid off two of its four analysts, due to budget reductions, leaving a workload too great for those remaining. The lab hires temporary workers during peak times to help out. However, the lab has had to recommend to some customers that they send their samples elsewhere because the lab can't complete the work in a timely fashion. Overall, MSU officials say the lab has lost upwards of 20% of its business, compounding its financial problems. Greg Ames is concerned about the

long-term viability of the Seed Lab because his division relies on the lab to analyze seed dealers' product samples for the department's "truth in labeling" regulatory program.

Part of the Seed Lab's funding issue is driven by the way statute requires its testing fees to be set. Section 80-5-110, MCA, dictates that while the Seed Lab is operated by MSU, its testing fees are set by rulemaking through the Department of Agriculture. The Seed Lab has submitted two requests in the last 2 years to increase its fees. Both were denied by the department. This appears to be a violation of statute, which states that the testing fees shall be set as recommended by the Agricultural Experiment Station.

Ames suggests the Seed Lab could be collocated with the SGL to improve the Seed Lab's viability. However, the SGL doesn't currently have the necessary space, equipment, and trained staff to take on the Seed Lab's functions, nor does the Seed Lab have space for the SGL. Moving either lab to the other would also disrupt each lab's current proximity to its core customers. SGL employees already put on thousands of miles making trips between the lab and its customers to the north. Being based in Bozeman would only add to the total. Conversely, the Seed Lab is currently located next door to the Seedgrowers Association, which has close ties to the lab and even provides staff oversight since the departure of the lab's director. Moving either lab would also raise budgetary questions and the possible need to adjust pay bands to account for changes in cost of living.

Given these considerations, the EAIC voted on May 26, 2010, to recommend that no action be taken to move the SGL from Great Falls because it's serving its customers in north-central Montana and northwest of Great Falls well. The EAIC also stated that it didn't want to proceed with further analysis of the Seed Lab.

Findings on Facilities

- Both the Veterinary Diagnostic Lab and Wildlife Lab appear to be in need of additional space better suited to their mission and function.

- While the Analytical Lab director says that facility is sufficient for the lab's testing and staffing needs, the MSU long range campus development plan doesn't show the lab at the same location in 10 years. A new location has yet to be determined.

- The MSU long range campus development plan envisions demolishing the building that houses the VDL in 10 to 25 years.

- Both the Environmental and Public Health Labs are newly renovated and in sufficient condition, except for lingering difficulties with the new air handling system.

- The State Grain Lab in Great Falls is serving its customers in north-central Montana and northwest of Great Falls well. On May 26, 2010, the EAIC recommended that no action be taken to move the SGL from its current location.

- The EAIC does not wish to proceed with further analysis of the Seed Lab at MSU-Bozeman at this time.

The Future

Based on the above findings, the following is a discussion of potential options for addressing the needs of the labs, while encouraging continued and additional cooperation between them. Assuming that trying to collocate all of the labs in either Helena or Bozeman would be an insurmountable challenge given the need to relocate entire staffs, and considering the recent remodeling of the Public Health and Environmental Labs, the following discussion focuses on possible options for the Veterinary Diagnostic, Wildlife, and Analytical Labs in Bozeman.

A New Joint Laboratory

Considering the existing cooperation between the VDL and the Wildlife Lab, some similarity in mission, and the mutual need for updated facilities, a new, combined building could be constructed or leased to serve both labs' needs. Officials with the Departments of Livestock and Fish, Wildlife, and Parks have expressed support to legislative staff for a joint lab concept.

Considering the existing cooperation between the VDL and the Wildlife Lab, some similarity in mission, and the mutual need for updated facilities, a new, combined building could be constructed or leased to serve both labs' needs.

Possible Design Considerations

Possible design considerations include:

- a shared loading dock/receiving area for animals or carcasses with a communal hoist system that reaches the delivering vehicle and extends fully into a common cooler, freezer, and necropsy area for improved work efficiency;
- separate necropsy rooms may still be needed to accommodate the work and workload of each lab and to prevent cross-contamination;
- though separate coolers and freezers may also be needed, there could still be economies of scale in constructing these coolers and freezers within the same area of the building, sharing walls, power sources, etc., coolers in existing facilities might also be moved and reused in a new facility;
- a shared incineration area for carcass disposal;
- shared specimen and test kit preparation areas;

- continuation of shared diagnostic resources, with VDL staff and equipment continuing to conduct analysis of Wildlife Lab samples;
- a shared BSL-3 area for diagnostic testing and, when needed, necropsies;
- sufficient office and storage space for personnel, records, etc.

Location

Option A: Given the uncertainty of the Analytical Lab's future location on the MSU campus in the long range development plan, a new, joint facility could include the Analytical Lab. College of Agriculture Dean Jeff Jacobsen indicated that a new Analytical Lab could be built on MSU property southwest of the existing Veterinary Diagnostic Lab. Could a joint facility for the three labs be built on this site, or an off-campus site, assuming there would be greater economies of scale in construction of three labs in one?

Discussion points:

- The director of the Analytical Lab, Heidi Hickes, has expressed concern that a lack of similarity in mission, and need to maintain certain pesticide testing standards, makes the idea of housing all three labs in the same facility unpalatable. Dean Jacobsen disagrees.
- These labs house potentially explosive materials, including compressed gases. Is there any increased risk in locating the labs in the same facility?
- Economies of scale in construction of three labs in one may not increase that much over the combination of two facilities. Further analysis would be required.

Option B: Lab space used by the MSU Department of Veterinary Molecular Biology, operated by the College of Agriculture, is located in a leased building adjacent to the MSU campus. The private development in which this building sits is billed as a "science park" and may include other space where a joint Veterinary Diagnostic, Wildlife, and Analytical Lab could be housed. The developer outfitted the MSU lab space to the college's specifications. However, according to Dean Jacobsen, both the developer and lab personnel agree in retrospect that more durable goods should've been used in the initial construction. Halfway through a 15-year lease, Jacobsen says, the facility is showing wear and tear. A discussion of the pros and cons of leased vs. owned space is included later in this report.

Option C: MSU is halfway through its 15-year lease for the lab space used by the Department of Veterinary Molecular Biology. In the future, Dean Jacobsen says, MSU

could consider constructing a new 100,000 square foot building, at an estimated cost of $40 million, that would house the department and other biomedical academic units. However, Jacobsen stresses this vision is not currently included in MSU's long range campus development plan, and a possible construction date and funding source are unknown. Jacobsen says there are multiple possible locations for a building of this nature on campus, including a site north of the existing Veterinary Diagnostic Lab. Could the state partner with MSU to construct this building and include space for the VDL, Wildlife, and Analytical Labs? Could this construction be done in phases to accommodate the state agency labs more quickly and then the MSU Department of Veterinary Molecular Biology when its lease has concluded? Dean Jacobsen says he and other MSU officials could be interested in this concept.

Other considerations

- Space on the MSU campus is highly prized and requires specific use agreements with the university. Is an off-campus location for a state lab facility more economical and palatable? Does moving the Executive Branch labs off of the campus open more needed space for university activities?
- Housing several labs in one location leaves fewer contingencies for emergencies.

Cost and Efficiency

At the request of Legislative Services, Jim Whaley, chief of the Design and Construction Bureau at the Department of Administration, provided a cost evaluation for the construction of a new facility to house the Veterinary Diagnostic, Wildlife, and Analytical Labs in Bozeman. (Appendix J) Based on his own site visits and review of the functions of each lab, and using standard estimating guidelines for a college laboratory, Whaley estimated a new facility could cost about $7.5 million in 2010 construction dollars. This figure doesn't include the cost of any acquisition of land, if necessary.

Whaley's estimate breaks down to about $275/square foot. For comparison, Colorado's newly constructed lab cost about $439/square foot[4] and Wyoming, which is adding about 10,000 square feet to its existing facility, is paying about $1,700/square foot[5].

[4] Phone conversation, Barbara Powers, September 30, 2009.

[5] Phone conversation, Don Montgomery, Director, Wyoming Veterinary Diagnostic Lab, September 28, 2009.

Whaley's estimate is for a facility with roughly the same square footage of the existing three labs combined. After his site visits in November, Whaley stated that he didn't see much opportunity to consolidate lab space due to the varied nature of the individual labs' functions and missions.[6] Whaley says the labs could be more efficient and are certainly antiquated. But Whaley questions why the state wouldn't just renovate the existing facilities, since there doesn't seem to be much opportunity to consolidate space and gain efficiency in that way.

Whaley says renovation is usually less expensive than new construction and could be more cost-effective in this case, though it would disrupt normal work at the labs and possibly displace workers. Whaley says he believes the Wildlife Lab would benefit from having a necropsy room that's comparable to the one at the VDL, though Whaley saw a downside in moving the Wildlife Lab away from its location behind the regional FWP office, which provides easy access for wardens and other FWP staff who need to visit both buildings.

This study did not contemplate the cost of additional renovations at the labs. When discussing Jim Whaley's comments, the director of the VDL, Dr. Layton, questioned whether trying to renovate his facility, particularly the air handling system, would actually be more cost-effective.

Barbara Powers says that her impression from visiting the VDL in November 2007 was that renovations would be difficult because of the facility's age.[7] Powers went on to say that portions of the facility don't meet biosecurity standards as far as people going in and out of certain areas, being able to separate 'dirty' and 'clean' areas, and being able to correct temperature modulations. Powers says the staff is doing the best it can with what it has, but the facility is not keeping pace with the modern state of diagnostic medicine.

Building vs. Leasing

If a new facility were to be constructed to house any of the state labs in Bozeman, the question becomes whether that facility should be state-owned or leased. Generally speaking, a state-owned building is now believed to be more cost-effective than leasing

[6] Phone conversation, November 30, 2009.

[7] Phone conversation, September 30, 2009.

in the long run. In the 1980s, that wasn't the case. Two separate analyses conducted by the Legislative Audit Division (one in 1984 looking at state office space in Bozeman, one in 1987 evaluating space in Helena) concluded that it was less expensive to continue leasing space at that time. In the mid-1990s, the trend reversed. Two analyses conducted by the Department of Administration and the LAD in Helena found that state-owned space had become more cost-effective.

In the LAD's 1997 analysis, the perceived downsides of a state-owned building were loss of tax revenue for local jurisdictions, a loss of flexibility, and the long-term responsibility for maintenance and improvement costs. The LAD analysis found that the normal, useful life of a building is 40 years and that while buildings can and do last longer than that, major maintenance may be required beyond that time. While that may seem to be an argument against owning a building, the LAD analysis determined those costs may be calculated into and paid by the state under the terms of a lease anyway.

In 2007, the value of owning over leasing led the state to purchase the 7-year-old Forensic Science Building (forensic lab), which the Department of Justice had been leasing in Missoula for about half a million dollars a year. The Legislature approved the purchase after DOJ estimated it could save $5.7 million over a 30-year period by owning the building. DOJ's analysis was based on its expectation that the cost of the lease would double when the contract was renegotiated in 2015, with expected 15% increases every 5 years thereafter. In its analysis, DOJ remarked that while the risk of owning the building included future costs of renovation, the lessor had "definite negotiation advantages when setting future lease costs – because of the specialized requirements for the building, the Forensic Science Building cannot easily relocate to another building." Ultimately, the state bought the building for $7.25 million, saving an estimated $7.5 million over 30 years, almost $2 million more than first predicted due to the final purchase price.

Other considerations

- Long-term durability of goods used to construct a building and outfit the space (recall the discussion of lab space used by MSU's Department of Veterinary Molecular Biology);
- Specialized equipment needed for a laboratory and maintenance responsibility for that equipment; and
- Finance and funding options.

Finance Options

If a state-owned building were constructed to house laboratories in Bozeman, several finance options could be considered, including:

- a general fund appropriation by the Legislature;
- issuance of a general obligation bond, typically for a 20-year term;
- financing through the Board of Investments (BOI). The BOI could either finance a new building via a mortgage, as it did with the existing Department of Public Health and Human Services Building, or purchase and hold the building as an investment in the pension portfolios. A minimum of 7.5% to 8% percent return would likely be required by the BOI. Debt service would be structured according to the requirements of the BOI; and
- a public-private partnership, which could be structured in several ways. One option is to contract with a private developer to construct a new building according to the state's specifications. The state would then lease the building from the developer. A lease/purchase agreement could be structured to provide the state an option to purchase the building at the end of some specified period of time. Lease payments would be paid by the agencies occupying space in the new building.

Other funding possibilities include securing federal moneys or matching grants to offset the outlay of state funding or a campaign to raise donations from private individuals, businesses, or organizations similar to fundraising campaigns recently used by MSU to construct other buildings.

Alternatives to a New Joint Laboratory

One alternative to construction of a new joint laboratory is renovating existing spaces, though as discussed in the section of this report titled "Cost and Efficiency" there's disagreement whether renovating the existing facilities would actually be more efficient. Analysis of the cost of renovations would require further study.

Another alternative raised is the possibility of privatizing or outsourcing the services provided by some state labs, specifically the Veterinary Diagnostic Lab. Dr. Layton told the EAIC that private labs typically provide small animal testing and don't do the kind of work on large animals that's conducted by state labs due to a lack of profitability. Dr. Barbara Powers provided written comments (Appendix K), stating that the USDA will use only AAVLD accredited labs for regulatory testing, such as brucellosis and

tuberculosis, and will not delegate this type of work to private labs. Dr. Powers says state labs are viewed to be more unbiased and free of any conflicts and are considered to be more reliable when it comes to collecting and transmitting relevant data to the appropriate public health officials. All of the 62 labs included in the National Animal Health Laboratory Network, including the VDL, are state labs.

A comparison of lab testing fees and turnaround times was conducted in an effort to evaluate the impacts of privatizing or outsourcing VDL testing services. A private lab with comparable testing services could not be found, but five other state labs (CO, MI, MN, WA, and WY) were chosen for comparison. The results, provided in Appendix L, found that the VDL charges the least expensive fee about 50% of the time. The VDL is the first or second least expensive about 83% of the time. Three states (MT, MN, and WA) tack on out-of-state surcharges, which Dr. Powers says is done to avoid subsidizing out-of-state tests with local funding sources. The cost comparison did not account for any additional shipping fee and time delay associated with sending samples to another lab.

Funding Issues

Veterinary Diagnostic Lab Budget

As mentioned in the "Background" section of this report, the AAVLD has expressed concern about the condition of the funding of the VDL, saying that the staff's efforts to maintain the lab's accreditation and achieve adequate facilities and a quality system are hampered by inadequate resources. Funding, of course, is a consideration in the discussion of whether to renovate or build a new facility

Currently, the VDL is supported with general fund, animal health fees (lab charges), per capita fees (head tax), and a small portion of federal funds. During state fiscal year 2008, the lab received a nonbudgeted transfer of funds from the per capita fund due to lower than anticipated revenue from the lab fees. Due to this incident, the Executive Branch proposed to increase funding from the per capita fund and decrease the animal health fees.

The 2009 Legislature debated the funding mechanism for the lab at various points in the process. The big issues included determining how much general fund represented the public health portion of the lab's activities, the reasonableness of the fees charged by the lab, the condition of the per capita fund, and how to ensure the lab does not become overdependent on general fund appropriations. In the end, the Legislature approved the following FY 2010 (or base) budget for the VDL.

Department of Livestock
FY 2010 Diagnostic Lab Base Budget

Fund	Appropriation	Percentage
General Fund	$421,109	24.0%
Per Capita Fees	250,225	14.3%
Animal Health Fees	1,070,788	61.1%
Federal Funds	9,897	0.6%
	$1,752,019	

In order to address the need for extra cash, the Legislature supplemented the VDL's base funding with one-time-only general fund of $172,350 in FY 2010 and $11,100 in FY 2011. This funding would be available if or when the lab faced a shortfall in funding. As per state law, the lab is required to expend nongeneral funds (per capita, animal health, or federal funds) prior to expending state general fund.

As the biennium has progressed, the general fund ending fund balance has dropped significantly. Because the ending fund balance dropped below 2% of all general fund appropriations, the Executive had to call for budget reductions per state law.

This situation places the VDL in a precarious position. First, the department suggested a $9,597 general fund reduction to the lab. This will slightly decrease the lab's base budget for consideration in the 2011 session. In addition, the one-time-only nature of the supplemental funding means that it will not be in the base for the next set of budget deliberations. Given the declining status of the general fund, it is difficult to determine if the Legislature will consider extending this supplemental funding.

Overall Financial Picture

The decline in Montana's general fund adds another dimension to any legislative discussion about the future of the facilities for the Veterinary Diagnostic, Wildlife, and Analytical Labs and any possible renovations or consolidation and construction of a new building. This raises the question of how and whether the concerns raised by the AAVLD about the VDL and its provisional accreditation (granted through December 2010) can be addressed.

Barbara Powers with the AAVLD accreditation committee says that in these economic times the accreditation committee can be relatively lenient about requiring a lab to have a new building in place by a certain date.[8] But she says the committee does need to see evidence of a plan, or funding, to show a lab is moving forward. In Montana's case, Powers says the committee wants to see a plan that something is being done to address the situation, although the necessary legislative process may take time.

[8] Phone conversation, September 30, 2009.

Importance of Maintaining Accreditation

Dr. Powers says that losing accreditation with the AAVLD would have many implications and could virtually shut down a laboratory.[9] The National Animal Health Laboratory Network, which coordinates disease surveillance and animal testing, requires associated laboratories to be accredited. The Montana livestock industry predominantly exports cattle to other states and countries, which frequently require disease surveillance testing. Importers demand that test results be accurate, and most will accept results only from accredited laboratories.[10]

Dr. Layton says the VDL's accreditation with the AAVLD was considered a significant factor in the USDA's decision to reestablish Montana's brucellosis-free status in 2009. If the VDL were to lose accreditation, the state may have to outsource brucellosis and other testing to an accredited lab, which would create inefficiencies and slow the receipt of results.[11] The VDL could also lose revenue sources associated with other lab functions requiring accreditation.[12]

[9] Phone conversation, September 30, 2009.

[10] Memo from Dr. A.W. Layton to the Economic Affairs Interim Committee, December 8, 2009. (Appendix B)

[11] Phone conversation with Barbara Powers, September 30, 2009.

[12] Ibid.

Findings and Recommendations

After considering the above analysis, the EAIC:

- voted on May 26, 2010, to recommend that the possibility of combining the VDL and Wildlife Lab in a joint facility be included in long range building process discussions in hopes of improving collaboration, communication, and workflow between the labs.

- sent letters (Appendix M) to the executive officer of the Department of Livestock, the chair of the Board of Livestock, the director of the Department of Fish, Wildlife, and Parks, and the President of MSU-Bozeman asking them to have a coordinated discussion about the possibility of joining the Veterinary Diagnostic and Wildlife Labs together on the MSU Campus. The goal would be to increase collaboration and communication between these state labs and various academic units at MSU while improving workflow, biosafety, and budgetary conditions for all.

- sent a letter (Appendix N) to the American Association of Veterinary Laboratory Diagnosticians, Inc., Accreditation Committee stating that the EAIC understands the importance of and supports maintaining the VDL's full accreditation with the AAVLD to fulfill the VDL's mission to monitor and protect animal and public health. The EAIC asked the AAVLD Accreditation Committee to recognize the progress being made to address the conditions of the VDL and to approve continued accreditation of the facility as the Department and Board of Livestock, the Department of Fish, Wildlife, and Parks, Montana State University, and the Legislature continue to discuss the laboratory's future.

Appendix A

A JOINT RESOLUTION OF THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE STATE OF MONTANA REQUESTING AN INTERIM STUDY TO EXAMINE THE POSSIBILITY OF STATE AGENCIES DEVELOPING AND MAINTAINING JOINT LABORATORY FACILITIES FOR TESTING RELATED TO WILDLIFE, LIVESTOCK, AGRICULTURE, AND PUBLIC HEALTH; AND REQUIRING THAT THE FINAL RESULTS OF THE STUDY BE REPORTED TO THE 62ND LEGISLATURE.

WHEREAS, several state agencies maintain separate laboratories for testing related to wildlife, livestock, agriculture, and public health; and

WHEREAS, some state laboratories face space and budget constraints; and

WHEREAS, potential efficiencies could exist to encourage development and maintenance of shared laboratory facilities; and

WHEREAS, the state could save money if existing laboratories could be consolidated.

NOW, THEREFORE, BE IT RESOLVED BY THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE STATE OF MONTANA:

That the Legislative Council be requested to designate an appropriate interim committee, pursuant to section 5-5-217, MCA, or direct staff resources to:

(1) conduct a review of existing laboratory facilities operated by the state of Montana;

(2) identify areas of potential overlap or similarity of testing procedures among state laboratories conducting testing related to wildlife, livestock, agriculture, and public health;

(3) explore the possibility of consolidating laboratories, as well as the benefits and drawbacks of consolidation;

(4) identify potential savings to the state if two or more laboratories could be consolidated into a shared laboratory; and

(5) examine potential sharing arrangements that could be made between state agencies that wish to or should share laboratory space.

BE IT FURTHER RESOLVED, that if the study is assigned to staff, any findings or conclusions be presented to and reviewed by an appropriate committee designated by the Legislative Council.

BE IT FURTHER RESOLVED, that all aspects of the study, including presentation and review requirements, be concluded prior to September 15, 2010.

BE IT FURTHER RESOLVED, that the final results of the study, including any findings, conclusions, comments, or recommendations of the appropriate committee, be reported to the 62nd Legislature.

DEPARTMENT OF LIVESTOCK
DIAGNOSTIC LABORATORY DIVISION

BRIAN SCHWEITZER, GOVERNOR

P.O BOX 997

STATE OF MONTANA

(406) 994-4885
FAX (406) 994-6344

BOZEMAN, MONTANA 59771-0997

December 8, 2009

To: Economic Affairs Interim Committee

From: Dr. A. W. Layton, Director, Montana Veterinary Diagnostic Laboratory

Re: Importance of maintaining AAVLD accreditation

An accreditation body determines or establishes standards considered essential by the members of that profession and assures compliance in adhering to these standards by conducting periodic and independent inspections of the accredited institution. A diagnostic laboratory review process analyzes the institution's quality programs and policies, personnel qualifications, facilities, the quality and reproducibility of their product and customer service and satisfaction. A formal analysis summarizes how well the institution is meeting these professional standards and provides comparison to other like institutions. Strengths and weaknesses are identified by the inspection and the accreditation body usually issues recommendations or requirements to the inspected institution that guarantee compliance with the accreditation standards. Put simply, accreditation review is an independent, competency audit. Obtaining accreditation by an independent, professionally recognized organization has become common place for many institutions and is now essential for all areas of the medical profession.

The Montana Veterinary Diagnostic Laboratory (MVDL) is the only full service veterinary diagnostic laboratory in the state of Montana and is provisionally accredited by the American Association of Veterinary Laboratory Diagnosticians (AAVLD). The AAVLD is a renowned accreditation body for veterinary diagnostic laboratories with 42 non-commercial laboratory systems being accredited in the United States and Canada and the majority of these laboratories are affiliated with veterinary colleges.

The Montana livestock industry predominantly exports cattle to other states and countries and most of the tests performed at the MVDL allow for the movement of livestock and/or their products. All states and countries frequently require import surveillance testing to minimize the potential of disease introduction. Importers demand that test results be accurate and most will only accept results from accredited laboratories. After Montana's brucellosis status was downgraded, the MVDL performed over 194,000 brucellosis tests to meet importation requirements placed upon the Montana cattle industry in order to continue to sell and move animals and their products. The Montana cattle industry could not have continued business if confidence in the test results was at issue. In addition, the fact that the MVDL was accredited by the AAVLD proved to be a significant piece of information that was considered by the USDA in 2009 upon reinstituting Montana's Brucellosis-free status. For the foreseeable future, the MVDL will continue to play an active roll in providing the livestock industry the required testing procedures that permit the sale and movement of the industry's product.

AAVLD accreditation validates the personnel competence and the testing procedures conducted by the MVDL. Being an accredited laboratory assures the public, veterinary and medical professionals, and state and international regulatory officials that the MVDL meets national and international laboratory standards of practice. If not for this independent evaluation, confidence in test results would rely solely on the assertions of the laboratory administration.

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AAVLD Accreditation Committee
American Association of Veterinary Laboratory Diagnosticians, Inc.
PO Box 647034
Pullman, WA 99164-7034

April 21, 2008

Dr. A.W. Layton, Director
Montana Department of Livestock
Montana Veterinary Diagnostic Laboratory
PO Box 997
Bozeman, MT 59771

Dear Dr. Layton,

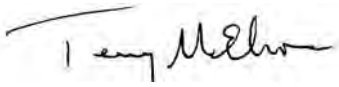
The Accreditation Committee of the American Association of Veterinary Laboratory Diagnosticians has discussed the Accreditation Audit Report received from the review team that visited your laboratory October 28-30, 2007. A copy of this report is enclosed. Following discussion of the report, the Committee voted to grant the Montana Department of Livestock Veterinary Diagnostic Laboratory Provisional Accreditation status for a maximum period of 1 year, through calendar year 2008. By definition of the *Essential Requirements for an Accredited Veterinary Medical Diagnostic Laboratory* of the AAVLD, a provisionally accredited laboratory is one that does not meet the essential requirements and guidelines but shows intent to do so.

Provisional accreditation is granted conditional on a satisfactory written response to non-conformances, including documentary evidence, by July 1, 2008**.** You may submit your response electronically to the Chair of the Accreditation Committee at the email address above. Your response will be considered at the July 2008 meeting of the Committee. In addition, an interim written and oral report demonstrating progress on addressing all Requirements and Recommendations in the enclosed report is requested at the October 2008 meeting of the Accreditation Committee. The Montana State Veterinarian and the Chair, or other member of the Livestock Commission, are invited and highly encouraged to address the committee at the October 2008 meeting. An additional written report addressing all Requirements and Recommendations is requested no later than February 1, 2009.

This laboratory has been provisionally accredited for many years. Progress toward achieving full accreditation is slow. While faculty and staff are supportive of achieving the goal of adequate facilities and a quality system, they are hampered by inadequate resources. If significant progress in meeting all Requirements is not made by February, 2009, accreditation of the Montana Veterinary Diagnostic Laboratory will be withdrawn.

The Committee looks forward to your response and progress toward achieving full accreditation. If there is need for clarification or follow-up to the actions of the AAVLD Accreditation Committee included herein, please do not hesitate to contact me.

Yours truly,



Terry F. McElwain, D.V.M., Ph.D.
Chair, AAVLD Accreditation Committee

Appendix D

To: Christian MacKay, Bill Layton
From: Becky Weed
Subject: Draft document for initiating Lab Planning Discussion with BOL
Date: 10 May 2008

Introduction

The need for long-term planning for the State Veterinary Lab has been building over many years. It has recently been brought into acute focus by the convergence of chronic funding shortfalls brought on by diminishing *per capita fee* revenue to the Department of Livestock (DOL); limited availability of State General Funds for departmental functions; and completion of the AAVLD Accreditation Report by a national review team. The accreditation report documents multiple factors which pose risks to the continued viability of our State Veterinary Lab unless measures are taken to update its facilities and financing.

The responsibility for long-term oversight of the State Veterinary Lab lies with the Board of Livestock (BOL). The BOL must, in turn, work with colleagues in the broader State Government to assess and manage its own needs in the context of related needs in the realm of public health, wildlife management, forensic and university laboratories within the State.

The purpose of this document is to spell out the nature of the challenge ahead for the Board of Livestock; to propose an outline of goals and strategies for the Montana Veterinary Lab; and to propose an approach for integrating DOL's Laboratory planning with that for other State laboratory capabilities. The reasons for considering such integration include financial and technical efficiencies, along with the educational opportunity afforded by acknowledging the interdependence of the State's livestock, wildlife, and human health. We will discuss these reasons more explicitly below.

Current Status of Lab Accreditation

The March Lab is currently operating under provisional accreditation. The recent review conducted by the AAVLD lays out a number of critical factors which potentially jeopardize ongoing accreditation of the State Vet Lab. Principal among these factors are non-competitive salary levels for key laboratory personnel, and outdated and/or deteriorating laboratory physical facilities. Although lab personnel receive both individual and collective praise for generally competent and timely service under difficult conditions, the AAVLD site visitors gave strong warning that this is likely unsustainable not only because of financial constraints, but also because the demands of international trade and biosecuity procedures will likely lead to increasingly stringent expectations for veterinary labs handling.

[we could have more specific discussion of the threats here or just refer to the AAVLD report?]

Current Status of Lab Funding

In fiscal year 2007, the DOL received _449,000_____$ from the General Fund, and _300,000?__$ from the *per capita fees* to support operations of the Marsh Lab. The Lab also has increased fees for lab services rendered to help offset costs, but that approach is not seen as a viable long-term solution. Christian MacKay and Bill Layton are anticipating a $____ budget shortfall based on recently invited personnel from the State Budget Office to tour the Marsh Lab and to confer in more detail on both short- and long-term needs for the Lab. That visit was informative for all, but it confirmed our sense that making a case for assistance from the General Fund is much more compelling to the Budget Office if it done in the context of specific, clearly justified demands, coupled with a solid rationale for a multi-year outlook for the lab.

Does the State need its own Veterinary Lab?

In a time of budget pressures and rapid information transmittal, it seems reasonable to ask if it makes sense for Montana to maintain its own veterinary lab, or could we more reasonably rely on out-of-state lab(s)? Indeed, we discussed this question explicitly during the AAVLD visit. Perhaps the simplest answer to this question came directly from one of the AAVLD reviewers. She is affiliated with the recently completed, large veterinary lab facility in Colorado: "If you had a substantial lab demand due to major testing required for , say, brucellosis or CWD, we wouldn't be able to add your samples to our own load and get them done in a timely manner."

State Vet Labs tend to be one of those government functions that we take for granted until we really need it, and the exercise of questioning whether we need an in-State lab forces us to consider all the reasons for having any lab capability at all. Whatever the BOL decides on for a long-term plan, we will have to communicate these lab functions both inside and outside the livestock industry to make our case. As ranchers our daily priorities focus on animal well-being and not disease; that is as it should be. However, the State Government cannot ignore the key functions that must be in place for routine trade needs, or for not-so-routine disease anomalies and/or full-blown health crises. These include:

[a statement here to include items from Christian's email and more]
- *commercial producers*
- *purebred producers*
- *vet practitioners*
- *public health connections*
- *economic implications*

What is needed to assure ongoing in-State Vet Lab capability?

We need to achieve higher salaries, updated facilities, more space, and a more stable funding system. Whether we seek to do that with bare-minimum step-by-step survival adaptations, by a more massive long-term investment, or by some assemblage between those two extremes, is what we must decide and design. In any case, it is not possible or desirable for the DOL to formulate a plan in isolation from other policy and funding issues that affect the state.

Rationale for coordination among all State labs and MSU?

The Marsh Lab provides diagnostic services that are important not only for the livestock industry, but also for monitoring and control of diseases that affect public health (e.g., rabies), and for animal health issues that potentially affect the State's economy (e.g., brucellosis, CWD, import/export activities, tuberculosis, etc.). Because of these specific connections to public welfare beyond ranchers alone, and because of a more general connection to the State's overall budget, the time is ripe is to consider coordinating plans among all the State labs together. The Lab System includes labs for Public Health, Fish, Wildlife & Parks, Forensics, Grains (?) and some University facilities, *[Bill please amend as needed],* as well as the DOL's Marsh Lab. The DOL Lab is not alone in facing budgetary pressures and accreditation concerns *[add evidence here],* and the State Budget Office is aware of this cross-departmental challenge.

The current lab system includes a variety of facilities, most of which are in Bozeman and Helena. Some are affiliated with the University; some are not. After preliminary conversations with other Lab personnel, University administrators, legislators, and budget personnel, it seems plausible that the State could achieve more efficient use of dollars, facilities, and training efforts if the whole lab system worked together toward a coordinated strategic plan. In addition, preliminary conversations with people who have observed Laboratory development in other States (e.g. Dr. Zaluski, the AAVLD accreditation visitors), confirm our sense that broad participation in a systematic investigation of State lab needs is necessary to achieve a fundable, effective plan. Because of the proximity of MSU and Marsh Lab and the important personnel resources available in Bozeman (both students and faculty), it seems sensible to maintain or even further emphasize Bozeman as the core of the Lab system.

Draft Strategy and time-line for building alliances and funding for updating and operating lab capabilities.\

We seek BOL approval to proceed with further investigation of the steps required to make a stable effective future for the Veterinary Lab. We envision that this will include more consultation with stakeholders within the livestock industry as well as Lab and University personnel, citizens, and legislators who are not solely focused on the livestock industry. Ultimately, it will be necessary to work with legislators from both parties to gather the support necessary to execute any plan. We believe that it is possible to make a strong bipartisan case for updating and supporting the State Lab system, including that Veterinary Lab. The process of justifying such budget planning has the added potential benefit of educating citizens and legislators about the interdependent nature of livestock, human and wildlife health in Montana and elsewhere.

(2) Response to occurrences of brucellosis in livestock:
The threat of state-wide loss of brucellosis Class-Free status for any of the states within the GYA is the principal driver for the massive attention (and money) directed to bison/elk/cattle interactions in the last several decades. This is a completely understandable condition given the history of brucellosis in this country and the economic reverberations of changes in brucellosis status. However, ongoing vigilance does not necessarily translate as stagnant rules; some contend that to best meet the needs of disease control we must adapt to changing conditions. Given that all fifty states in the U.S. have achieved Class-free status (since Texas just reached that milestone in recent weeks), we can now say that the disease is eradicated in the U.S. cattle industry, and that a small but finite risk remains due to exposure to infected wildlife in the GYA. Unmatched by any period in the last century, we now have the ability to target brucellosis occurrences on a par with management of rare human health diseases. In accordance with human health policies, it seems sensible to target such occurrences as sharply and as rigorously as we can (e.g. to a single ranch and contact herds), rather than blanket whole states, counties or other arbitrary large sectors with sudden and costly changes in protocol. Stringent livestock movement and inspection laws make such a targeted response feasible, and the logic of directing resources to the limited area of concern will help inspire the committed efforts of ranchers, brand inspectors, vets, auction yarn owners, or whoever has to contend with the practical realities of rapidly containing an outbreak.

A variety of individuals from the public and private sector are discussing this possible evolution of brucellosis response policy, so I will not prematurely discuss details here. I believe it should be an integral part of ongoing wildlife/livestock disease management as we move forward from this GAO Report. I believe that such an adaptation of brucellosis response policy is valuable not only for maintaining prudent animal health management, but will also be an invaluable prerequisite for developing a sane risk management approach that acknowledges the dual risk of pervasive elk with low seroprevalance of the disease and less numerous bison with greater seroprevalence. Then, and only then, will we be able to move toward management of bison as wildlife in a way that respects the needs of both animals and people.

Note: These comments reflect my own opinions and have not yet been reviewed by other members of the Board of Livestock (2-17-08) or Department of Livestock staff.

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AAVLD Accreditation Committee
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July 17, 2009

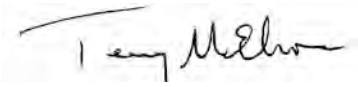
Dr. A. W. Layton, Director
Montana Department of Livestock
Montana Veterinary Diagnostic Laboratory
PO Box 997
Bozeman, MT 59771

Dear Dr. Layton,

Thank you for submitting the Montana Veterinary Diagnostic Laboratory's documents requested by the Accreditation Committee in their letter of December 8, 2008 as a follow-up to your response to the 2007 Accreditation Audit Report. The Accreditation Committee reviewed your documents at our July 2009 meeting and found them satisfactory. Provisional Accreditation is extended through December 31, 2010. The Committee requests an oral and written report to the committee regarding the Senate Bill 14 Feasibility Study, as well as an update on budget and personnel at the October 2010 Committee meeting.

The committee looks forward to your report and progress toward achieving full accreditation. If there are questions regarding the actions of the AAVLD Accreditation Committee, please do not hesitate to contact me.

Yours truly,



Terry F. McElwain, D.V.M., Ph.D.
Chair, AAVLD Accreditation Committee

Appendix F

VETERINARY DIAGNOSTIC LABORATORY INVENTORY

TAG NO		ROOM	DATE		DESCRIPTION			FROM		SERIAL NO		PRICE
		94	2/2/2006		Desk Lamp			MSU		E230863		$24.10
3960	G	94	11/19/2004		UPS Battery Back-up			Staples		AB0413349151		$39.98
3967	G	90	11/19/2004		UPS Battery Backup			Staples		AB0412146168		$39.98
		73	2009		Power Cyber PP1500					PPF6W2000050		$49.00
		73	2009		Power Cyber PP1500					PPF702000006		$49.00
		77	5-Feb		Canon Desk/print adding machine			Janets desk		2079851		44.98
		77	5-Feb		Canon Desk/print adding machine			Front desk		2065791		44.98
3741A	G	97			Camera Card, Scan Disk		Model SDDR-83					$50.00
		77	Jun-06		Phone Answering Machine AT&T 1738					CN400131601		$50.00
		94	28-Dec		Portable pH 20 tester			VWR				63.95
		96	3/12/2008		Chair-Black Luxura task(arms)					105054-US		59.99
		73	2009		Power Cyber 685AVR					BFA652009010		$73.00
3965	G	95	10/15/2004		UPS Battery Backup			Bilkin		#20104729970W5		74.16
		94	Jul-09		Chair, Brown leather/arms			Home Depot		CA41472		$80.00
3492	G	81	5/24/1996		Ladder/5 Ft Step - Blue							$84.75
3964	G	97	10/15/2004		Computer CD Drive/Iomega			Staples		#3VBE0704H6		89.98
3966	G	88	11/19/2004		UPS Broadban			Staples		QB0412341250		89.98
276	B	94			Chair - Black							$100.00
1822	G	94			Chair, Secretary - Tan							$100.00
1869	G	94	1995		Chair Tusk Blue							$100.00
2051	G	94	1995		Stool, adj/swvl w/casters		Black					$100.00
2054	G	94	1995		Blue Screw Type Low Stool			Terrella				$100.00
2362	G	94	1995		Stool, backless Swvl - Gray							$100.00
		94	1996		Stool, backless swivel- Gray							$100.00
4391A	G	83mm	3/28/2007		Camera Case							$110.00
3568	G	90			Yellow Extension Cord - 100 FT/110 Volt							$115.00
3569	G	90			Yellow Extension Cord - 100 FT/110 Volt							$115.00
3579	G	95			Yellow Extension Cord-100 Ft/110 Volt							$115.00
3580	G	95			Yellow Extension Cord-100 Ft/110 Volt							$115.00
		94	7/28/2008		Chair, Black Vinyl Draft			Staples				$119.00
		94	7/28/2008		Chair, Black Vinyl Draft			Staples				$119.00
3819	G	83	5/15/2001		Matte White Projection Screen 50x50			F-11 Photo Supplies				$130.00
2294	G	94	1996		Exec. Chair with Arms - Blue			Staples				$145.00
4335	G	90	4/5/2005		Fax-Brother 2440C			Staples		U61086M4F360182		$149.98
4446	G		8/16/2007		Chair, Gray, Model 649753			Staples				$149.99
		76A	5/9/1996		Refrigerator/Abscold		AR366MDIOR			#960201444		$152.72
3961	G	94	2004-Dec		Pipettor, Eppendorf Research 2-20 ul			Fisher Scientific		4021614		$162.00
3962	G	94	2004-Dec		Pipettor, Eppendorf Research 10-100 ul			Fisher Scientific		3914304		$162.00

3963	G	94	2004-Dec		Pipettor, Eppendorf Research 20-2000 ul		Fisher Scientific		3917084	$162.00
4367	G	88	8/14/2006		Fax, Brother, Intellifax 2820		Staples		U61325F6J135274	$179.98
4348	G	95	21-Nov		Conductivity Meter Con5/TDS 5		Weber Scientific		252710	$180.00
4429	G	73	6/27/2007		Pipettor, Eppendorf Research 20ul		Fisher		4794976	$181.50
4428	G	73	6/27/2007		Pipettor, Eppendorf Research 200ul		Fisher		4955136	$181.50
4430	G	73	6/27/2007		Pipettor, Eppendorf Research 1000ul		Fisher		11692917	$181.50
3785	G	94	0/0/1996		Pipet Aids XP		Fisher Scientific		58818	$184.80
3469	G	77	Dec-95		File Cabinet/4 Drawer-Hon/letter (Putty)					$185.00
3470	G	77	Dec-95		File Cabinet/4 Drawer-Hon/letter (Putty)					$185.00
3471	G	77	Dec-95		File Cabinet/4 Drawer-Hon/letter (Putty)					$185.00
3472	G	77	Dec-95		File Cabinet/4 Drawer-Hon/letter (Putty)					$185.00
3473	G	77	Dec-95		File Cabinet/4 Drawer-Hon/letter (Putty)					$185.00
3513	G	97	Dec-95		File Cabinet, Hon 4 Drawer - Letter (Putty)					$185.00
3514	G	97	Dec-95		File Cabinet, Hon 4 Drawer - Letter (Putty)					$185.00
3515	G	97	Dec-95		File Cabinet, Hon 4 Drawer - Letter (Putty)					$185.00
3803	G	94	Sep-03		Rapid Charge Stand EPD-Plus		Rainin		2402	$185.00
4444	G	73	Jun-07		Chair, Burgundy, Model BC41		Terrels Office		SO#170715459	$185.00
		94	Jul-07		Printer B4400		IT		N22105A	$185.00
4397	G	73	Jun-06		Pipettor, Eppendorf		Fisher Scientific		7030	$189.00
4433	G	87			Printer, OKI B4400		OKI		N22105A	$200.00
3781	G	94	1/6/1999		Pipettor, eppendorf Reference 10-100 ul		Fisher Scientific		318947	$209.30
3782	G	94	1/6/1999		Pipettor, Eppendorf Reference 10-100 ul		Fisher Scientific		140236	$209.30
4416	G	94	1/6/1999		Pipettor, Eppendorf Reference 100 ul		Fisher Scientific		296335	$209.30
4417	G	94	6/25/2007		Rapid Charge Stand		Rainin		2707	$209.30
4420	G	94	4/14/2005		Card Test Rocker		Fed Warehouse			$245.00
4398	G	73	Jun-06		Pipettor, Eppendorf Research		Fisher Scientific		2503893	$248.92
4399	G	73	Jun-06		Pipettor, Eppendorf Research 100-1000ul		Fisher Scientific		2606193	$248.92
4400	G	73	9/21/2006		Pipettor, Eppendorf Reference 2-20ul		Fisher Scientific		3550205	$248.92
4401	G	73	9/20/2006		Pipettor, Eppendorf Reference 10-100ul		Fisher Scientific		4558715	$248.92
4338	G	94	9/9/2005		Maxi Mix II		Fisher Scientific		#1254050677404	$251.20
3619	G	94	2001		Pipette, Finn MCP 8 Channel		Fisher		S04116	$270.41
3783	G	94	1/8/2003		Finnpipette MCP 8 Channel 5-50 microliter		Fisher Scientific		T11784	$270.41
3786	G	94	0/0/1997		Pipet Aids XP		Fisher Scientific		38729	$280.00
4412	G	94	1991		Pipettor, Eppendorf Repeater 4780		Fisher Scientific			$300.00
4413	G	94	1991		Pipettor, Eppendorf Repeater 4780		Fisher Scientific			$300.00
4414	G	94	1991		Pipettor, Eppendorf Repeater 4780		Fisher Scientific			$300.00
4415	G	94	1991		Pipettor, Eppendorf Repeater 4780		Fisher Scientific			$300.00
4443	G	83MM	Jul-07		Monitor, Dell Flat Screen		Dell	CN-0CC352-6418D-630-40WL		$300.00
		83			Lens - 20X/0.40 N PLAN					$300.00
		73	8/27/2008		Pipettor, Eppendorf Research 20-200 µl		Thermofisher		1611498	$301.00

		73	8/27/2008		Pipettor, Eppendorf Reaearch 20-200 µl		Thermofisher	1611268		$301.00
4393	G	73	3/3/2007		Mini Vortexer		Fisher Scientific	4376		$308.30
4394	G	73	Jun-06		Mini Vortexer		Fisher Scientific	70123042		$308.30
4423	G	84	9/9/2003		Mini Centrifuge Labnet C1200		Fisher			$325.00
4387	G	73	3/1/2007		Mini Centrifuge		Fisher Scientific	61213469		$325.00
4427	G	73	6/12/2007		Stool, Gray		Fisher			$336.93
4386	G	73	3/25/2007		Freezer, Frigidair		Boz. TV & Appliance	WB70925327		$349.99
4431	G	84	9/9/2003		Power Pack Model FB300		Fisher	307N0094		$351.44
3780	G	94	9/24/2002		Water Bath, Economy 5 Ltr. 120V		Fisher Scientific	207N0307		$380.31
4349	G	94	1/13/2006		Hot Plate, Stir, Ceramic		Fisher Scientific	502N0396		$397.10
3823	G	94	Sep-03		Pipettor, Ovation P-0100		Phenix Research	106419		$399.00
3824	G	94	Sep-03		Pipettor, Ovation P-0200		Phenix Research	106577		$399.00
252	G	94			Vacuum Pump		GAST	5KH32EG550AT		$400.00
3454	G	94	1996		Vaccum Pump, Model #G8EXC		GAST	SA55JXGTD4144		$400.00
4424	G	84	Sep-03		Electrophoresis System FBSB1316		Fisher	185296		$402.56
4463	G	73	10/4/2007		Pipettor, Rainin EDP A		Rainin	G079799IE		$425.00
4435	G	96	Jun-05		Water Bath/Model 135		Fisher	408NO165		$450.00
3787	G	94	8/16/2001		Pipette, EDP Plus Electronic 2500 ul		Rainin	J01124		$465.00
3788	G	94	0/0/1998		Pipette, EDP Plus Electronic 1000 ul		Rainin	G82938		$465.00
3789	G	94	0/0/1998		Pipette, EDP Plus Electronic 250 ul		Rainin	H00934		$465.00
3790	G	94	2001		Pipette, EDP Plus Electronic 1000 ul		Rainin	D60845		$465.00
3791	G	94	2001		Pipette, EDP Plus Electronic 250 ul		Rainin	J21657		$465.00
3919	G	95	Dec-97		Pipettor/Electronic SOO3678		3M Products	R73277		$475.00
4432	G	95	7/23/2007		Pipettor/Electronic 7020684		3M Products	6088734		$475.00
3920	G	95	Dec-00		Pipettor/Electronic SRO4521		3M Products	YR02770		$475.00
3820	B	90	Dec-02		Waterbath ISOTEMP 110		Fisher Scientific	211N0491		$478.00
4368	G	100	Sep-06		Work Station-Sauder Model#1031		Staples			$480.00
242	G	81	5/24/1996		14 ft Metal ladder					$482.25
4473	G	94	8-Oct		Computer, Compaque HP		HP	2UA8370KHB		$489.00
4488	G	87	8-Oct		Computer, Compaque HP		HP	2UA8370KH9		$489.00
3801	G	94	Sep-03		Pipette, EDP Plus Electronic 1-10 ml		Rainin	C30254		$495.00
1977	G	94			Refrigerator, Magic Chef Frost Free			10027216KW		$500.00
3453	G	75	1995		Milton Roy spectronic 20D Model #333175		Milton Roy	#3327081009		$500.00
3542	G	94	Apr-02		Thermo Spectronic 20D+ Model #333183		ThermoSpectronic	3DUE05702		$500.00
4392	G	73	10/20/2006		96 Well Magnetic Ring Stand		Ambion			$500.00
4468	G	73			Pipettor EDP3 Electronic		Rainin	L07683678		$500.00
4469	G	73			Electrophoresis System FBSB1316		Thermofisher	234717		$513.71
		77	20-Feb		Chairs Black 3			CA-27270(TW)		$537.00
3464	G	77	Dec-95		File/4Drawer Lateral - Hon (Putty)					$550.00
3465	G	77	Dec-95		File/4Drawer Lateral - Hon (Putty)					$550.00

4425	G	73	9/9/2003		Camera, Polaroid			Fisher		FB-PDC-34		$569.77
2140	G	77			550 Phillips Transcription 500 System							$579.00
4472	G	90	9/19/2008		Waterbath, Economy			Fisher Scientific		1601080565474		$590.79
3821	G	94	Jan-04		2000 Imprinter			Claritus		2000133899		$599.79
		88	Dec-06		Leica 100X N PLAN 100x/1.25 OIL					506158		$600.00
4408	G	83	4/16/2007		Monitor, Ultrasharp 2407FP			Dell		MX-OCC302-46634-73T-1945		$627.71
4384	G	94	3/15/2007		Clinical Rotator			Fisher Scientific		#1870061205387		$601.24
3804	G	94	Sep-03		Water Bath, 10 L Economy			Fisher Scientific		308N0342		$649.93
		84	5/20/2009		Freezer, Frigidaire FFUZIF5HNB			Boz TV Appliance		WB83859323		$649.99
3808	G	101	Sep-03		Refrig/Whirlpool ET1FTKXKT BT			Vanns		EP5038065		$650.00
3935	G	83MM	Dec-95		File Cabinet, 5 Drawer Lateral - Hon (Putty)							$650.00
3936	G	83JM	Dec-95		5 Drawer Lateral File-Hon (Putty)							$650.00
4462	G	94	3/31/2008		Water Bath, 20 L			Thermo Fisher		160708231007		$656.00
4434	G	96	Jun-05		Incubator/Thermolyne					42000217		$700.00
4493	G	94	10/8/2008		Rotator, VAI 2342			NVSL		990607D		$750.00
4494	G	94	10/8/2008		Rotator, VAI 2342			NVSL		970307X		$750.00
4419	G	94	6/25/2007		Pipette, Multichannel Electronic			Rainin		B0727837E		$795.00
4418	G	94	6/25/2007		Pipette, Multichannel Electronic			Rainin		B0727857E		$795.00
		83	2007		Lens - 5X/0.15 HCX PL FLYDTAR							$805.00
3802	G	94	Sep-03		Pipette, EDP Plus Elec 8-Ch 10-250 ul			Rainin		E30015		$895.00
4436	G	77	2005		Computer, IBM ThinkCenter -Janet			IBM		LKFWN7N		$900.00
4437	G	77	2005		Computer, IBM Think Center-Michelle			IBM		LKFWP2H		$900.00
4438	G	77	2005		Computer, IBM ThinkCenter - Cathy			IBM		LKFWP4M		$900.00
4439	G	78	2005		Computer, IBM ThinkCentre			IBM		LPDKMC2		$900.00
4445	G	96	2005		Computer, IBM Think Centre			IBM		LKFWP4L		$900.00
4440	G	88	6/27/2005		Computer, IBM ThinkCentre			IBM		LBDKNK0		$900.00
4442	G	83MM	7-Jul		Computer, Dell Desk Top			Dell		809M881		$900.00
4385	G	73	3/14/2007		Lab Line 96 Well Plate Shaker			Fisher Scientific		#1472070234235		$921.00
3416	G	95	11/21/1996		Oven/Precision			Fisher		#696101140		$949.45
3784	G	94	6/13/1997		Impacet 8 Channel Pipettor 15-1250			Matrix Technologies		713272		$995.00
4491	G	83JM	8-Oct		Computer/HP			HP		CNU8330G9G		$999.00
4496	G	94	10/8/2008		Computer, Laptop			NVSL		DT7JG31		$1,000.00
3805	G	73	Oct-03		Ice Maker 60#			J&C Rest. Supply		E30102117-Z		$1,053.00
4467	G	95	7/8/2008		Water Bath/Techne/Circulating			Weber Scientific		156198-15		$1,060.40
4422	G	73	9/9/2003		Transillumenator 88A			Fisher		308N0075		$1,063.00
1922	G	90			Pipettor/Impact 8 Channel-125					511767		$1,065.00
3540	G	90	Mar-02		Pipettor/Impace Matrix 8 Channel			Apogent Discoveries		210617		$1,065.00
3452	G	75			Water Bath, Precision Model #5122-1058					#699121725		$1,100.00
3538	G	87	Feb-02		CO2 Analyzer Model #2820					GN8976		$1,162.78
1923	G	90			Pipettor/Impact 8 Channel-85					521279		$1,280.00

3539	G	90	Mar-02		Pipettor/Impact Matrix 12 Channel	Apogent Discoveries	123889		$1,280.00
3922	G	95	10/17/1994		Balance, Mettler AB104		#1113273215		$1,406.25
4391	G	83MM	3/28/2007		Camera System, Nikon D-100	Boz Camera Repair	2157623		$1,493.94
4421	G	73	7/3/2007		Air Clean 600 PCR Workstation	Bio Express	AC632DB-3234		$1,595.00
3779	G	73	6/30/2003		Dell Laptop Model #PP01L	Dell LBL	P/N 6P326A02		$1,600.00
4389	G	73	3/2/2007		Pipettor - 12 Channel Impact 2, 850	Matrix Technologies	128333001		$1,600.00
4390	G	73	3/2/2007		Pipettor - 12 Channel Impact 2, 250ul	Matrix Technologies	128334007		$1,600.00
4407	G	87			Pipettor, Biolog Impact II, 1250ul	Biolog	100928101		$1,600.00
		83	2007		Lens - 1.6 HCX PL FLYDTAR				$1,633.00
4402	G	73	Mar-07		Computer, Dell Desk Top	Dell	1Y5HLC1		$1,632.86
4460	G	95	10/31/2007		Centrifuge, Gerber/Micro II	Weber Scientific	642211		$1,666.00
4402A	G	73	Mar-07		Computer, Dell Monitor - Flat Screen	Dell	CN-OY9833-71618-6B5-AFHF		
4464	G	96	5/21/2008		Rotary Microtome, Jung Model 620	Lehman Scientific	125809		$1,995.00
4021A		73	4/22/2008		Grinding Jar Set	Qiagen			$1,750.00
4495	G	94	10/8/2008		Reader, ELx 808	NVSL	183699		$2,000.00
4497	G	95	10/28/2008		Balance, Mettler	Fisher Scientific	1129333980		$2,244.82
4466	G	73	Jul-08		Water Sts. Barnstead Diamond RO	Nothwest Scientific	1265080504507.00		$2,770.00
3778	G	90	Jun-03		Incubator, NUAIRE CO2	Cascade Scientific	#84549061803		$3,396.00
4410	G	83	5/9/2007		Camera, Leica DFC290 R2 Digital & Lens	Bartels & Stout Inc.	221401407		$3,873.00
3441	G	94	2000		Plate washer-Tecan #M8/2R	Tecan	6010525		$4,500.00
3776	G	90			Tecan Columbus Strip Washer	Phenix Research	6012167		$4,500.00
3775	G	90			Sunrise - O.D. Reader	Phenix Research	393200123		$4,714.00
4406	G	73	4/23/2007		Centrifuge 5415R Eppendorf	Northwest Scientific	5426#0018625		4,900.00
4022	G	73	Jun-05		Water System, Nanopure Model #D11931	Nothwest Scientific	#1370080402945		$5,220.00
3995	B	95	9/14/2004		Cryoscope/Advanced Instruments	Fisher Scientific	04080719W		$5,285.00
4426	G	84	6/19/2007		Geneamp PCR System 9700	Fisher	805S6120562		$5,865.00
		94	6/31/2009		Centrifuge, Sorval ST40	Thermo Fisher	40972565		$6,450.00
4020	B	94	4/25/2008		Centrifuge, Sorvall	Thermo Fisher	40826724		$6,222.41
4004	B	77	9/6/2006		Ricoh Aficio 3045/Copier	Davis Business	K9465501638		$7,549.00
3996	B	96	12/22/2004		Histocentre 3/Imbedding	Thermo electron	#1293031152142		$7,788.50
4010	B	73	4/23/2007		Biosafety Cabinet Class II	Northwest Scientific	70469067		$8,000.00
4021	B	73	4/22/2008		TissueLyser 2	Qiagen	128210201		$10,301.00
4023	G	96	7/9/2008		Rotary Microtome, HM355S	Thermo Fisher	35658		$11,000.00
4404	G	100	3/28/2007		Server		#570251016937		$15,000.00
1973	B	95	Sep-94		Charm II 6600 System	Charm Sciences	269		$17,500.00
3628	B	90			Cryostat-Leica CM-1850-w/Knife System		47131148		$18,000.00
3990	B	81	Mar-03		Biological Safety Cabinet	Nuaire Inc.	#82490022403		$20,000.00
3991	B	88			Immulite One Analyzer	Diagnostic Products	L4892		$28,350.00
3980	B	73	Jul-03		Autoclave, Consolidated Sterilizer SSR-3A-MC		100202		$32,988.00
3978	B	84	6/30/2003		Smart Cycler II TD System #SC1000-2	Cepfeid	200408		$34,000.00

4024	B	73	8/13/2008		Thermo Cycler 7500 Fast			Applied Biosystems		270511659		$36,900.00
4024B	G	73	8/13/2008		Laptop/Dell Computer/7500 Fast			Applied Biosystems		B9k7701		
3983	B	95	Sep-03		SomaScope-MK2					SR607607		$38,000.00
3979	B	73	Jul-03		Autoclave, Consolidated Sterilizer SSR-24BMC					71103		$41,266.00
2174	B	95			Milkoscan FT 120					1699-31-04		$47,000.00
3443	B	94	2000		Ultra Microplate Reader - Tecan			Tecan		#12901000106		$85,000.00
		88	5/2/2005		Chemistry Analyzer Dimension Xpand plus			Dade		#2004070120		lease
		88	5/2/2005		Water System, Millipore AFS-3D			Dade		F5BN13941B		lease
		77	Jun-09		Copier, Kyocera KM2560					QAS8902892		lease
75	B	87			Microscope, AO							
					Objectives: 5X							
					10 X							
					43 X							
76	B	95			Incubator/Thelco					6-G-3		
82	B	87			Microscope							
83	B	95			Centrifuge/Type M56A, Gerber/Model #3562							
84	B	75			Spectrophometer							
87	B	87			Cenrifuge, Lourdes 8 place head					60575A		
94	B	95			Balance, Mettler H18					11263-011		
98	B	87			Microscope FA Zeiss							
					Objectives: 10 X NEOFLOUR							
					40 X NEOFLOUR							
					25 X NEOFLOUR							
					10 X UM							
107	B	87			International Centrifuge					605754		
122	B				Air Conditionaing Unit-Roof Top							
123	B	87			Incubator, V.I.P. CO2							
124	B	100			Air Conditioning							
124	B	101			1 Air Conditionaing							
128	B	95			Balance Model DH-2A							
130	B	87			Microscope, Bausch & Lomb Model BV1070					124245		
					40X PLAN ACHRO							
					100X PLAN OIL							
					4X PLAN ACHRO							
					10X PLAN ACHRO							
209	B	95			Microscope/AO model #XL10TU-FW							
216	B	87			Microscope, Zeiss					O42808		
					Objectives: 6.3X							
					16X							
					40 X							

						100 X							
221	B	87			Microscope/Zeiss								
					Objectives:	2.5 X							
						6.3 X							
						16 X							
						40 X							
224	B	83			Camera/Olympus 35mm								
258	B	95			Fume Hood/Labconco ZZMFG							47705-04	
266	B	96			AO Microtome 820 Rotary							67120	
267	B	94			Air Conditioner-Carrier Model 51HK330-3								
269	B	96			Tissue Tek 111 Tissue embedding System							74104236	
299	B	95			Pipetting Machine, Model 40-SS							163	
306	B	87			Biological Safety Cabinet CCI/1160							16566	
308	B	90			Hood, Laminar							NBB274	
320	B	90			Refrigerator/Freezer							VRW#55700-089	
340	B	95			Refirgerator/Admiral - white							31140550	
341	B	96			Lab Bench Cabinet, 2 Door, Under Counter								
348	B	87			Incubator Model 1920							42-15	
351	B	95			Air Conditioner/Carrier Model 51HK3303								
383	B	95			Conductivity Meter/Model 152							762	
404	B	95			Microscope, Zeiss							4756212	
					100/1.25X OIL								
					2.5X PLAN								
					2.5X PLAN								
					6.3X PLAN								
					1.6X PLAN								
450	B	88			Air Conditioner Model #51HKB230-3								
461	B	87			Power Supply for Microscope #98							11203	
493	B	95			Photomicrographis System #79402 Nikon							7866768	
499	B	95			Pneumotive Air Compressor								
563	B	88			Water Bath, Fisher								
564	B	88			Refractometer VRL #1010								
					Objectives: 4 X								
						10 X							
						20 X							
						40 X							
						100 X							
567	B	84			Microscope, AO Model DXHII							124243	
					Objectives: 4 X								
						10 X							

						20 X							
						40 X							
						100 X							
		78			95 GMC 1500								
641	G	77			Tray, Gray								
645	G	77			Tray, Gray								
1309	B	90			Incubator, CO2 Lab-Line Model 715						6911420		
1323	B	88			Centrifuge MDL 6K 115V 50/60HZ						12910392		
1648	B	81			Chemistry Analyzer						920421		
1657	B	100			IBM PS/290						23HNY69		
1972	B	95			Heater Block/Charm Sciences			Charm Sciences			110-0203		
1974	B	81			Freezer/REVCO Ultralow Temp.						O12H-368897-OH		
2071	B	81			Table/Necropsy Model 42-84								
2106	B	78			Hot-water High Pressure Washer								
2133	B	87			Fax, Canon Model LC 5000						61077		
2134	B	90			Air conditioner 30,500 BTU Wall Mount								
2153	B	81		AR	Compressor Ingersoll-Rand Model 2-242OD5								
2159	B	94	1996		Impact 12 Channel Pipettor			Matrix			621494		
2334	B				Roof Top Air-Conditioner								
3383	B	87			Incubator, CO2 Isotemp						FIC05500DABB		
3385	B	83JM			Microscope Olympus BX40						3J09521		
3392	B	88			Speciman Mixer-Thermolyne M23125						#1107010654246		
3393	B	88			Hematology Analyzer-Cell DYN3500R (Printer,computer,monitor						30787N96		
3394	B	88			Centrifuge-Jouan Model #11175701						#400090040		
3395	B	88			Cytospin/Stainer- Wescor-Model 7120						7120102		
3396	B	88			Coagulation Analyzer-Diagnostica Stage 4						9010845		
3397	B	75			Water System - Millipore Model ZDAF3115D								
3398	B	88			Counter-Diffcounter Model 10-308						311037		
3399	B	88			Refractometer						214093		
3404	B	96			Fume Hood								
3409	B	96			Tissue Processor-Shandon 2000						CB1065A9904		
3424	B	73			Autoclave - Model #LB-LG 20(H)	Primus					15216		
3451	B	94			Incubator, Precision Scientific, 1483						4M-3620		
3455	B	87			Biomic Digital Camera Vision System								
3484	B	78			Hobart Pass Thru Cooler Model #01						#321033337		
3501	B	81			Incinerator-Therm Tec-Model #A4-P-S								
3512	B	97			Microscope, Olympus BX40F						4E11334		
		97			Objectives: 2X PLAN APO								
		97				4X PLAN							
		97				10X PLAN							

		97				20X PLAN							
		97				40X PLAN							
		97				100X PLAN							
3548	B	90	2000 Dec		Spectrophotometer						LR45227		
3550	B	90			Olympus Light & Fluoro Scope						7V07418		
		90			Objectives: 10X LM PLLAN FL								
		90				10X U PLAN FL							
		90				20X U PLAN FL							
		90				40x U PLAN FL							
		90				100X U PLAN FL OIL							
3551	B	90			Freezer, Minus 80 Degree - Upright								
3555	B	90			Centrifuge/Marathon - Model #22KBR						31950062		
3560	B	90			Hood/ Labconco - Bio-Hazard						600809627W		
3603	B	94	2001		Air Conditioner-Lennox CHA16-511 Rooftop								
3633	B1	87			Computer, Dell PC						9087T11		
3703	B	100			P series 610 6CI Server						10-818CD		
3705	B	100			Hard Drive						68-EQ250		
3713	B	100			X series Server						78R2473		
3991	B1	88			Monitor, ADI Microscane						R900253		
3991	B2	88			Printer, OKI Microline 186						AE4400224ZA0		
3991	B3	88			Powervar Back-UP						541103-0430050		
3991	B4	88			Computer DPC						99018018		
904498	F&G	87			Microscope, Olympus BX40F-3		(Fish & Game 904498)				6M06887		
					Objectives:	100 X PLAN Apo							
						40 X PLAN							
						10 X PLAN							
						4 X PLAN							
79	G	96			Balance Mettler						P02330		
85	G	75			Burning House - Model B								
93	G	87			Meat Grinder								
97	G	90			Desk - Executive								
108	G	75			Extraction Apparatus								
115	G	81			Livestock Head Gate								
119	G	97			Desk - Sand Color								
121	B	96			Microscope, AO Microstare (Dual Viewer)						192868		
					Objectives: 10 X PLAN ACHRO								
						2.5 X AO							
						100 X OIL PLAN ACHRO							
						40 X AO							
						20 X AO							

125	G	87			Air Conditioning							
152	G	100			File Cabnet, Gray							
154	G	87			Desk Light							
162	G	81			Storage Cabinet - Gray							
167	G	87			Micrometer 12.5x eyepiece							
168	G	95			Incubator/Aloe w/cabinet & 1 door					18377		
169	G	90			Incubator - Precision					4-0-3		
174	G	95			Weights/Class S Arthur Thomas							
176	G	73			Range, 6 Burner - Vulcan Model E-36F					8374323		
179	G	78A			Stool, Stainless Steel							
185	G	73			Stainless Steel Cart -2 each							
188	G	87			Chair - Gray							
192	G	87			Table, Microscope							
194	G	87			Table 2 dwr. W/black top							
195	G	87			Table, Work Bench							
196	G	87			Table, Work Bench							
197	G	87			Table w/black top							
199	G	78			Rabies Rack, 4-Shelves		Virology					
202	G	88			Filing Cabinet for Slides - 2 pieces							
207	G	77			Chair/Steel Gray metal chair w/leather seat and back							
208	G				Camera							
213	G	87			Table wood, gray w/black top							
217	G	97			Table, wood/black top							
218	G	81			Cart/Stainless Steel (3)							
218	G	73			Stainless Steel Cart - 10 each							
219	G	81			Saw/Stryker Autopsy							
220	G	95			Spencer-Quebec Colony Counter (2)							
223	G	81			Clipper, Oster Model 2							
224	G	78			Green Dolly							
225	G	95			Water Bath/Precision					10-S-8		
227	G	78			Engravers, Burgess, Vibro, Model U-73							
231	G	87			Microburner							
240	G	94			Microscope Lamp					651		
243	G	87			File Cabnets, Four Drawer (two)							
243	G	90			File Cabinet, 4 Drawer							
244	G	78			Desk - Secretarial							
245	G	87			Desk, Executive							
247	G	81			Butcher Block/Wood/rollers							
253	G	75			Water Bath/Precision Thelco					13-Z-4		
256	G	87			Rota Torque Rotator & Attachments							

259	G	95			Weight/Precision (Voland)				4751		
261	G	97			Table, Microscope/Gray						
262	G	87			Table, Folding 5' x 30"						
264	G	78			Cart/Stainless Steel						
265	G	95			Stainless Steel Cart - 2 each						
275	G	95			File Cabinet - Gray						
281	G	96			Chair black						
289	G	87			Chair/Gray (3) each						
296	G	96			Stool						
390	G	87			Labconco Storage Cabinet, walk in cooler						
454	G	95			Speed Air Compressor/Model 3Z-323-B						
566	G	78A			Refrigerator/Kenmore				S90434128		
600	G	96			Refirgerator, Kalvinator/Almond						
601	G	96			Microwave Oven,				126065		
605	G	96			Fume Hood, Hyperclean 2						
606	G	96			Fume Hood, Hyperclean 1 Bench Model						
643	G	77			Paper basket/Steel Gray (3)						
648	G	77			Paper stacking tray/3 tier steel gray metal						
773	G	90			Desk-Gray 3 Drawer						
775	G	87			Balance, Havard Trip						
776	G	95			Water Bath/Thelco - Model 83				13AC-S		
780	G	87			Desk Top Organizer						
781	G	87			Bausch & Lomb power						
781	G	97			Book shelf/tan						
782	G	87			File Cabnets, Four Drawer						
829	G	95			Hamilton Beach Blender						
851	G	81			Saw?Wellsaw 404-16 Meat						
926	G	81			Metal 5 shelf rack/slide outs/roller - Wahman						
974	G	81			Esisharp Model SK100		Anteroom				
988	G	73			Balance, Hansen Trip - Scale						
1006	G	77	7/5/2005		Plastic Printer Tray	smoke					
1010	G	101			Table- Brown			Ft Smith Furniture Co			
1010	G2	101			Table- Brown			Ft Smith Furniture Co			
1010	G3	101			Table- Brown			Ft Smith Furniture Co			
1010	G4	101			Table- Brown			Ft Smith Furniture Co			
1070	G	96			Safety Cabinet #E-2455						
1071	G	96			Security Cabinet #2650						
1109	G	77			Paper stacking tray/3 tier steel gray metal						
1110	G	77			Paper stacking tray/3 tier steel gray metal						
1140	G	87			Table, Brown/Computer						

1146	G	77			Copier Stand, White metal-2 doors						
1161	G	100			Desk, Computer						
1162	G	83			Table/Metal Computer						
1163	G	77			Table, Typing						
1188	G	77			Mobile Computer Cart						
1278	G	78			Computer Work Station - Oak						
1316	G	95			Water Bath/Precision Model 186				10A2-7		
1317	G	97			Chair, #4978 Executive High Back - Smoke						
1318	G	83JM			Chair/Executive High Back-smoke						
1319	G	97			Chair, #4978 Executive High Back - Smoke						
1325	G	97			Pioneer 1d-v4200 Laserdisc PL				KK39114		
1328	G	100			Television/Color Quasar SP-2040 EE 29"						
1329	G	100			Advanced Adjustable Cart PIX Mobile						
1346	G	96			Slide File Cabinet						
1347	G	96			Slide File Cabinet - 2 each						
1640	G	100			Sentry Media Fire Safe Model 1710				E605690		
1683	G	97			400 APC-UPS						
1748	G	100			Smart Label Printer PRO				P913467634		
1820	G	78			Chair/Secretary Smoke						
1821	G	83			Chair/Secretary Blue (2) each						
1821	G	83MM			Chair, Secretary/Blue						
1821	G	78			Chair/Secretary Smoke						
1864	G	77			Chair - Task Blue						
1865	G	95			Chair - Task Blue						
1866	G	95			Chain - Mauve						
1868	G	73			Chair - Mauve						
1870	G	88			Chair Tusk Mauve						
1871	G	90			Chair - Task Blue						
1917	G	96			APC Back-UPS 400				T5925138462		
1975	G	75			Timer Timeswitch 115V AC 60HZ						
1998	G	87			Table, Short Black/Top for V.I.P.						
2002	G	88			File Cabinet, 4 Drawer						
2003	G	88			Desk - Gray 4 Drawers						
2004	G	88			Chair gray w/arms						
2005	G	88			Chair-gray						
2006	G	88			Microscope Table						
2008	G	73			Balance, Havard Trip						
2009	G	73			Pipette Washer, Boekel, automatic						
2011	G	78			Table - Gray Top						
2013	G	87			Pressure regulator - 2 stage				1176(B-8477)		

2014	G	87			Micro Meter/Slide						
2018	G	87			Storage Cabinet						
2021	G	96			Shandon-Micro-Line AS325				MT003805V		
2022	G	75			Balance, Havard Trip				33678		
2023	G	96			Balance, AS Aleco Scale				533		
2025	G	87			Desk, Oak	6 Drawer					
2026	G	95			Dual Oak Desk 5.5'x6'						
2031	G	94	2003		File Cabinet			Clin Path			
2033	G	77			Book Case 4 Shelves-Tan						
161	G	87			Desk/Gray 6 Drawer						
2037	G	94	2004		File Cabinet			Clin Path			
2043	B	95			Monitor, IBM 6554-603						
2070	G	83			Chair/Secretary Task Blue						
2080	G	100			Chair/Deluxe Operatory - Gray						
2081	G	83			Bookcase/ 72" Mahaganey						
2082	G	83MM			APC Back-UPS 400						
2083	G	100			400 APC-UPS						
2084	G	77			Vacuum Upright Dirt Devil		Model 088305				
2095	G	81			Orange/3 Drum Rack						
2097	G	78			Metro Max Storage Unit		Anteroom				
2098	G	81			Dolly/55 Gall ss Drum						
2099	G	81			Dolly/55 Gall ss Drum						
2100	G	81			Dolly/55 Gall ss Drum						
2101	G	81			Dolly/24" 55 Gal Plastic Drum						
2102	G	81			Dolly/24" 55 Gal Plastic Drum						
2103	G	81			Dolly/24" 55 Gal Plastic Drum						
2104	G	81			Dolly/white 55 Gal ss Drum						
2105	G	78			Welded Wire Panel Storage Unit		Anteroom				
2107	G	81			Grinders						
2108	G	78			Postal Scale						
2109	G	78			Wood Paper Trimmer						
2110	G	78			Chair/Gray Deluxe Operator						
2111	G	78			Chair/Gray Deluxe Operator						
2112	G	78			Chair/Gray Deluxe Operator						
2113	G	78			Chair/Gray Deluxe Operator						
2114	G	83MM			Bookcase, 72" Mahoganey						
2115	G	83JM			Bookcase/72"Mahoganey						
2116	G	83			Bookcase/ 72" Mahaganey						
2129	G	100			400 APC-UPS						
2132	G	83JM			Chair - Delux Operator						

2135	G	77			Phillips Transcription System 710						
2141	G	77			Phillips Transcription System 720 #4471						
2147	G	81			Table/Steel Adjustable Instrument						
2149	G	81			Table/Steel Adjustable Instrument						
2150	G	81			Wall Mounted Table w/backsplach & Drawer						
2151	G	77			Steel Locking Key Cabinet						
2152	G	101			Chair/United Stacking - Brown/armless						
2152	G10	101			Chair/United Stacking - Brown/armless						
2152	G11	101			Chair/United Stacking - Brown/armless						
2152	G12	101			Chair/United Stacking - Brown/armless						
2152	G13	101			Chair/United Stacking - Brown/armless						
2152	G14	101			Chair/United Stacking - Brown/armless						
2152	G15	101			Chair/United Stacking - Brown/armless						
2152	G16	101			Chair/United Stacking - Brown/armless						
2152	G17	101			Chair/United Stacking - Brown/armless						
2152	G18	101			Chair/United Stacking - Brown/armless						
2152	G19	101			Chair/United Stacking - Brown/armless						
2152	G2	101			Chair/United Stacking - Brown/armless						
2152	G3	101			Chair/United Stacking - Brown/armless						
2152	G4	101			Chair/United Stacking - Brown/armless						
2152	G6	101			Chair/United Stacking - Brown/armless						
2152	G7	101			Chair/United Stacking - Brown/armless						
2152	G8	101			Chair/United Stacking - Brown/armless						
2152	G9	101			Chair/United Stacking - Brown/armless						
2152	G5	101			Chair/United Stacking - Brown/armless						
2165	G	73			Printer, HP Deskjet 600C					SG65FIJ027	
2174	G2	95			ONAC Back-Up Model ON900A					9627-5637	
2182	G	100			Computer, IBM PC 330/6577-79T					23YDDBB	
2216	G	90			Refrigerator/Woods 17 CuFt					05053171KC	
2227	G	95			Incubator/Precision Mo	25E - 115V 2.5 CuFt				9506-102	
2270	G	73			Range, Hotpoint						
2297	G	73			Chair - Multi-Adj, task blue						
2327	G	87			IBM Monitor P70						
2342	G	78			Computer/IBM 300 GL System Unit w?CDROM						
2383	G	100			VCR, 4 Head						
2395	G	100			Printer, HP Deskjet 670C					US826ISODN	
2414	G	73			Computer, IBM PC 300 GL					23GNZ55	
2446	G	77			Wide Shelf (Putty)						
2529	G	77			Printer/HP Laser Jet 4000						
2575	G	100			Computer, IBM 300GL						

2584	G	73			Monitor, IBM					23-20088		
2620	G	88			Microscope - Leica	with 2nd Head and Extension				202423		
					Leica 10X N PLAN 10X/0.25					506084		
					Leica 40X N PLAN 40X/0.65					506097		
					Leica 50X N PLAN 50X/0.90 OIL					506085		
					Leica 100X N PLAN 100x1.25 OIL					506086		
2621	G	83			Microscope/Lieca/Clinical Pathology					202461		
		83			Lens - 40X							
		83			Lens - 50X/0.90 OIL N PLAN							
2635	G	78			Printer/Turbo Okidata ML 391					810B2005793		
2638	G	77			Printer/Okidata ML 590							
2647	G	77			APC Back-UPS 500M							
2701	G	77			Computer/ 300 GL IBM							
2704	G	77			Printer, Okidata ML 390 Turbo					812B2022339		
2706	G	95			Iomega Zip Drive					P4AW2842RM		
3247	G	100			APC Smart-UPS 1000VA							
3248	G	96			Printer, HP Deskjet 840C					CN04FIM22D		
3249	G	83MM			Printer, HP Deskjet 840C							
3250	G	94			Printer, HP DeskJet 840C					CN0721R14F		
3296	G	77			Electronic Stapler Max Model #EH50F							
3303	G	100			Computer, IBM NetVista					23VPARG		
3304	G	96			Computer/IBM NetVist 6578TAU					23VPCGC		
3305	G	83MM			Computer, IBM NetVista 6578TAU					23VPCHR		
3306	G	77			Computer/NetVista 6570TAU					23VPCWM		
3308	G	77			Monitor/IBM 15" Flat Screen							
3309	G	87			Monitor, IBM Flat Screen							
3310	G	96			Monitor, IBM 15" Flat Screen					23-01387		
3311	G	77			Monitor/IBM 15" Flat Screen							
3312	G	77			Monitor/IBM 15" Flat Screen					23-01408		
3314	G	95			Computer/NetVista 6578RAU					78-3AX5K		
3315	G	77			Computer/NetVista 6578RAU					78-3AX7B		
3316	G	100			Computer, IBM NetVista					78-3RZ5P		
3343	G	100			400 APC-UPS							
3344	G	77			APC-UPS Backup 500							
3345	G	78			APC Back-UPS 500VA					PR0025113697		
3346	G	87			APC-Back-UPS 650							
3347	G	94			APC Back-UPS 500VA					PB0025113464		
3348	G	88			APC Back-UPS 500VA							
3352	G	88			Monitor, IBM 9511-AG4 Flat Screen					66-F8755		
3367	G	100			HP Scanjet 5490CYI Scanner					CN15T1IOPW		

3386	G	87			Oxygen Pressure Gauge							
3387	G	87			Oxygen Pressure Gauge					1869893		
3388	G	87			Centrifuge, Quantum QM-100					591		
3389	G	87			Chair, Red							
3390	G	87			Chair, Red - 2							
3400	G	96			Tissue Float - TBS					9602T0362-13		
3401	G	96			Freezer/Kenmore - Model 23501/5.0 CuFt					#981025664		
3402	G	96			Water Bath-VWR							
3403	G	96			Micro Probe							
3405	G	96			Fisher Vortex-Genie 2 Model 12-812					2-283340		
3407	G	96			Chair - Gray							
3408	G	96			Typewriter/IBM - Whellwriter 1000					11RBZ36		
3410	G	96			Processor Vaccum Unit - Shandon					CV1033A9904		
3411	G	95			Water Bath/Techne/Circulating					98305-4		
3412	G	95			Fax Machine/Panosonic KXFP80					PFGT1608ZA		
3413	G	95			Hot Plate-Thermolyne/Type 2200					/237980277974		
3414	G	95			Hot Plate- Thermolyne/Cimerac 2 SP46925					#1069970268210		
3415	G	95			Blender/Waring 31BL92					7011		
3417	G	95			Clinifuge/Baxter					211699		
3418	G	95			LabLine-Multi Block					0563-0577		
3419	G	95			Thermolyne-Maxi-Mix II - M37615					#376940350973		
3420	G	95			Balance, Mettler PB1502-S					#1119110154		
3421	G	95			Weights, Class S			Fisher		3873		
3422	G	95			pH Meter - Model 410A					18890		
3423	G	95			Balance, Tortion					102986		
3425	G	73			Fume Hood 800 Series							
3426	G	73			Auto-Pipettor-Ominspense-Wheaton							
3427	G	73			Hot Plate - Mixer-Model #PC-420 Corning							
3428	G	73			Ph Meter-Model #310 - Orion					2979		
3444	G	94			Desk - Gray Metal							
3445	G	94			Desk - Gray Metal							
3446	G	94			Desk - Gray Metal							
3447	G	94	2002		Lab Table, White/Black top (8ft)							
3448	G	94	2002		Lab Table, White/Black top (16ft)							
3449	G	94	2002		Lab Table, White/Black Double Sided			with top shelf				
3450	G	94	2002		Lab Table, White/Black Top, W/Riser			with top shelf				
	G	77			Mail Meter - NEO Post		IJ50A1			#347389 9370097		
3457	G	77			Server Cabinet - Gray							
3458	G	77			4 Panel Work Station-Mauve (Bernie)							
3459	G	90			Chair- Gray/arm							lease

3460	G	77			File/ 3 drawer Roll-Around (Putty)	Part-time's desk					
3461	G	77			File/ 3 drawer Roll-Around (Putty)	Janets desk					
3462	G	77			File/3 drawer Roll-Around (Putty)	Vickie-front desk					
3463	G	77			File/Lateral 2 Drawer Side by Side						
3466	G	77			7 Panel Double Work Station-Mauve						
3467	G	77			Chair/Arm-Gray						
3468	G	77			Canon 6030 Copier					ZNP65504	
3474	G	77			Counter, Front Office - Burgundy						
3476	G	77			Typewritter - IBM Wheelwriter 2000						
3477	G	77			Phone Answering Machine-TAD723					6036971	
3478	G	77			Chair/Arm-Gray						
3479	G	78			Sharp Copier - SF-2514					86503724	
3480	G	78			Metal Shelving-Gray						
3481	G	78			Metal Shelving-Gray						
3482	G	78			Metal Shelving-Gray						
3483	G	78			Metal Shelving-Gray						
3485	G	78			Sink-Stainless Steel						
3486	G	78			Fume Hood-Stainless Steel						
3487	G	78			Workbench-Wood Top						
3488	G	78			Workbench-Wood Top w/Riser						
3489	G	78			Workbench-Wood Top w/Riser						
3491	G	78			Biohazard Waste Basket w/Top-White						
3493	G	81			Hotsy Pressure Washer-Model #5550B					C34528-0895	
3494	G	81			Freezer/Woods Chest					J707743	
3495	G	81			Cap Gun-Cash						
3496	G	81			Multi-Oil Stone-Norton Model #IM-313						
3497	G	81			Tool Box/16" Red-All American						
3498	G	81			Metal Shelving-Gray						
3499	G	81			Electric Sharping Machine-KascoCorp-Model B						
3500	G	81			Wire Storage Cage						
3502	G	81			Table/Stainless Steel w/Drains						
3503	G	81			Tool Rack/Stainless Steel						
3504	G	81			Tool Rack/Stainless Steel						
3505	G	81			Tool Chest w/Casters-White/Red						
3506	G	81			Tool Chest w/Casters-White						
3508	G	78A			Fume Hood-Stainless Steel						
3509	G	78A			Sink/Counter-Stainless Steel						
3510	G	78A			Refrigerator-Whirlpool/White	(389B Tag also)				E33521532	
3511	G	78A			Plastic Shelving/4 Tier						
3541	G	73	Apr-02		NAPCO Mechanical Oven Model #130DM					#602031621	

3549	G	90			Microscope/Zeiss Inverted				663088		
		90			Objectives: 5X CP Achromat						
		90			10X CP Achromat PH 1						
		90			20X LD Achrostigmat PH 1						
		90			32X LD A-Plan PH 1						
3552	G	90			Freezer, Minus 20 Degree - Upright				W200823897		
3553	G	90			Centrifuge/Marathon - Model #3000				64590244		
3556	G	90			Stirring Hot Plate				70601916		
3557	G	90			Stomacher-Model #BA-7020				32922		
3559	G	90			Card Test Rotator				743192		
3561	G	90			Chair - High Back Stool - Gray						
3562	G	90			Chair - High Back Stool - Gray						
3563	G	90			Chair - High Back Stool - Mauve						
3564	G	77			Chair/ Gray w/back						
3565	G	90			Chair - High Back - Black						
3566	G	90			Chair - High Back - Black						
3567	G	90			Black Extension Cord - 100 FT/220 Volt						
3570	G	87			Yellow Extension Cord-100 ft/110 Volt						
3571	G	87			Yellow Extension Cord-25 ft/110 Volt						
3572	G	87			Yellow Extension Cord-100 ft/110 Volt						
3573	G	87			Yellow Extension Cord-25 ft/110 Volt						
3574	G	88			Yellow Extension Cord -100 FT/110 Volt						
3575	G	88			Yellow Extension Cord -100 FT/110 Volt						
3576	G	88			Yellow Extension Cord -100 FT/110 Volt						
3577	G	88			Yellow Extension Cord -100 FT/110 Volt						
3578	G	88			Yellow Extension Cord -100 FT/110 Volt						
3581	G	75			Black Extension Cord-100 Ft/220 Volt						
3582	G	90			Liquid N2 Tank (In Walk-in Cooler)				506-041-H7		
3583	G	90			Liquid N2 Transport (in Walk-in Cooler)				585-053-HB		
3614	G	77			Phillips Transcription System Model #710						
3615	G	77			Phillips Transcription System Model #710		Storage room				
3616	G	83MM			Phillips Dictation Package-Model #398						
3617	G	77			Phillips Dictation Package-Model #398						
3618	G	97			Phillips Dictation Package-Model #398						
3620	G	88			Refrigerator-Frigidaire Model FRU17B2JW5				WA21000322		
3621	G	81			Table/Mobile Scissor Lift						
3622	G	94			Fax Machine-Canon L2050 Laser				YKM12845		
3633	G	87			Biolog				E11145		
3633A	G	87			Reader, Biolog % Transmittance				2071105		
3707	G	100			Smart-UPS 3000				XS0025003262		

3709	G	100			Hard Drive					68-22726		
3710	G	100			42U Rack Storage					23AO737		
3722	G	83JM			Monitor/T541 Flat Screen					2317843		
3725	G	95			Monitor, IBM Flat Screen							
3841	G	87			Monitor, IBM Flat Screen					8846429		
3733	G	100			APEX-Outlook KVM							
3741	G	97			Comuter, IBM NetVista					KA3BKM9		
3743	G	95			Computer, IBM NetVista					KA38K28		
3745	G	87			Computer, IBM Netvista PC					KA3BLA2		
3747	G	83JM			Computer/IBM Net Vista M41					KA3BLB1		
3748	G	94			Computer IBM NetVista							
3757	G	78			Monitor, IBM Flat Screem					2331170		
3761	G	83JM			Backup-UPS 650							
3767	G	95			APC Back-UPS 650VA					PB0207223683		
3769	G	83JM			Printer/Deskjet 845C					TH22J2B08H		
3770	G	97			Printer, HP Deskjet 845C					TH22J2BOJ3		
3771	G	95			Deskjet 845C Printer					TH22J2B0JG		
3772	G	87			Printer, HP Deskjet 845C					TH22J2B0JR		
CB1355	G	90			Printer, HP Deskjet 710					TH22-2B4K9		
3806	G	87			Incubator, CO2 Nuaire					#84849070303		
3807	G	87			Incubator, CO2 Nuaire					#84851070303		
3842	G	88			Monitor, IBM, Cell Dyn							
3889	G	100			InFocus					AJNN42500473		
3897	G	100			IBM Think Pad X40					KV-AD262		
3921	G	95			Balance/Tortion Scale (Butter)					22460		
3923	G	73			Barnstead NANO Pure/Model 08991					#1162000750303		
3924	G	73			Hot Plate/Gyratherm Stirrer					Md58922-054		
3925	G	73			Water Bath, Blue M							
3926	G	78A			Maxi Mix II					#1254011193905		
3927	G	83			Projector/Infocus LP225-Computer					ACN 001 528 954		
3928	G	83			Projector/Kodak Extagraphic III					A 649116		
3929	G	83			Camera Stand							
3931	G	83			APC Back-UPS 500					P80046310929		
3932	G	83			File Cabinet/4 Drawer							
3933	G	83			Table/Wood Microscope							
3934	G	83MM	Dec-95		4 Panel Work Station - Mahogeny							
3937	G	83JM	Dec-95		4 Panel Work Station - Mahagoney							
3938	G	75			Wisper Cool/Air Cooler/Portable (Old Receiveing)					L94062147		
3939	G	75			Maytag Washer			MSU				
3940	G	75			Maytag Dryer			MSU				

3941	G	75			Slide File Cabinets - 26 racks						
3942	G	75			Large Upright Dolly/Metal						
3943	G	97			APC-UPS				AB0349140706		
3944	G	97			Bookcase, 8 shelf/wood						
3945	G	97			Bookcase, 5 shelf/wood						
3946	G	78			Smart Label Printer				P930361366		
3947	G	78			Pelouze/Heavy Duty Utility Scale				P100S		
3948	G	78			Table, Oak						
3949	G	100			Bookcase, 7 shelf/metal						
3956	G	81			Freezer/Tru Cold (CWD)				26XHM		
3957	G	81			Table/Blue Lift 1100 lbs capicity				166		
3958	G	81			Hobart Bandsaw				59536		
3959	G	81			Shandon/Dissecting Sink				21195-1		
3983	G1	95			Sample Preparation Unit 3.0				AL805L07		
3983	G2	95			KEI/Computer				MX4642-22		
3983	G3	95			Monitor, Philips				CX00037884261		
3996	G1	96	12/22/2004		Cryostate		Thermo electron		#1294031252793		
4336	G	83MM			Microscope, Olympus BX40F				4E11339		
7573	MSU	73			Refrigerator, Hotpoint						
8507	G	81			Table/Stainless Steel w/Drains						
	USDA	75			Plate Reader Dynateck MR5000		USDA/APHS Serolo		2213		
	USDA	75			Microplate Reader Model L307		USDA/APHS Serolo		13676		
289		87			Chair, Gray High Back						
3390		87			Chair, Red						
4451	G	100			Computer				2890MDI		
4452	G	100			Monitor				OPM372-72872-77K-098I		
4457	G	97			Computer, Dell Latitude D520 Lap Top		Dell				
4457A	G	97			Computer, Dell Docking Station						
663	G	83			Camera Tripod						
		97			Chair, Secretary/Blue						
		88			Oak Computer Stand						
		88	Aug-04		Mobile Computer Cart						
		77			Multipurpose Mail Organizer						
		77			APC Back UPS ES 350				AB0448128965		
		76A			Table w/orange counter top						
		73			Stainless Steel Buckets (6)						
		73			Stainless Steel Bucket Lids (8)						
		75			Fax/Panosonic - Model KX-FP80				OCCFA176574		
		75			Printer/ Epson LX 810				44B0179992		
		81			White Rubbermaid bin/rollers 13.8 cu ft						

		81			Barrels/55 gal plastic - 9							
		81			Barrels/50 gal plastic - 6							
		81			Barrels/55 gal Stainless -3							
		81			Hoist							
		81			Morse Barrel Pully/Blue		anteroom					
		81			Block & Tackel/chain		cage-anteroom					
		81			Screw/lock in place dolly barrel							
		83MM			Bookcase, 3 shelf/Gray							
						Smart Cycler is shared by Virology & Bacteriology						
		73			Carts, Stainless Steel - 12 each			MSU				
		75			Buckets, Stainless Steel (6)							
		75			Bucket, Lids - Stainless Steel (3)							
		97			Electrical Unit for lap top					75Q-381A		
		97			Electrical Unit for lap top					776-74C4		
		77			Paper cutter - green large							
		76A			Paper stacking tray, gray metal							
		90			Monitor, HP Computer							
		90			Desk Chair, Brown X2			Staples				
298	B				Microscope, Trinoc Head, B&L #BRT3Z1H					13211683		
					Objectives: 10 X							
					40 X							
					100 X OIL							
					4 X							

VETERINARY DIAGNOSTIC LABORATORY
STAFF AND SALARY

Name	Total Pay
Clinical Lab Tech-supervisor	20.444946
Clinical Lab. Technologist	19.340764
Clinical Lab Tech-supervisor	23.155983
Media preparation	14.781732
Administrative Asst, Transcriptionist	11.59685
Administrative assistant	13.623353
Clinical Lab Technologist	22.52
Pathologist/Administrator	39.948357
Clinical Lab Tech-supervisor	18.759738
Clinical Lab Tech-supervisor	22.006369
Clinical Lab Technologist	21.855101
Administrative Asst,supervisor	13.813281
Pathologist	33.069243
Clinical Lab Technologist	16.439456
Administrative Asst- Transcriptionist	10.662943
Administrative Asst	10.776959
Clinical Lab Tech-supervisor	19.063407
Clinical Lab Technologist	16.498372
Clinical Lab Technologist	16.439456
Clinical Lab Technologist	16.680612
Clinical Lab Technologist	14.92
Clinical Lab Tech-supervisor	15.86

MSU Original

Office of Facilities Services

MSU • Bozeman
P.O. Box 172760
Bozeman, MT 59717-2760

Telephones (406)

Administration	994-2001
Facilities Plan. & Mgmt.	994-4131
Work Control Center	994-2107
Accounting	994-5020
Engineering & Utilities	994-2001
Campus Stores	994-2098
Motor Pool	994-3670
Landscape & Grounds	994-3442
Custodial Services	994-6868
Fax	994-6572

April 19, 2006

Marc Bridges
Department of Livestock
PO Box 202001
Helena, MT 59620-2001

RE: Marsh Lab – MOU
Montana State University
Bozeman, MT 59717

Marc,

Enclosed for your review and signature is the final Marsh Lab- Memorandum of Understanding between MSU and the Montana Department of Livestock.

Please sign both of the originals and mail one back to me.

Sincerely,

Patti Yasbek

Attachment

MEMORANDUM of UNDERSTANDING
HADLEIGH MARSH LAB
Montana State University

This Memorandum of Understanding (MOU) is made and entered into on the date of signature noted herein, by and between Montana State University (MSU) and the Montana Department of Livestock (DOL).

A. Acknowledgements
   1. Marsh Lab is a state facility owned by MSU. Marsh Lab was constructed in 1960, funded by a combination of federal grants and state funds approved by the legislature. An addition to Marsh Lab was constructed in 1996, funded by DOL State Special Revenue funds authorized in HB05 by the legislature.
   2. Marsh Lab was constructed to house MSU uses and the Dept. of Livestock's Veterinary Diagnostic Laboratory; however, the lack of an occupancy or use agreement has contributed to confusion among the cohabitants regarding issues of space, services and building operations and associated cost distribution.
   3. Both MSU and DOL reaffirm the desirability and benefits of having the Veterinary Diagnostic Lab (VDL) located at MSU, and desire to continue their cooperative relationship.
   4. Therefore, it is in the best interests for the parties to consummate this MOU to clarify and document commitments, procedures and obligations.

B. Basic Occupancy Provisions
   1. Current Space Allocation: The current allocation of space is documented in Exhibit A.
   2. Changes in Space Allocation: The parties to this MOU intend to collaborate regarding the use and allocation of space within the building. MSU recognizes that the VDL may have need for additional space and MSU will consider requests from VDL for vacated space in context with MSU and VDL space needs. The MSU Space Management Committee or other current appropriate entity shall be the official venue for space requests.
   3. Use of Space: The space allocated to the DOL shall be for the expressed use of the VDL to accommodate its laboratories and offices. Any other use by DOL shall be by mutual agreement between the parties under the provision by which this MOU may be modified.
   4. Term of Occupancy by VDL: It is the intent of both parties that the VDL will continue to occupy space in Marsh Lab until VDL no longer requires the space; however, MSU may in the future desire to displace VDL from the facility, in which case MSU and DOL will collaborate to develop a displacement strategy that may include (but not necessarily be limited to) pursuing replacement space through the state's Long Range Building Program or other mutually agreeable strategies.
   5. No Assignment: The DOL has no claim to the space in Marsh Lab beyond its own use as noted above, and has no right to assign the space to any other federal, state or private entity. Upon termination of use by DOL, allocation of the previously occupied space will revert to MSU.

6. Care of Premises/Alterations to Premises: While reasonable wear and tear is expected, both parties agree to attempt to avoid activities that will unnecessarily impact maintenance costs by using the facility in a manner appropriate to the intent thereof. All alterations to the facility must comply with MSU's Construction Activities Policy and all applicable statutes.
7. MSU Policies and Procedures: DOL agrees to comply with MSU's Policies and Procedures regarding the general operations and maintenance of the facility, e.g., Building Supervisor procedures, keys policies, construction policies, etc. MSU will work with DOL to minimize/accommodate legitimate conflicts between MSU and DOL policies.
8. Chemical and hazardous waste materials generated on MSU property are collected and disposed by MSU Safety and Risk Management according to the MSU hazardous waste collection policy. VDL shall report all chemical and hazardous waste generated to MSU Safety and Risk Management. Infectious wastes generated by VDL in Marsh Lab will be destroyed or sterilized by an approved means on the premises. If an approved means of destroying or sterilizing (incineration or steam sterilization) is not available on premises these wastes shall also be reported to MSU Safety and Risk Management for collection and disposal.
9. Right to Inspect/Repair: MSU shall have the right to enter into VDL spaces, after reasonable notice at all reasonable times or in an emergency, for the purposes of inspection and/or repair and maintenance of the facility.
10. Compensation: No compensation or "rent" is charged to DOL for the space allocated for their use – only reimbursement as noted in the distribution/assignment of costs section applies.

C. Services/Distribution/Assignment of Physical Plant Costs

1. Non-educational campus entities, such as VDL, are responsible for their share of costs for University-provided centralized services. Centralized services are provided to Marsh Lab and its occupants at the level normally provided to MSU-Supported Facilities. The level of services provided is subject to priorities/budget processes and funding limitations.
   - Centralized services currently provided to Marsh Lab are Mail Services, Custodial Services, Refuse, Building/Heat/Scheduled/Preventative Maintenance, Major Maintenance, Facilities Administration, Property Insurance, Utility System O&M, Safety & Risk Management, and University Police.
   - The Overhead Cost Distribution (OVH) calculates an entity's proportionate share of the centralized services that they receive based on their share (%) of gross square feet occupied, budgeted utilities, waste volume generated, FYE Expenditures and/or FTE. (i.e., the OVH does not represent what is actually spent or will be spent on a particular building or area in any given year.) The OVH is distributed annually by the University Budget Office. See Exhibit B.
   - Since DOL is responsible for securing Comprehensive General Liability and Content insurance, the OVH will only reflect VDL's proportionate share for structure insurance.

- Landscape & Grounds services for Marsh Lab are not distributed through the OVH. This is because the OVH method would result in a disproportionately large amount relative to the actual services provided.

2. All campus entities are responsible for their proportionate share of purchased utilities; 100% of any centralized services that are requested beyond that normally provided/assessed by the OVH; and, 100% of non-building/department type services requested (Refer to the Facilities Services Guide for "services normally charged to a requesting college or department").
   - The University's monthly auto-bill system is used to bill these services.
   - These services are billed when requested services are provided. Charges reflect a rate per hour worked, supplies used, and/or metered utility consumption.
3. VDL's proportionate share of Marsh Lab's L&G services are charged through the monthly auto-bill system. Mowing and watering are pre-authorized, other desired services are to be approved by Facilities Services and VDL and a funding commitment(s) must be secured.
   - The Marsh Lab parking areas are not currently included in the MSU decaled, revenue-producing, parking system. Therefore, all maintenance, snow removal, etc., is currently handled on an informal, ad hoc basis among the current building occupants. At some future point, parking areas at Marsh Lab may be absorbed into the MSU parking system with its associated permit requirements, and after prior consultation with building occupants. Such a change would subsequently cover maintenance costs at the campus average level.
4. Capital projects and large-scale major maintenance projects will be requested through the State's Long Range Building Program.
5. Projects funded with non-MSU state dollars may be assessed the OFS Project Fee. (Refer to the Physical Plant Project Fee Assessment Policy).

D. Damage or Destruction

1. In the event that the building is damaged by fire, earthquake or other peril, the building may be abandoned, demolished, repaired, reconstructed or restored at the sole discretion of MSU. If repair is deemed appropriate, MSU is not obligated to provide temporary space for DOL during the repair period. If the facility is abandoned or demolished, MSU is not obligated to provide replacement space for the use of DOL. Neither party shall be responsible to the other party for damages or losses or any inconvenience or annoyance occasioned by such building damage, repair or reconstruction.

E. Insurance/Indemnification

1. DOL is responsible for securing Comprehensive General Liability Insurance through the Montana Self Insurance Program administered by the Risk Management and Tort Defense Division (RMTDD) of the Montana Department of Administration. Since MSU and the DOL are both entities of the State of Montana, and since both fall under the Montana Tort Claims Act 2-9-101, MCA, neither can indemnify itself against the other. If any incident likely to result in a liability claim arises from the activities, operations, and acts, errors, or omissions of the DOL or its employees, agents, volunteers, or representatives, that incident shall be immediately reported to the

appropriate RMTDD claim representative with a copy of all incident and claim information forwarded to MSU Safety and Risk Management.

2. DOL is responsible for reporting all its contents (personal and portable property) residing in Marsh Lab to the RMTDD via the appropriate Source Data Reporting mechanism. DOL will insure all personal and portable property through the State's Commercial Property Insurance Program administered by the RMTDD.

F. Multi-Use Facility

1. Both parties acknowledge that Marsh Lab is a multi-use building that accommodates a variety of occupants/uses, and they are not to conduct activities in or about the building that will obstruct or interfere with the legitimate activities of other occupants. MSU agrees to consider compatibility of use when reassigning vacant space to prospective users.

G. Modifications to MOU

1. This MOU may be modified at any time; however, any such modification must be in writing and signed by both parties.

H. Official Contacts

1. Dept. of Livestock:	Executive Officer
2. Veterinary Diagnostic Lab:	Director VDL
3. Montana State University:	Associate Vice President, University Services

I. Execution

Montana State University:

Geoffrey Gamble, President

4-13-06
Date

Dept. of Livestock:

Marc Bridges, Executive Officer

May 1, 2006
Date

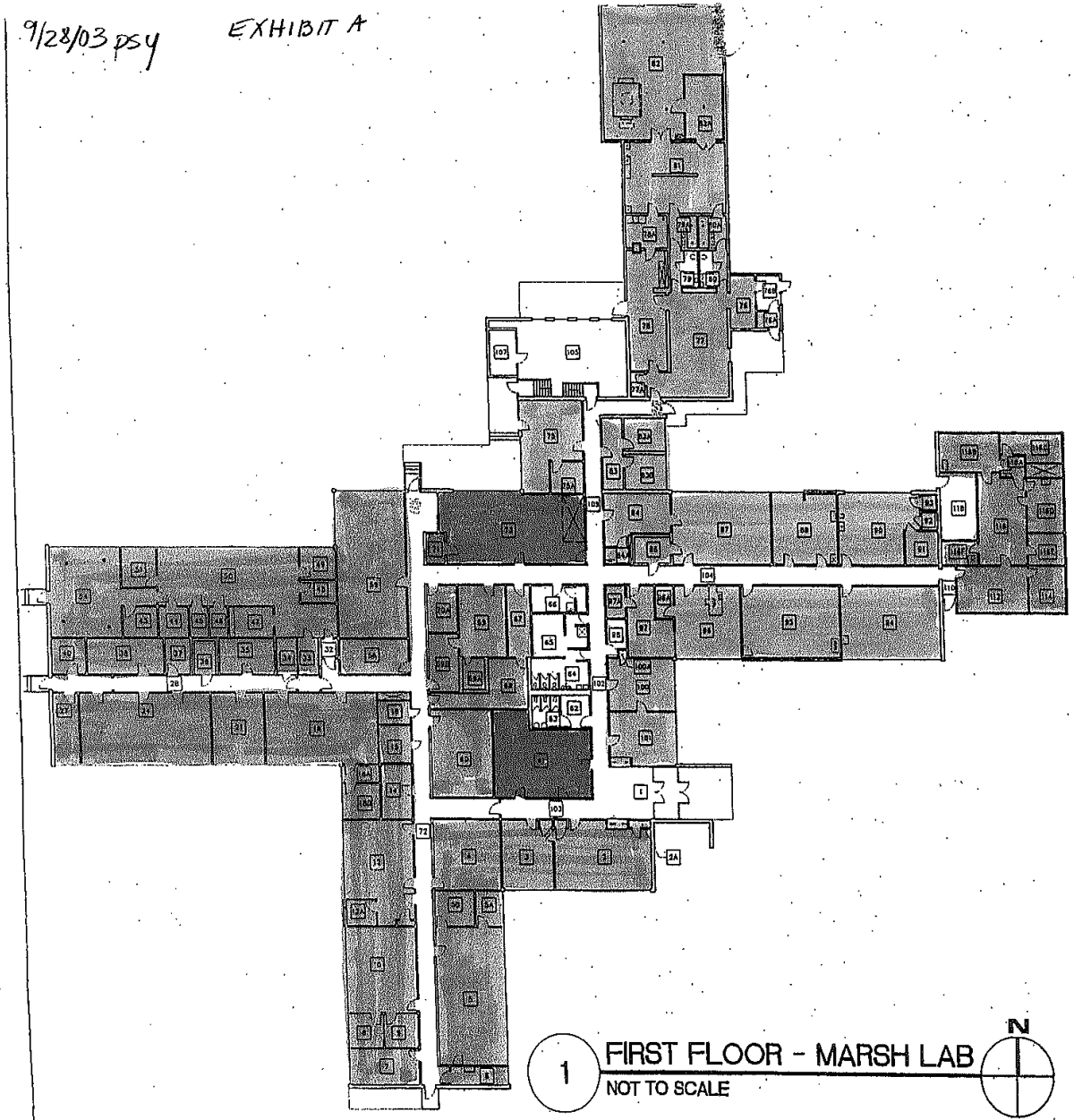
FACILITIES SERVICES
RECEIVED

MAY 0 3 2006

MONTANA STATE UNIVERSITY

9/28/03 psy EXHIBIT A

NON-ASSIGNABLE
Vet DIAGNOSTIC LAB
MSU
SHARED - 0/0 UG/M



1 FIRST FLOOR - MARSH LAB
NOT TO SCALE

N

DATE REVISED JAN 03

MONTANA STATE UNIVERSITY BOZEMAN

DESIGNS 994-4551
PLANT BUILDING 5977
BOZEMAN, MONTANA

INDEX # 2

BUILDING # 116

Montana Fish, Wildlife & Parks

1400 S. 19th Avenue, Bozeman, MT 59718

Laboratory Review for SJ 14

Response to Questions:

a) Laboratory Inventory
    a. Physical Space: The Wildlife Lab consists of two levels totaling approximately 5,500 sq ft (outside measurement). Working space consists of an exam room (386 sq ft), a walk-in cooler (131 sq ft), a walk-in freezer (76 sq ft), a side room for equipment such as ultra-low freezers (117 sp ft), a dark room (25 sq ft), technician office space and computer work center (216 sq ft), a general work room (469 sq ft), blood processing and equipment storage room (137.5 sq ft), pharmacy room (20 sq ft), lab supervisor and wildlife veterinarian office space (278 sq ft), bathrooms and shower room (308 sq ft) and upstairs storage space (approx 3000 sq ft). The Wildlife Laboratory also has parking space for up to 6 vehicles that are used on a full time or seasonal basis and two storage facilities for equipment (approx 300 sq ft).
    b. Equipment: The Wildlife Lab currently has two ultra-low freezers, one stand-up freezer, a refrigerator of tissue storage, 4 2 dissecting micro-scopes, an oil microscope, several centrifuges a Class V safe, gun safe, two x-ray machines, a large vacuum packing machine, six computers located at computer stations, up to 6 pickup trucks, one portable vet box, exam table, a four-wheeler and other misc. tools and equipment.
    c. Employees: The Wildlife Laboratory currently has three full time employees, the wildlife laboratory supervisor, the wildlife veterinarian and a wildlife lab technician. There is also a seasonal, part time technician position (0.17 FTE) An addition full time employee, the avian influenza coordinator, works out of the wildlife lab but is supported by a federal grant. The lab will hire up to 20 seasonal technicians and up to 8 MSU work-study students.

d. Lease agreement: The wildlife lab resides on MSU land that is under a long-term lease. That lease was paid in a lump sum initial payment so there is current no cost associated with the lease.

b) Personnel
   a. Wildlife Laboratory Supervisor
      a) Age - 44
      b) Sex - Male
      c) Salary - Base = $26.24/hr, with benefits = $34.61/hr.
   b. Wildlife Veterinarian
      a) Age - 35
      b) Sex - Female
      c) Salary – Base = $25.00/hr, with benefits $33.26/hr
   c. Wildlife Technician, Full Time
      a) Age - 43
      b) Sex – Male
      c) Salary – Base = $13.016/hr, with benefits $20.15/hr
   d. Wildlife Technician, Part Time/Seasonal
      a) Currently Vacant
      b) Salary approximately $4,600/yr.
   e. Avian Influenza Coordinator
      a) Age - 52
      b) Sex – Female
      c) Salary – Base = $16.242, with benefits $22.98
   f. Seasonal technicians (up to 20)
      a) Age, Sex variable
      b) Salary approximately $13/hr on average

c) Biosafety Levels

Currently the Wildlife Laboratory has minimal biosafety measures. The entire lab including the exam room, walk in coolers and walk-in freezer are accessible by FWP employees and to some extent the public. The minimal biosafety of the lab is not conducive to conducting examinations of sick or diseased wildlife. The lab does follow general personal safety and cleaning protocols.

d) Coordination with other labs

The Wildlife Laboratory has limited diagnostic capabilities. As a result we rely heavily on other labs for sample testing. We currently have an agreement with the Dept. of Livestock, Diagnostic Laboratory for diagnostic work but do utilize other labs as well. The list of labs that we contract with consists of but is not limited to the: National Veterinary Services Laboratory (IA), National Wildlife Health Center (WI), Centers for Disease Control, Caine Veterinary Teaching Hospital, Washington Animal Disease Diagnostic Laboratory, Wyoming State Diagnostic Laboratory, Biotracking (ID), Michigan State University, Louisiana State University, Rocky Mountain Research Laboratory, U of Montana Genetics Laboratory and other labs based on need and services offered.

The wildlife lab supervisor is currently part of the Montana Laboratory Forum. The forum consists of personnel from various labs across Montana and is designed to improve communication among the labs of the state. We have historically collaborated with MT Dept. of Livestock and USDA-APHIS on various projects.

e) Lab Needs

a. Short-term needs:

a) A part or full time technician for the wildlife veterinarian. Currently too much of the wildlife veterinarian time is consumed by activities that should be performed by a technician such as entering data or maintaining databases.
b) A hydraulic necropsy/exam table. Our current table is not adequate and is not adjustable.
c) An evidence locker (cold storage). Evidence is currently stored with other specimens in an unlocked portion of the freezer. This is not adequate for maintaining chain-of-custody for evidence.
d) Improved lighting in exam room.

b. Long-term needs:

Currently the facility we have is inadequate for the volume of work done at the Wildlife Laboratory. We can and have

been able to function but often bottlenecks occur reducing production. We also have to conduct animal examinations in less than optimal situations that could result in the exposure of multiple people to potential pathogens. Work space (including access to computers) is limited. At times of the year the Wildlife Lab will have up to 15 people working at the same time on various projects. It can be difficult to find adequate space for everyone and often results in safety issues associated with biosecurity. Following are recommendations for improving the Wildlife Laboratory's effectiveness and production:

a) A part or full time technician for the wildlife veterinarian. Currently too much of the wildlife veterinarian time is consumed by activities that should be performed by a technician such as entering data or maintaining databases.
b) Other items listed in short-term needs
c) A bio-level 2 or greater exam room with adequate ventilation system, lighting and space for multiple necropsies.
d) Separate necropsy/exam room (bio-level 2 exam room mentioned in c above) and tissue processing room. The Wildlife Lab processes over 2,000 deer, elk and moose heads for CWD surveillance and about 2,000 bobcat heads during the furbearer season requiring a large working space for extended periods of time. This and other tissue processing projects should not be conducted in the same room as an animal necropsy. The potential for multiple people to be exposed to a potential pathogen is too great. Wildlife lab staff would also monopolize a single necropsy room during this time period potentially creating conflicts with other agency personnel needing to use a single necropsy/exam room.
e) A cooler and freezer system that utilizes a hoist and railway system that is accessible from both outside and inside the building. Currently the Wildlife Laboratory does not have such a system requiring personnel to hand carry heavy carcasses into and out of the freezer

risking injury. The Wildlife Laboratory receives carcasses from throughout the state yet has the smallest, least accessible freezer in the department.

f) An incinerator. We currently use DoL's.
g) Night Drop capabilities. We currently do not have a refrigerated area accessible for the submission of samples during non-office hours.
h) An autoclave…We currently use DoL's.
i) A parasitologist or adequate staff to take over those duties. Currently MFWP contracts parasite work to Floyd Seesee, a semi-retired parasitologist. Mr. Seesee conducts all of our trichinosis testing on harvested bears and lions, conducts parasite evaluations on fecal material from a variety of wildlife species and identifies parasites found during examinations. Once Mr. Seesee retires fully these functions may no longer be available or may become cost prohibitive.
j) Improved diagnostic capabilities. Currently MFWP contracts the majority of its diagnostic work. The majority of the diagnostic tests available were created for livestock and do not function as well in wildlife species. Many diagnostic tests designed specifically for wildlife are not available. Obtaining the ability to conduct research and develop or improve existing diagnostic tests would greatly enhance MFWP abilities to serve the public and wildlife resources of Montana. Having the ability to develop or have access to individuals capable of developing new tests or improving existing tests within the state would greatly improve our diagnostic capabilities in wildlife. The ability to develop new diagnostic tools may also be a way to generate revenue as other states may have similar testing needs. The wildlife supervisor and wildlife veterinarian should have some authority to oversee personnel conducting diagnostic tests and have the ability to request and oversee research and development activities in efforts to improve diagnostic capabilities in wildlife.
k) Genetics laboratory. The use of genetics in wildlife research and management has greatly increased over

the last 10 years. Currently new techniques are being developed that may greatly improve our abilities to conduct wildlife investigations/research and improve management of certain wildlife species. The Wildlife Laboratory does not have the ability perform even basic genetic analysis.

l) If several state labs were to be combined MFWP would request that the Wildlife Lab maintains its autonomy and continues to be operated and supervised under MFWP so that the people and wildlife resources of Montana are adequately supported and represented. The Wildlife Laboratory would also need adequate office, workspace, storage and parking for its full-time and seasonal personnel, equipment and vehicles in order to maintain existing activities/duties with the capability to expand in needed areas.

m) Support staff. MFWP personnel would need access to adequate support staff if separated from the regional office.

Montana Department of Agriculture/Montana State University Agricultural Experiment Station
Analytical Lab
McCall Hall - Inventory

Rm #	SF	Room Name	Staff Assigned	Use of Space	Inventory of Space	
					Furniture	Equipment
*All Laboratories contain the following items:					Work Tables Benches Lab Carts Miscellaneous Glassware Waste Receptacles Chairs Step Stools Shelves Dish Drying Racks	Stirrers/Hot Plates Voltage Stabilizers Water Baths Vortexers Desiccators Auto Pipettes Pipette Stands
1	237	Break Room	All	Break Room Server Closet Comp. Equip. Storage File Cabinet Storage	Conference Table (6) Conference Chairs (6) Lg File Cabinets (2) Floor-Ceiling Shelves Small Appliances ▪ Microwave ▪ Coffee Pot ▪ Refrigerator	(2) Server Computers
1A	Media/Theatre Arts Use Only					
1B	Media/Theatre Arts Use Only					
2	784	*Laboratory	PDP Groundwater AES	Sample Analysis for Trace Pesticide (ppt)	Flammable Storage Cabinet Appliances ▪ (2) Refrigerators	Controlled Air System (2) Lab Hoods Stainless Steel Sink with Faucet Water Purification Unit Centrifuge Wrist Action Shaker (3) Vacuum Pumps w/ SPE Apparatus Nitrogen Evaporator w/ Nitrogen Tank Sonicator (2) pH Meters Lab Scale Oven

Montana Department of Agriculture/Montana State University Agricultural Experiment Station
Analytical Lab
McCall Hall - Inventory

Rm #	SF	Room Name	Staff Assigned	Use of Space	Inventory of Space	
					Furniture	Equipment
3	226	*Laboratory	Feed & Fertilizer AES	Sample Grinding Station for Feed & Fertilizer	Appliances ▪ (2) Freezers	Controlled Air System (1) Lab Hood Stainless Steel Sink with Faucet (2) Shop Vacs Sieve Vibrator Sample Divider Coffee Mill Grinders Fire Extinguisher
4	328	*Laboratory	Feed & Fertilizer AES	Sample Grinding Station & Storage for Feed & Fertilizer	Appliances ▪ (2) Microwave Ovens ▪ Convection Oven	Large Lab Compressor (2) Downdraft Tables (2) Lab Hood (2) Shop Vacs (5) Mills Lab Scale Sample Splitter Vibratory Feeder
5		Foyer	All	Recycling Center	(2) Tables Recycling Bins	
6		Restroom	All	N/A	N/A	N/A
7		Hallway	All	Circulation	N/A	Water Fountain (10) Gas Tanks Eyewash Station Emergency Shower Fire blanket (7) Fire Extinguisher Corner Safety Mirrors Emergency Lighting
8	222	Office	Bureau Chief (Heidi Hickes)	Office Space	Desk Table (5) Chairs Wall of Bookshelves ½ Wall of Bookshelves	Roof Air Conditioner Computer
9	116	Copy Room	All	Copy Room Office Supplies File Cabinet Storage Safe for A/R	(6) File Cabinets Large Cabinet for Office Supplies Cabinet	Roof Air Conditioner Copy Machine

Montana Department of Agriculture/Montana State University Agricultural Experiment Station
Analytical Lab
McCall Hall - Inventory

Rm #	SF	Room Name	Staff Assigned	Use of Space	Inventory of Space	
					Furniture	Equipment
10	341	Front Office	Accounting Tech, (Steph Kamerman)	Reception to Customers Receiving USPS, FedEx, UPS Receiving Samples Monthly Lab Meetings	(2) L Shaped Desks (2) Built in Bookcases (2) Credenzas (3) Desk Chairs Conference Room Chair Hanging Bookcase	Roof Air Conditioner HP Laser Printer Postage Scale Fax Machine Computer Dymo Label Writer Adding Machine
11	192	Office	BSE Chemist, (Laura Luckey); Feed & Fertilizer /Chemist Supervisor (Jaci Konecny)	Office Space	(2) L Shaped Desks File Cabinet Wall of Bookshelves	Roof Air Conditioner (2) Computers Dymo Label Writer Printer
12	215	Office/Lab	Feed & Fertilizer Chemist (SooRyong Yoon); Feed & Fertilizer Technician (Vacant)	Office Space/ Sample Weighing for Feed & Fertilizer	(2) Desks Shelves (2) Lab Tables	(2) Computers Printer (2) Balances Oven Air conditioner
13	237	Storage	All	Chemical Storage	Shelving	Ducting
14	411	*Laboratory	Pesticide Groundwater AES	Sample Analysis for Pesticide (Low to Medium Levels)		Air Conditioner Venting/Ducting (2) Lab Hoods Stainless Steel Sink with Faucet Multi-Stir Plate Desiccator Lab Scale (2) Large Centrifuges Small Centrifuge Shaker Nitrogen Evaporator w/ Nitrogen Tank (2) Vacuum Pump w/ SPE Apparatus Water Purification Unit Homogenizer

Montana Department of Agriculture/Montana State University Agricultural Experiment Station
Analytical Lab
McCall Hall - Inventory

Rm #	SF	Room Name	Staff Assigned	Use of Space	Inventory of Space	
					Furniture	Equipment
15	112	*Laboratory	Feed & Fertilizer AES	Instrument room for Feed & Fertilizer Analysis	Instrument Table	Vents and Ducting Computer Printer Varian AAS Instrument Vapor Generation Accessory Nitrogen Tank Acetylene Tank
16	162	*Laboratory	Feed & Fertilizer AES	Instrument room for Feed & Fertilizer Analysis	Industrial Grade Instrument Table w/ wheels	Computer Printer Recirculation Cooling Unit Air Conditioning ICPOES Perkin Elmer Instrument Venting & Ducting Argon Tank
17		Rear Foyer	All	Circulation	N/A	Fire Extinguisher
18	50	Storage	Feed & Fertilizer AES	Sample & Chemical Storage for Feed & Fertilizer / AES	Appliances ▪ Refrigerated Unit Cooler	
19	138	*Laboratory	Feed & Fertilizer AES	Sample Analysis for Feed & Fertilizer		Heating Block Perchloric Acid Hood Stainless Steel Sink Industrial Grade Microwave Shaker Water Purification Unit Compressor
20	164	*Laboratory	Pesticide AES	Sample Analysis for Pesticide	Appliances ▪ (2) Freezers ▪ Dishwasher	Stainless Steel Sink Hobart Grinder Carbon Dioxide Tank Dry Ice Maker Balance Hood Air Conditioning Unit

Montana Department of Agriculture/Montana State University Agricultural Experiment Station
Analytical Lab
McCall Hall - Inventory

Rm #	SF	Room Name	Staff Assigned	Use of Space	Inventory of Space	
					Furniture	Equipment
21	228	*Laboratory	Feed & Fertilizer AES	Sample Analysis for Feed & Fertilizer / AES program Sample analysis for high level pesticide program.	Flammable Storage Cabinet Appliances ▪ Refrigerator ▪ (3) Freezers	Lab Hood Air Conditioner Nitrogen Evaporator w/ Nitrogen Tank Nitrate Electode Centrifuge (2) Sonicator Wrist action shaker Steam Table
22		Stairs	N/A	Circulation/Storage	Water Heater	Distilled Water System Fiber Optics Station
23	335	Office	QA Officer PDP Pro-gram - Robin Johnson; GWTR/Chemist Supervisor - Angela Schaner; Chemist - Cathy Bauder	Office Space/Conference Area	(3) L Shaped Desks (6) File Cabinets Printer Stand Small Filing Cabinet	Air Conditioner (3) Computers Laser Printer Dymo Labelwriter Printer
24	242	*Laboratory	Pesticide Groundwater Feed AES	Instrument room for Pesticide & Feed Analysis	Desk File Cabinet (3) Industrial Instrument Tables w/ Wheels	(2) Air Conditioners Recirculation Cooling Unit Vent Lines to Instruments Medical Grade Copper Tubing (3) Computers (3) Printers Water Premier XE and UPLC Instrument Micromass Quattro Ultima MS Instrument HPLC Instrument Waters XEVO w/ UPLC Instrument

Montana Department of Agriculture/Montana State University Agricultural Experiment Station
Analytical Lab
McCall Hall - Inventory

Rm #	SF	Room Name	Staff Assigned	Use of Space	Inventory of Space	
					Furniture	Equipment
25	344	*Laboratory	Pesticide Groundwater Feed AES	Instrument room for Pesticide & Feed Analysis		Air Conditioner Venting/Ducting Gas Purifier (4) Computers (4) Printers 5975 GCMSD Instrument 6890 GC Instrument 5973 GCMSD Instrument Waters 2695 HPLC w/UV Detector Instrument Waters 2695 w/ Florescence and UV Detection System Instrument Pickering PCX Instrument Argon Tank Hellium Tank (2) Standard Size Nitrogen Tanks (3) 55 Gallon Nitrogen Tanks
26	244	Office	Groundwater/Chemist (Jona Verreth); Pesticide/Chemist (Katie Giddings); AES Research Technician (John Barnick)	Office Space	(3) Desks (2) 4' Shelves Printer Stand	Air Conditioner (3) Computers Printer
27		Janitor's Closet	N/A	N/A	N/A	N/A
30		Bathroom	N/A	Janitor Storage	N/A	Shower
31	115	*Laboratory	Feed Pesticide	PCR Clean Room Pesticide Standard Preparation	Appliances ▪ Freezer	Stainless Steel Sink w/ Faucet Ducting/Venting System Lab Scale Centrifuge Balance with Hood Digital Heat Block Biorad Imaging Unit Computer Printer Water Bath

Montana Department of Agriculture/Montana State University Agricultural Experiment Station
Analytical Lab
McCall Hall - Inventory

Rm #	SF	Room Name	Staff Assigned	Use of Space	Inventory of Space	
					Furniture	Equipment
32	46	Storage	Pesticide	Pesticide Waste - High level	Flammable Storage Cabinet	Nitrogen Generator
33	44	Cold Chemical	All	Cold Chemical Storage	Shelves Walk in Cooler	
34	117	*Laboratory	All	Storage Tools	Tool Chest (2) Dollies Appliances ▪ (3) Freezers	
36	59	*Laboratory	Feed AES	PCR Clean Room		Purifier Vertical Hood Icycler Waters Bath
38	410	*Laboratory	All	Sample Analysis for Pesticide, Feed, AES	Flammable Storage Appliances ▪ Small Refrigerator	Air Conditioner Venting/Ducting Industrial Oven (2) Lab Hoods Stainless Steel Sink with Faucet Shaker (4) Vacuum Pumps Vacuum Pump w/SPE Apparatus (2) Roto-evaporators w/ vacuum pumps Sonicator/Bath Auto Titrator Fibertech Digestion Unit Fat Extraction apparatus Balance Recirculating Refrigeration Unit Nitrous Oxide Tank Nitrogen Tank
38A		*Laboratory	All	Sample oven for heating/burning	Industrial Lab Tables	Industrial Oven (2) Furnaces

Montana Department of Agriculture/Montana State University Agricultural Experiment Station
Analytical Lab
McCall Hall - Inventory

Rm #	SF	Room Name	Staff Assigned	Use of Space	Inventory of Space	
					Furniture	Equipment
39	629	*Laboratory	Feed & Fertilizer AES	Sample Analysis for Feed & Fertilizer, AES	Appliances ▪ Refrigerator	Air Conditioner Venting/Ducting (2) Lab Scales LECO FP-528 Instrument Computer Laser Printer Forced Air Oven pH Meter Pellet Press Balance w/ Computer Helium Tank Oxygen Tank Perchloric Acid Hood Titrating Station Automated Distillation Unit Gas Purifier (2) Stainless Steel Sinks Water Purification Unit

Montana Department of Agriculture/Montana State University Agricultural Experiment Station
Analytical Lab
Miscellaneous Information

Introduction

McCall Hall was built in 1952 and is owned by Montana State University. MDA maintains a cooperative agreement with MSU regarding the laboratory space and the operation of a joint laboratory facility that provides testing services to both MDA and MSU AES. The agreement includes the following key provisions:

- MSU shall "provide adequate laboratory facilities on the campus of MSU for the analytical laboratory" and the MDA shall employ and pay personal costs for the bureau Chief/laboratory Director and a secretary in lieu of payment for space provided in McCall Hall for the Department's office and storage needs.
- MDA shall supervise both MDA and MSU personnel and programs to maximize efficient and effective utilization of lab personnel, equipment, space and related items in performing analytical work for either agency.

Building Lease Information

MDA does not pay rent nor do we lease lab space at McCall hall per the arrangements in the Cooperative Agreement between MDA and MSU. MDA is responsible for utility costs(~$40,000 per year) and any additional building requirements such as air-conditioning, remodeling, hoods and venting, modifying plumbing and/or electrical needs and others.

Biosafety

We have none.

Coordination with Other State Laboratories

- Veterinary Diagnostic Laboratory: pesticide screening in milk and miscellaneous livestock water and forage testing for nitrates, TDS, sulfate and others.
- Fish, Wildlife & Parks: Rotenone analysis in water after Black Lake poisonings
- Analyzed milkshake for trace pesticides for the state Crime lab in Missoula.
- Cooperative agreement with Health lab in Helena that in the event of an emergency and they ran out of lab space they could utilize our lab for their testing needs.

Montana Department of Agriculture/Montana State University Agricultural Experiment Station
Analytical Lab
Miscellaneous Information

Short Term Needs for Analytical Lab

Install a liquid nitrogen tank by the Fall of 2009

Long Term Needs for Analytical Lab

The unique relationship MDA maintains with MSU in the "joint operation" of the analytical laboratory is a continuing economic benefit to both agencies and to the public through cooperative management of personnel, equipment, supplies, facilities, and laboratory programs and expertise. It is important to MDA and MSU that this relationship continues.

MDA is not seeking nor do we need to move to another location. McCall Hall meets all of our analytical and staffing needs. The building is the right size, in the right location and we have invested heavily in the building over the years in order to meet our expanding analytical requirements – adding air-conditioning to all working rooms, adding specialized venting and electricity, and remodeling to accommodate additional staff, grinding areas, clean rooms, gas requirements and others.

Suggestions for Combining Services and Facilities between Labs:

MDA is not seeking nor do we need to move to another location; it is in our best interest to maintain an association and our current location with MSU. The collaboration benefits both agencies by consolidating resources and is critical to our mission of providing efficient, quality chemistry testing services in support of Montana Agriculture.

In addition there are concerns with co-locating the MDA lab with other laboratories as MDA lab requirements are rigorous and require enough space and isolation to ensure clean space without fear of contamination. For example:

- It is critical that we do not share space with a lab that operates in a bovine rich environments such as the Veterinary Diagnostic Lab due to the potential for cross contamination of our PCR test for ruminant contamination in animal feed.
- It is critical that we maintain control of our lab environment inside and outside of the building in regards pesticide residues. Our weekly testing of pesticides in water samples at sub part per trillion amounts require a pesticide free environment not only inside the lab but outside as well. In our current location spraying with pesticides is not

allowed at or near the building and our trace lab is located in a separate wing away from other pesticide testing in the lab.

- It is critical that we maintain controlled access into the building not only for security but because of the potential for outside contamination.
- It is critical that we maintain enough physical space to separate incompatible inorganic and organic testing activities.
- It is critical that we maintain our lab facilities to meet the ISO17025 accreditation standard in the USDA PDP program. Accreditation was granted in May of 2008 at the current facility. If a new facility does not meet the standard of ensuring correct performance of the testing activities as well as effective separation between incompatible activities our accreditation is jeopardized.

Montana Department of Agriculture/Montana State University Agricultural Experiment Station
Analytical Lab
Personnel & Demographics

Position	Years in Service	Age Pa	y Ban	*Salary
Bureau Chief	33	56	7	36.08471
Groundwater/Chemist Supervisor	25	49	6	30.14958
Chemist	10	50	6	22.72499
Feed & Fertilizer/ Chemist Supervisor	7	30	6	28.07131
Groundwater/Chemist 4		32	6	21.96158
Pesticide/Chemist 3		25	6	20.59444
QA Officer PDP Program	2	32	6	19.39276
BSE Chemist	7	29	6	22.28805
Feed & Fertilizer/Chemist	5	51	6	20.85622
MSU AES Research Technician III	3	25	N/A	16.7418
Feed & Fertilizer/Lab Technician	-	-	4	NA
Part Time MSU Student Employee	3	22	N/A	10.50
Part Time MSU Student Employee	1	19	N/A	8.50
Accounting Technician	1	26	4	13.34500

***Salary**: dollars per hour

DPHHS Public Health & Environmental Laboratories' Inventory	Submitted by Anne Weber, Lab Director
Facility Description	
Physical space description with square footage	First floor clinical laboratory (6620 sq. ft.), first floor BSL3 suite (805 sq. ft.) and second floor chemistry laboratory (5400 sq. ft.) in B wing of Cogswell Bldg, with storage in B wing basement (8154 sq. ft.)
Biosafety levels	One BSL3 laboratory (805 sq. ft.), remainder is BSL2
Equipment list	see page 2
Annual cost of rent	FY10 annual rent $253,560 estimated from Sept 09 monthly charges
Staff Description	
Number and type of personnel	38 total FTE including 1 Director, 6 Section Supervisors, 17 Clinical Laboratory Specialists, 6 Chemists, 2 Laboratory Preparedness Coordinators, 3 Administrative Support, 3 Laboratory Training and QA Coordinators, and 2 Laboratory Technicians
Personnel demographics, including age and pay scale	Age of staff in the currently filled positions are 3 staff in their 60's, 18 staff in their 50's, 10 staff are in their 40's and 5 staff are age 39 or less. Pay scale ranges from an average of $31.74 per hour for managers, $21.39 per hour for technical and professional personnel, and $13.75 per hour for support personnel.
Services Description	
List of Services	see pdf attachment
List of Fees	see pdf attachment
Coordination Description	
How we are already coordinating with other state laboratories	We perform testing as requested for the Dept of Livestock laboratory. This is generally limited to confirmatory testing for specific bacterial pathogens. We have MOU's with the Dept of Livestock and the Dept of Agriculture Laboratories to share facilities in the case of emergency. We have recently implemented a group called the Montana Laboratory Forum to collaborate on Laboratory System Improvement. Members of this group include representatives from DPHHS, Dept of Livestock, Dept of Agriculture, FWP, and the Dept of Justice.

Wish list for facilities, infrastructure, equipment, personnel (describe recent upgrades)	Recent facility upgrades: in 2003, an area of the first floor laboratory was remodeled into a BSL3 suite, a requirement for work with agents of bioterrorism and a recommendation for work with tuberculosis. In 2004, another area of the first floor laboratory was remodeled into a molecular diagnostics laboratory. In 2007, a new organics laboratory was built on the second floor, and the second floor offices were moved outside the laboratory testing area. In 2008, an area of the first floor laboratory had the existing cabinets removed and painted and new vinyl flooring installed. In 2009, the remaining area of the second floor laboratory was remodeled to include new fume hoods, cabinets, flooring, and air handling. Our facility is in good shape, the only difficulty is that it is in a building with non-laboratory office space, which sometimes causes challenges in building maintenance. We are constantly looking for state and federal funding to keep current on equipment and equipment maintenance. Our personnel is adequate for our current testing volume and programs.
Suggestions for combining services	I have no suggestions for combining services. In an ideal world, state laboratory services would be co-located in one building to maintain consistent expertise for building maintenance and to share expensive equipment as available.
Mission Description	
Scope of services	DPHHS provides two types of laboratory services: clinical and environmental. The primary function of the clinical services is to provide testing of community health importance directed at the prevention and control of human disease and at the improvement of the community's health. The clinical tests provided are limited to those of public health significance in support of federal, state and local public health programs. Clinical test consultation and training is also provided. Public Health Emergency Preparedness is also a focus of both laboratories, as DPHHS has received federal funding for Bioterroism and Chemical Terrorism testing. Analysis of food for bacterial contaminants is also done in the clinical laboratory. The environmental laboratory provides analytical, consulting and training services to programs of the State of Montana, local and federal agencies, and to the general public. The Environmental Laboratory is certified by Region 8 Environmental Protection Agency to provide analyses for the Safe Drinking Water Act (SDWA), and also provides testing for the Clean Water Act (CWA), the National Pollutant Discharge Elimination Syster

Authorizing legislation	The DPHHS laboratory has general authorization, see: http://data.opi.mt.gov/bills/mca/50/1/50-1-202.htm specifically see d (ii) and p(ii).

	A	B	C	D	E	F	G
1		**Laboratory Services Bureau DPHHS**					
2		**Equipment List**					
3	**Current Status**	**Tag No**	**Description**	**Serial No**	**Acquistion Date**	**Physical Location**	
4	IN SERVICE		GLOVE BOX			AHRF BLOCKHOUSE	
5	IN SERVICE	19162	PANASONIC LCD PROJECTOR	SB7330074R	7/13/2007	B105	
6	IN SERVICE		BIOTEK ELX405 PLATE WASHER	181215		B108	
7	IN SERVICE		BIOTEK ELX808 READER/SOFTWARE	219856		B108	
8	IN SERVICE	4972	BLOOD LEAD ANALYZER #1, ESA	516		B108	
9	IN SERVICE		BLOOD LEAD ANALYZER #2, ESA	554		B108	
10	IN SERVICE	18811	FREEZER, KENMORE -20C			B108	
11	IN SERVICE		INCUBATOR SANYO 37C	8030063		B108	
12	IN SERVICE		PLATE WASHER, STRIP, WELLWASH 4 M	006-9-7437		B108	
13	IN SERVICE		REFRIGERATOR, VWR DOUBLE DOOR GI	5114410		B108	
14	IN SERVICE		REFRIG FREEZER THERMOSCIENTIFIC	1521080504856		B109	
15	IN SERVICE		DRIED BLOOD SPOT PUNCHER	2962954		B110	
16	IN SERVICE	12494	MICROSCOPE, LIGHT LEICA	203275	11/1/2001	B110	
17	IN SERVICE		BIOLOG SYSTEM	E11046		B111	
18	IN SERVICE	6504467	INCUBATOR, THELCO 56C			B111	
19	IN SERVICE		INCUBATOR, VWR 42C	702303		B111	
20	IN SERVICE		INCUBATOR, WALK-IN HOTPACK 33C	24246		B111	
21	IN SERVICE	P2195	MICROSCOPE, FLUORESCENT LEICA	203816		B111	
22	IN SERVICE	12492	MICROSCOPE, LIGHT LEICA	717274		B111	
23	IN SERVICE		REFRIGERATOR, VWR	O26U-182897-PU		B111	
24	IN SERVICE		CENTRIFUGE, IEC CENTRA CL3			B112	
25	IN SERVICE	4503	INCUBATOR, EQUATHERM 30C	0197-71		B112	
26	IN SERVICE		INCUBATOR, THERMOSCIENTIFIC PRECI	2077090935335		B112	
27	IN SERVICE		INCUBATOR, VWR CO2	900602		B112	
28	IN SERVICE	12493	MICROSCOPE, LIGHT WITH TRINOCULAI	203709	11/1/2001	B112	
29	IN SERVICE		REFRIGERATOR, VWR DOUBLE DOOR GI	5130468	11/24/2008	B112	
30	IN SERVICE	P2476	ARTEL PCS PIPETTE CALIBRATION SYST	2477623	1/10/2008	B113	
31	IN SERVICE		BIO SAFETY CABINET, BAKER BIOGARD	SP12783V		B113	
32	IN SERVICE	P2475	CENTRIFUGE, ALLEGRA X12	5407XG725453	7/23/2008	B113	
33	IN SERVICE	1492	FREEZER SO-LOW -70C	8182523	6/1/1982	B113	
34	IN SERVICE	P2480	FREEZER, VWR -86C	818067-34	1/28/2009	B113	

	A	B	C	D	E	F	G
3	**Current Status**	**Tag No**	**Description**	**Serial No**	**Acquistion Date**	**Physical Location**	
35	IN SERVICE		AUTOCLAVE, CONSOLIDATED STILLS			B114	
36	IN SERVICE		DISHWASHER, LANCER	3A032119		B114	
37	IN SERVICE		METTLER BALANCE	509674		B114	
38	IN SERVICE		REFRIGERATOR, NORLAKE UNDERCOU	8212829		B114	
39	IN SERVICE	979	WATER PURIFICATION SYSTEM			B114	
40	IN SERVICE		INCUBATOR, PERCIVAL	4620.01.03C		B116	
41	IN SERVICE		INCUBATOR, REVCO ULTIMA CO2	R24N-631519-SN		B116	
42	IN SERVICE		INCUBATOR, VWR 30C	1009002		B116	
43	IN SERVICE		REFRIGERATOR, VWR	R25N-631811		B116	
44	IN SERVICE		REVCO LEGACY, LOCKING -70C	V106N-201884AWN		B116	
45	IN SERVICE		BIO SAFETY CABINET, STERILCHEM GA	76253		B117	
46	IN SERVICE		CENTRIFUGE, IEC GP8	31270225		B117	
47	IN SERVICE		INCUBATOR, REVCO ULTIMA LOCKING	R25N-631797-SN		B117	
48	IN SERVICE		MAGNA PURE LC 2.0 ROCHE	LC2C00000119		B117	
49	IN SERVICE		MICROCENTRIFUGE, EPPENDORF 5417R	5407XG725453		B117	
50	IN SERVICE		AUTOCLAVE-PASS THRU, CONSOLIDATED STILLS			B117/118	
51	IN SERVICE	214	INCUBATOR WALK-IN 37C		1/1/1960	B119	
52	IN SERVICE		BAX SYSTEM	824		B120	
53	IN SERVICE		BEAD RETREIVER, INVITROGEN	701-734		B120	
54	IN SERVICE	P2473	CHEF DR II CHILLER SYSTEM, BIORAD	961BR1104	12/31/2008	B120	
55	IN SERVICE		CHEF MAPPER, BIORAD			B120	
56	IN SERVICE		GEL DOC, BIORAD	801BR1602		B120	
57	IN SERVICE		INCUBATOR/SHAKER, NEW BRUNSWICK	990324099		B120	
58	IN SERVICE		M1M, BIOVERIS USDA TAG 6217	1206		B120	
59	IN SERVICE		REFRIG FREEZER, BARNSTEAD LABLINE	1521071077180		B120	
60	IN SERVICE		WATER BATH SHAKER, NEW BRUNSWIC	100190703		B120	
61	IN SERVICE		STOMACHER 400 CIRCULATOR	43718		B121	
62	IN SERVICE	1251	BIO SAFETY CABINET, BAKER BIOGARD	SP9445V	8/1/1977	B122	
63	IN SERVICE		CENTRIFUGE, IEC CENTRA CL3R	37552335		B122	
64	IN SERVICE	P2401	FREEZER, NUAIRE -70C	NU-9483GC	12/24/2007	B122	
65	IN SERVICE		INCUBATOR, 33C PRECISION	22AR-5		B122	
66	IN SERVICE	P2193	MICROSCOPE, INVERTED LEICA	213655	1/11/2001	B122	
67	IN SERVICE		REFRIGATOR, VWR	Z16M-612607-ZM		B122	
68	IN SERVICE	P2194	MICROSCOPE, FLUORESCENT LEICA	217605	1/11/2001	B123	
69	IN SERVICE	1833	MICROSCOPE, ZEISS FOR FTA	47 3013-9901		B123	

	A	B	C	D	E	F	G
3	**Current Status**	**Tag No**	**Description**	**Serial No**	**Acquistion Date**	**Physical Location**	
70	IN SERVICE		REFRIG FREEZER THERMOSCIENTIFIC	1521080804209	12/4/2008	B131	
71	IN SERVICE		REFRIG FREEZER, VWR	N24N-617918-NN		B131	
72	IN SERVICE		ABI 7500 FAST DX REAL TIME PCR INSTR	275012286	5/6/2009	B134	
73	IN SERVICE		BIO SAFETY CABINET, BAKER CO STERI	80988		B134	
74	IN SERVICE		BIORAD BIOPLEX 200	LX10006207401		B134	
75	IN SERVICE		BIOROBOT EZ-1 EXTRACTOR	0502F0713		B134	
76	IN SERVICE	P2119	FREEZER, REVCO ULTIMA II LEGACI -70	P10J-426077-PJ		B134	
77	IN SERVICE		MICROCENTRIFUGE, EPPENDORF 5417R	5407 13628		B134	
78	IN SERVICE	P2311	NUCLISENS EASY MAG EXTRACTION SY	37	9/1/2005	B134	
79	IN SERVICE		NUCLISENS EASY Q	EQ1024		B134	
80	IN SERVICE		SMART CYCLER BLOCK A	901043		B134	
81	IN SERVICE		SMART CYCLER BLOCK B	200189		B134	
82	IN SERVICE		SMART CYCLER BLOCK C	400154		B134	
83	IN SERVICE	P2390	SMART CYCLER BLOCK D	402475	12/28/2007	B134	
84	IN SERVICE	P2389	SMART CYCLER BLOCK E	402451	12/28/2007	B134	
85	IN SERVICE		VICTOR 3 TRF INSTRUMENTATION, PERI	4205479		B134	
86	IN SERVICE		FREEZER, WOODS -20C CHEST	06743011HF		B22	
87	OUT OF SERVICE	755	FREEZER, FRIGIDAIRE CHEST -20C	90BK2350		BASEMENT ACROSS FROM B23	
88	IN SERVICE		FREEZER, VWR CHEST -20C	Unknown	10/15/2009	BASEMENT ACROSS FROM B23	
89	IN SERVICE		FREEZER, KENMORE -20C			BASEMENT ACROSS FROM B23	
90	OUT OF SERVICE		ICYCLER	584BR4674		BASEMENT STORAGE	
91	IN SERVICE	22011	VWR INCUBATOR BOD MODEL 2020	11008808	12/8/2008	B214	
92	IN SERVICE	22012	VWR FORCED AIR OVEN	4074008	1/19/2000	B210	
93	IN SERVICE	P1653	INCUBATOR FISHER SCIENTIFIC	70900233	8/18/1997	B214	
94	IN SERVICE	P2039	NUTRIENT ANALYSIS LACHAT	A830001195	3/20/1998	BASEMENT	
95	IN SERVICE	P2381	DIGIFLEX CDC	7373	9/19/2007	B210	
96	IN SERVICE	P2472	ANALYST 600 AA	600S8120202	1/15/2009	B213	
97	IN SERVICE	P2474	PERKIN ELMER OPTIMA 5300DV	077C8121701	6/18/2008	B213	
98	IN SERVICE	P2477	MANSI MANTECH MUTIPARAMETER AU	CAC810050P	7/3/2008	B210	
99	IN SERVICE	P2478	DIONEX ICS-2000 ION CHROMATOGRAPI	8050780	6/16/2008	B210	
100	IN SERVICE	P2479	HACH LACHAT QUIK CHEM	80600000587	6/25/2008	B210	
101	IN SERVICE		BAKER CLASS II BIOLOGICAL SAFETY C	95558	7/1/2009	B210	
102	IN SERVICE	3195	OPTIMA 3000XL ICP	069N4121601	1/1/1995	B213	
103	IN SERVICE		ELAN CRC PLUS ICP	L0520204	1/1/1998	B213	
104	IN SERVICE		6890N GAS CHROMATOGRAPH	CN10449121	1/1/2004	B214A	

	A	B	C	D	E	F	G
3	**Current Status**	**Tag No**	**Description**	**Serial No**	**Acquistion Date**	**Physical Location**	
105	IN SERVICE		AGILENT 6890 GAS CHROMATOGRAPH	US10508005	2/15/2005	B214A VOC CN	
106	IN SERVICE		AGILENT 5973 MSD	US44630614	2/15/2005	B214A VOC CN	
107	IN SERVICE		AGILENT 6890 N GAS CHROMATOGRAPH	US10543048	2/15/2006	B214A NERVE AGENTS	
108	IN SERVICE		AGILENT 5973 MSD	US539331122	2/15/2006	B214A NERVE AGENTS	
109	IN SERVICE		AGILENT 6890 GAS CHROMATOGRAPH	US00037389	3/15/2000	B214A VOC	
110	IN SERVICE		AGILENT 5973 MSD	US01160186	3/15/2000	B214A VOC	
111	IN SERVICE		TELEDYNE PURGE AND TRAP	US08305005	6/28/2009	B214A	
112	IN SERVICE		WATERS 2695 HPLC	E065M7123M	4/15/2007	B214A	
113	IN SERVICE		LEEMAN HYDRA AA MERCURY ANALYZ	8026	6/1/2009	B217	
114	IN SERVICE		LEEMAN HYDRA C MERCURY ANALYZE	9026	6/1/2009	B217	
115	**REAGENT RENTALS**						
116	IN SERVICE		DTS GENESIS RSP100 TECAN GENPROBE	7112		B108	
117	IN SERVICE		APTIMA SYSTEM, GENPROBE			B108	
118	IN SERVICE		PLATE READER, ELX800 WAMPOLE	137377		B109	
119	IN SERVICE		MAS MICROPLATE SYSTEM BIORAD	35670		B109	
120	IN SERVICE		EVOLIS BIORAD	9163700908		B109	
121	IN SERVICE		VICTOR 2 D PERKIN ELMER WALLAC	4203137		B110	
122	IN SERVICE		RESOLVE HGB SYSTEM WALLAC	1J443035-1-A		B110	
123	IN SERVICE		LEADER 450i GENPROBE	122000		B116	
124	IN SERVICE		MGIT BECTON DICKENSON			B116	
125	IN SERVICE		GENE AMP 9600 ROCHE	S01620		B134	
126	IN SERVICE		LEADER HC+ GENPROBE	400282		B135	

PUBLIC HEALTH LABORATORY TEST FEES

August 1, 2008 to June 30, 2009

CPT	TEST NAME	FEE
SEROLOGY		
86703	HIV 1 / 2 Antibody Supplemental	**45.00**
86790	Hantavirus IgG	**44.50**
86791	Hantavirus IgM	**44.50**
83655	Blood Lead	**19.50**
86592	VDRL, Qualitative	**13.00**
86593	VDRL, Quantitative	**13.25**
86609	RMSF IgG	**20.00**
86622	Brucella, Total Ab	**18.00**
86638	Q Fever, Phase 1 and 2, IgG	**20.00**
86644	CMV, IgG	**20.00**
86645	CMV, IgM	**35.50**
86653	SLE IgM Serology	**18.00**
86668	Tularemia, Total Ab	**18.00**
86689	HIV Western Blot	**115.50**
86695	Herpes I Type Specific Ab	**20.00**
86696	Herpes II Type Specific Ab	**20.00**
86703	HIV 1 / 2 + O Antibody test	**20.00**
86704	Total HepB core Ab	**34.50**
86705	Hepatitis B core IgM	**30.00**
86706	Hepatitis B surface Antibody	**23.25**
86709	Hepatitis A IgM	**30.00**
86713	Legionella IgG	**20.00**
86735	Mumps IgG, IgM	**20.00**
86762	Rubella IgG, IgM	**20.00**
86765	Rubeola IgG, IgM	**20.00**
86777	Toxoplasma IgG	**20.00**
86778	Toxoplasma IgM	**35.50**
86781	FTA-ABS for Syphilis Confirmation	**32.25**
86787	Varicella Zoster Virus IgG	**20.00**
86788	West Nile Virus IgM	**18.00**
86789	West Nile Virus IgG	**18.00**
86790	Colorado Tick Fever Virus IgG	**20.00**
86803	Hepatitis C Antibody	**34.50**
87340	Hep B Surface Antigen (HBsAg)	**20.50**
86747	Parvovirus B19 (Test Sendout)	**10.00**
NEWBORN SCREENING		
	Newborn Screening Panel A	
84030	PKU	**11.80**
82775	Galactosemia	**12.88**
84437	Thyroxine	**11.50**
83020	Hemoglobin IEF	**10.12**
83516	Cystic Fibrosis	**11.50**
	Newborn Screening Panel B	
82017	Acylcarnitines, MS/MS	**11.75**
82261	Biotinidase	**6.00**
83498	Congenital Adrenal Hyperplasia	**11.50**
82136	Aminoacidopathies MS/MS	**4.65**
	Other Newborn Screening tests	
84443	Thyroid Stimulating Hormone (TSH)	**10.12**
87143	Hemoglobin HPLC Confirmation	**33.00**
MICROBIOLOGY		
	Autoclave Monitor	**19.50**
87081	Surveillance Culture Confirmation	**31.20**
87187	Antimicro Susc Conf, eTest per agent	**15.00**
87186	Bact Suscept (Send Out)	**20.00**
87081	Antimicro Susc ID Confirm	**31.20**
87207	Crypto/Cyclo stain	**27.50**
	Enteric Panel	**39.60**
87045	Stool Culture, Salm and Shig	**13.20**
87046	Stool Culture, Other Agents. Ecoli	**13.20**
87046	Stool Culture, Other Agents, Campy	**13.20**
87070	Aerobic Culture with presump ID	**20.00**
87077	Aerobic Isolate, add'l method of ID	**17.50**
87075	Anaerobic Culture with presump ID	**20.00**
87076	Anaerobic Isolate, add'l method of ID	**20.00**

ENVIRONMENTAL LABORATORY TEST FEES

August 1, 2008 to June 30, 2009

CODE	TEST NAME	FEE
ANIONS		
ANIONSCAN	ANION SCAN	***28.50***
BAL	CATION-ANION BALANCE	***3.25***
BR-IC	BROMIDE BY IC	***18.20***
CLFREE	CHLORINE, FREE RESIDUAL	***11.50***
CL-IC	CHLORIDE BY IC	***25.00***
F-IC/FI-HS-IC	FLOURIDE BY IC	***21.50***
ICSCAN	IC SCAN	***26.00***
NH3	AMMONIA , TOTAL AS N	***18.50***
NO2-IC	NITRITE BY IC	***18.50***
NO3	NITRATE PLUS NITRITE	***18.50***
NO3-HUD	NITRATE FOR HUD	***18.50***
NO3NO2	NITRATE+NITRITE BY IC	***18.50***
NO3-IC	NITRATE BY IC	***18.50***
OP	PHOSPHORUS-ORTHO	***18.50***
SO4-IC	SULFATE BY IC	***25.00***
SRP	PHOSPHORUS, SOL. REACT.	***18.50***
TKN	NITROGEN, TOTAL KJELDAHL	***35.00***
TKNDIS	NITROGEN, KJELDAHL, DISS.	***36.00***
TN	NITROGEN, TOTAL	***6.25***
TP	PHOSPHORUS, TOTAL	***31.00***
TPN	TOTAL PERSULFATE NITROGEN	***29.00***
TRC	CHLORINE, TOTAL RESIDUAL	***13.25***
METALS		
AG	SILVER	***11.50***
AGDIS	SILVER, DISSOLVED	***11.50***
AGSED	SILVER, SEDIMENT	***11.50***
AGTR	SILVER, TOTAL RECOVERABLE	***11.50***
AL	ALUMINUM	***11.50***
ALDIS	ALUMINUM, DISSOLVED	***11.50***
ALSED	ALUMINUM, SEDIMENT	***11.50***
ALTR	ALUMINUM, TOTAL RECOVER	***11.50***
AS	ARSENIC	***22.00***
ASDIS	ARSENIC, DISSOLVED	***22.00***
ASSED	ARSENIC, SEDIMENT	***22.00***
ASTR	ARSENIC, TOTAL RECOVER	***22.00***
B	BORON	***11.50***
BA	BARIUM	***11.50***
BADIS	DISOLVED BARIUM	***11.50***
BAL	CATION-ANION BALANCE	***3.25***
BASED	BARIUM, SEDIMENT	***11.50***
BATR	BARIUM, TOTAL RECOVER	***11.50***
BE	BERYLLIUM	***11.50***
BEDIS	DISSOLVED BERRYLLIUM	***11.50***
BESED	BERYLLIUM, SEDIMENT	***11.50***
BETR	BERYLLIUM, TOTAL RECOVER	***11.50***
BTR	BORON, TOTAL RECOVERABLE	***11.50***
CA	CALCIUM	***11.50***
CADIS	CALCIUM DISSOLVED	***11.50***
CATSCAN	CATION SCAN	***28.50***
CD	CADMIUM	***11.50***
CDDIS	CADMIUM, DISSOLVED	***11.50***
CDSED	CADMIUM, SEDIMENT	***11.50***
CDTR	CADMIUM, TOTAL RECOVER	***11.50***
CO	COBALT	***11.50***
COTR	COBALT TOTAL RECOVER	***11.50***
CR	CHROMIUM	***11.50***
CR + 6	CHROMIUM, HEXAVALENT	***36.50***
CREAT	CREATININE	***16.75***
CRDIS	DISSOLVED CHROMIUM	***11.50***
CRSED	CHROMIUM, SEDIMENT	***11.50***
CRTR	CHROMIUM, TOTAL RECOVER	***11.50***
CU	COPPER	***11.50***
CUDIS	COPPER, DISSOLVED	***11.50***
CUSED	COPPER, SEDIMENT	***11.50***
CUTR	COPPER, TOTAL RECOVER	***11.50***
DWIPES	LEAD DUST WIPES	***22.50***
FE	IRON	***11.50***
FEDIS	IRON, DISSOLVED	***11.50***
FESED	IRON, SEDIMENT	***11.50***
FETR	IRON, TOTAL RECOVERABLE	***11.50***

		LABORATORY SERVICES BUREAU				7/24/2008
PUBLIC HEALTH LABORATORY TEST FEES				**ENVIRONMENTAL LABORATORY TEST FEES**		
	August 1, 2008 to June 30, 2009				**August 1, 2008 to June 30, 2009**	
CPT	**TEST NAME**	**FEE**		**CODE**	**TEST NAME**	**FEE**
87081	Bacterial Culture Screen	**31.20**		FULLSCAN	SCAN, FULL METAL	***115.00***
87324	C difficile Toxin Test	**25.50**		HARD	HARDNESS AS MG/L CACO3	***26.00***
87449	EHEC Toxin	**25.50**		HG	MERCURY	***53.00***
87101	Fungal Culture, skin	**35.00**		HGTMDL	MERCURY BY ICP-MS	***22.00***
87102	Fungal Culture, Other	**35.00**		K	POTASSIUM	***11.50***
87103	Fungal Culture, Blood	**35.00**		LANG-X	LANGELIER INDEX	***4.00***
87106	Fungal ID, each yeast	**15.00**		MG	MAGNESIUM	***11.50***
87107	Fungal ID, each mold	**15.00**		MG-HARD	MAGNESIUM HARDNESS	***5.72***
87278	Legionella DFA	**23.00**		MN	MANGANESE	***11.50***
87207	Malaria Smear	**27.50**		MNDIS	DISSOLVED MANGANESE	***11.50***
87177	O & P Conc. ID	**20.75**		MNSED	MANGANESE, SEDIMENT	***11.50***
87209	O & P Trichrome	**20.75**		MNTR	MANGANESE, TOTAL RECOVER	***11.50***
87205	Smear for Bacteria	**13.75**		MO	MOLYBDENUM	***11.50***
87147	Agglutination Grouping, each antisera	**17.50**		MOTR	MOLYBDENUM TOTAL RECOVER	***11.50***
87140	IFA Bacterial Typing, each antisera	**17.50**		NA	SODIUM	***11.50***
87149	Bact ID by Nucleic Acid Probe	**28.00**		NI	NICKEL	***11.50***
87172	Pinworm Examination	**20.75**		NIDIS	NICKEL, DISSOLVED	***11.50***
87185	Beta-Lactamase	**6.00**		NISED	NICKEL, SEDIMENT	***11.50***
				NITR	NICKEL, TOTAL RECOVER	***11.50***
TB				PB	LEAD	***22.00***
87206	Modified AF Stain	**13.75**		PBDIS	LEAD, DISSOLVED	***22.00***
87176	Homogenization tissue for culture	**8.50**		PBSED	LEAD, SEDIMENT	***22.00***
87015	AFB Concentration	**14.50**		PBTR	LEAD, TOTAL RECOVERABLE	***22.00***
87116	Mycobact. Culture	**31.25**		PBMWDIG	LEAD IN PAINT	***46.50***
87190	Mycobact. Suscept, each agent	**14.50**		RMBCURINE	URINE METALS PANEL	***39.50***
87206	Acid Fast Stain	**13.75**		RMBCWATER	WATER METALS PANEL	***39.50***
87550	Mycobacterium sp. Probe	**23.00**		SAR	SODIUM ABSORPTION RATIO	***35.00***
87555	M TB Probe	**23.00**		SB	ANTIMONY	***22.00***
87556	TB Direct Amplification Test	**175.00**		SBDIS	ATIMONY, DISSOLVED	***22.00***
87560	MAC Probe	**23.00**		SBSED	ANTIMONY, SEDIMENT	***22.00***
				SBTR	ANTIMONY, TOTAL RECOVER	***22.00***
VIROLOGY				SCAN	SCAN FOR METALS BY ICP	***44.00***
87252	Herpes Culture	**24.00**		SCANSOLID	METAL SCAN FOR SOLIDS	***40.00***
87110	Chlamydia Culture	**36.75**		SE	SELENIUM	***22.00***
87253	Virus ID, add'l ID (HAd, IFA, Neut)	**28.50**		SESED	SELENIUM, SEDIMENT	***22.00***
87252	Viral Culture	**36.75**		SEDIS	SELENIUM, DISSOLVED	***22.00***
87273	HSV1 DFA	**11.50**		SETR	SELENIUM, TOTAL RECOVER	***22.00***
87274	HSV2 DFA	**11.50**		SI	SILICON	***11.50***
87280	RSV Direct Detect.	**23.00**		SOILSCAN	SCAN FOR METALS IN SOIL	***78.00***
87290	VZV DFA	**23.00**		SN	TIN	***11.50***
87254	CMV Shell Vial Culture	**27.50**		SR	STRONTIUM	***11.50***
				SRTR	STRONTIUM. TOTAL RECOVERY	***11.50***
PFGE/Food Testing				TI	TITANIUM	***11.50***
	Confirm + PFGE	**114.00**		TL	THALLIUM	***22.00***
	PFGE, each add'l enzyme	**79.50**		TLSED	THALLIUM, SEDIMENT	***22.00***
				TLDIS	THALLIUM, DISSOLVED	***22.00***
MOLECULAR				TLTR	THALLIUM, TOTAL RECOVER	***22.00***
87798	PCR Norovirus	**85.00**		TMDLHARD	TMDL HARDNESS	***7.50***
87498	NAAT Enterovirus	**85.00**		U	URANIUM	***11.50***
87798	PCR INF A	**74.00**		V	VANADIUM	***11.50***
87798	PCR INF B	**74.00**		WELLSCAN	SCAN FOR METALS IN WELL	***35.00***
87798	PCR Anthrax	**74.00**		ZN	ZINC	***11.50***
87798	PCR Adenov	**74.00**		ZNDIS	ZINC DISSOLVED	***11.50***
87798	PCR plague	**74.00**		ZNSED	ZINC, SEDIMENT	***11.50***
87798	PCR Varicalla Zoster Virus	**74.00**		ZNTR	ZINC, TOTAL RECOVERABLE	***11.50***
87798	PCR tularemia	**74.00**				
87798	PCR pertussis	**85.00**		**MICRO**		
87798	PCR Brucella spp.	**74.00**		DILUTION	DILUTION OF BACT SAMPLE	***5.75***
87798	PCR Vaccinia	**74.00**		ECOLI	ECOLI VERIFICATION	***6.75***
87798	PCR Burkholderia spp.	**74.00**		ECQT	E COLI BY QUANTITRAY	***24.00***
87529	PCR HSV	**85.00**		FCOLIF	WATER FECAL COLIFORM	***28.50***
87522	Hep C RNA quantification	**122.50**		FE-BACT	IRON BACTERIA IN WATER	***24.00***
87902	HCV Genotype	**85.00**		HPC	HETEROTRPHIC PLATE COUNT	***28.50***
				S-BACT	SULFUR BACTERIA IN WATER	***24.00***
MISC				TCPA	TOTAL COLIFORM, PRES/ABS	***21.00***
Varies	Test Sendout to CDC	**10.00**		TCQT	TOTAL COLIFORM COUNT	***24.00***
Varies	Dangerous Sendout	**65.00**				
STD				**ORGANICS**		
87491	Chlamydia Nucleic Acid Amplification	**42.00**		DRO	DIESEL RANGE ORGANIC	***110.00***
87591	Gonorrhea Nucleic Acid Amplification	**42.00**		BTEXCRN	BTEX SCREEN	***40.00***

		LABORATORY SERVICES BUREAU				7/24/2008
PUBLIC HEALTH LABORATORY TEST FEES				**ENVIRONMENTAL LABORATORY TEST FEES**		
	August 1, 2008 to June 30, 2009				**August 1, 2008 to June 30, 2009**	
CPT	**TEST NAME**	**FEE**		**CODE**	**TEST NAME**	**FEE**
				DW508SL	CHLORINATED PESTICIDES	***30.00***
				DW515	CHLOROPHENOXY HERBICIDES	***187.20***
				DW525	SOCS BY EPA 525	***335.00***
				EPA 8260	VOC BY EPA 8260	***325.00***
				EPA 8270	SOC BY EPA 8270	***325.00***
				EPH	EXTRACTABLE PETRO HYDRO	***240.00***
				DW531	CARBAMATE PESTICIDES	***215.00***
				DW552	HALOACETIC ACIDS	***185.00***
				GRO	GASOLINE RANGE ORGANICS	***105.00***
				PHTHALATE	PHTHALATE BY EPA	***185.00***
				ROTENONE	ROTENONE TESTING	***200.00***
				TPH	TOTAL PETRO HYDROCARBON	***70.00***
				THM	TOTAL TRIHALOMETHANES	***130.00***
				VOCREG	REGULATED VOCS	***160.00***
				WELLHERB	HERBICIDE/PESTICIDE SCREEN	***60.00***
				WELLPEST	PESTICIDE SCREEN	***60.00***
				WELLPETRO	PETROLEUM SCREEN FOR WELLS	***50.00***
				WELLVOC	WELL VOC	***26.00***
				PHYSICAL		
				ALK	ALKALINITY IN WATER	***18.75***
				ALPHARAD	GROSS ALPHA RADIOACTIVITY	***84.25***
				DISSECT	DISSECTION OF INVERTEBRATE	***8.50***
				FILTER	FILTRATION IN LAB	***8.00***
				FS-VS	FIXED AND VOLATILE SOLIDS	***15.50***
				GLZEXT	GLAZE EXTRACTION	***9.00***
				MOIST%	PERCENT MOISTURE	***6.25***
				MWDIG	MICROWAVE DIGESTION	***24.50***
				PH	PH IN WATER	***9.25***
				PH-SOIL	PH IN SOLIDS	***45.75***
				RAD-COMB	COMBINED RADIUM 226+228 IN	***182.00***
				SPC	SPECIFIC CONDUCTANCE	***9.25***
				TDS	TOTAL DIS SOLIDS AT 180 C	***11.50***
				TRDIG	TR METALS DIGESTION	***14.50***
				TSS	TOTAL SUSP. SOL. 105 C	***11.50***
				TURB	TURBIDITY IN WATER	***9.25***
				WET CHEM		
				ASHFR	ASH-FREE DRY MASS	***26.00***
				BOD	BIOCHEM OXYGEN DEMAND	***50.00***
				CLPH-P	CHLOROPHYLL, PERIPHYTON	***39.75***
				CBOD	CARBONACEOUS BOD	***50.00***
				CBOD-20	CARBONACEOUS BOD-20 day	***50.00***
				CLPH-H	CHOLOROPHYLL IN HOOP SAMPLE	***39.75***
				CLPH-S	CHLOROPHYLL IN SEDIMENT	***39.75***
				CLPH-W	CHLOROPHYLL A IN WATER	***39.75***
				CLPH-PHEO	CHLOR PHEOPHY	***39.75***
				CN	CYANIDE IN WATER	***47.00***
				COD	CHEM OXYGEN DEMAND	***51.00***
				DO	DISSOLVED OXYGEN	***7.00***
				O+G	OIL AND GREASE IN WATER	***65.50***
				PHENOL	TOTAL PHENOLICS	***52.00***
				S	SULFIDE IN WATER	***51.00***
				TOC	TOTAL ORGANIC CARBON	***37.50***
				TANNIN	TANNIN AND LIGNIN	***37.50***
				TRC	TOTAL RESIDUAL CHLORINE	***13.25***
				MISC		
				RADON	RADON 222 IN WATER	***62.00***
				RUSH	RUSH SAMPLE ONE WEEK	***50.00***
				RUSH-1	RUSH SAMPLE NEXT DAY	***90.00***
				RUSHSED-1	RUSH SOLIDS 1 WEEK	***50.00***
				RUSHSED-2	RUSH SOLIDS 2 DAY	***90.00***

Appendix G

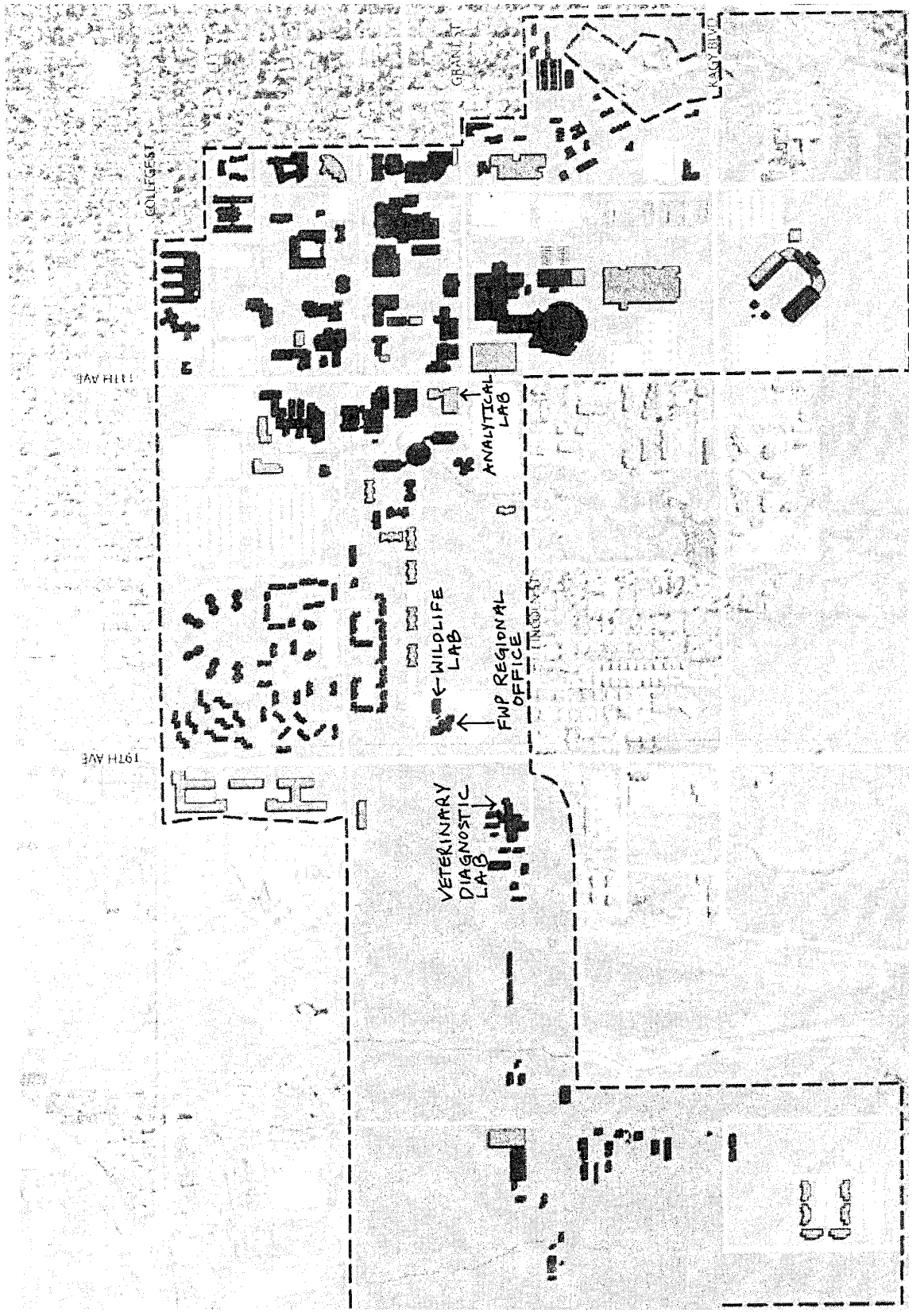
MVDL Animal Tests 2005-2009

	2005	2006	2007	2008	2009
Livestock	35,832	36,270	41,328	48,133	183,299
Companion Animals	12,796	13,168	13,891	12,548	10,888
Wildlife	1,882	2,346	2,852	4,852	4,065
Total	**50,510**	**51,784**	**58,071**	**65,533**	**198,252**

MVDL Animal Test Percentage 2005-2009

	2005	2006	2007	2008	2009
Livestock	71%	70%	71%	73%	92%
Companion Animals	25%	25%	23%	19%	5%
Wildlife	4%	5%	6%	8%	3%

Appendix H


GRANT
KALY BLVD
COLLEGE ST
19TH AVE
ANALYTICAL LAB
WILDLIFE LAB
FWP REGIONAL OFFICE
VETERINARY DIAGNOSTIC LAB

5 Implementation and Plan Phasing

Introduction

A useful and enduring campus development plan must be flexible and able to adapt to the institution's evolving needs. Chapter 4 identified framework elements that are vital to a successful development plan, and Chapter 5 builds in the flexibility required for successful implementation of MSU's Long Range Campus Development Plan (Plan). Flexibility includes the phased implementation approach and the formal, regular review of the process of the Plan.

MSU will revisit the Plan on a cyclical basis to ensure that its principles, elements and fundamental strategies remain consistent with university's vision. Development and construction of the campus in the next decade will focus on the establishment of the fundamental elements of the framework plan. Subsequent stages of implementation of the Plan will continue to build upon and refine these fundamental elements and strategies. Recurring review of the Plan ensures that all future development continues to evolve with the university's mission and goals, while still achieving a long-term vision. Campus planning and design projects will be reviewed by the University Facilities Planning Board to ensure that they contribute to the context of the campus and the Plan principles.

Plan Review and Update Process

Review and Update Cycle

Scheduled review and cyclical updating of the Plan is critical to keeping the documents relevant and viable in guiding the decisions pertaining to the campus' physical environment. The plan includes a specified cycle of review and production of an updated document every five years.

An updated plan will be distributed in 2012 and every five years thereafter. The process provides future administrations with a planning tool that is adapted regularly to meet the university's aspirations and needs.

Review Process

The revision process will begin with Montana State University's Facilities Planning, Design and Construction (FPDC) office. In its role as the steward of the campus facilities planning and construction efforts, FPDC will initiate the cyclical review and update process. Direction from the UFPB, university stakeholders, advisory bodies and administrators will be sought to give guidance to the Plan. The process will also encourage continued communications with and input from the City of Bozeman, local and state officials and the local community.

Facilities Planning Design and Construction will routinely collect information regarding physical changes to the campus and demographic data. In year four of the five-year process, the data will be analyzed for trends and anomalies or deviations from the Plan. The information will be reviewed, translated and appropriately distributed to assist the university in making informed adjustments and modifications to the Plan. The fifth year will be devoted to working with UFPB and a LRCDP Advisory Committee to determine if any adjustments and modifications to the Plan are necessary. Updating the Plan will be supervised by FPDC, and the revised publication will be re-issued at the end of the fifth year.

To ensure that the cyclical update is comprehensive, the collected data may include the following:

- University enrollment
- Administration policy
- Legislative decisions
- Physical modifications to the university campus
- Review Long Range Building Program projects that have increased/decreased in priority, or may have been eliminated
- University Major Maintenance and Capital Improvement Plan, funding streams and budgets
- University capital campaigns
- University strategic plans, including the Five-Year Vision
- City and county building permits
- City and county zoning changes
- City and county platted subdivisions
- City and county planning projections
- Municipal transportation network plan modifications
- Notation of unanticipated economic, public service, utility, campus or municipal modification that was not factored into the Plan

Implementation of Build Out

Phased implementation is necessary to successfully achieve realization of the Plan. The Plan proposes an incremental approach to implementing the principles, elements and fundamental strategies of the framework plan. Vital factors such as student population growth, academic plans, research, five-year vision goals, and logical development of the campus districts will have a bearing on the programmatic needs of the campus physical environment.

The Plan is an investment in the future of the institution. It is a useful tool in linking the university's mission and vision to the physical learning environment and is a quantitative tool for assessing the university's growth strategy.

A view of campus, looking east toward the foothills of the Bridger Mountains (2005).

10-year Projected Build Out

See referenced maps on following pages.

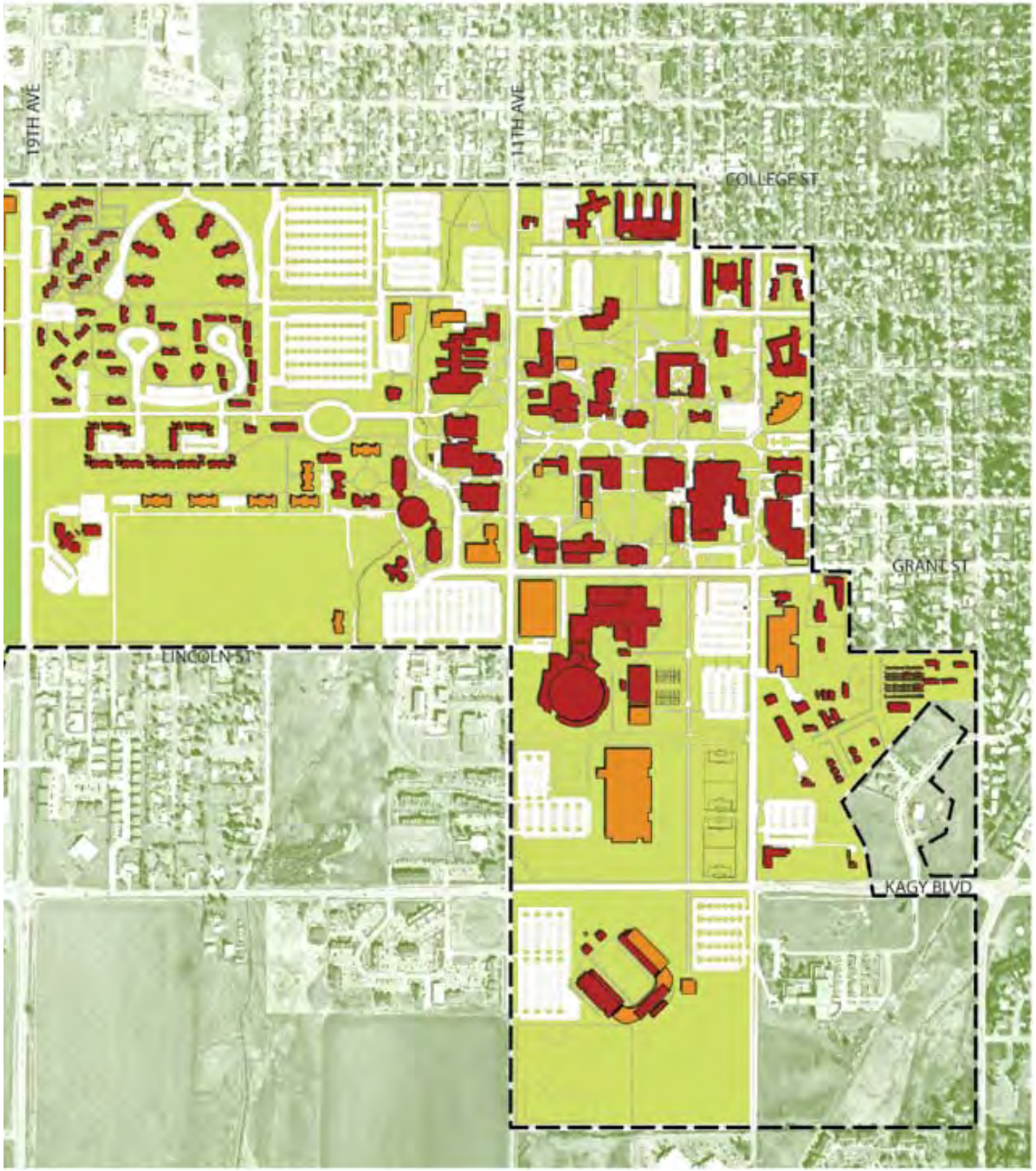
The primary purpose of the first 10-year projected build out is to establish the foundations of the various fundamental strategies of the framework plan elements. The 10-year build out primarily focuses on infill within the campus core and establishment of the fundamental strategies of the Plan elements such as formalization of the districts, open space concepts, and transportation and circulation objectives. There are numerous appropriate buildings in close proximity to existing infrastructure which expand program opportunities within designated neighborhoods, and which complement and define intentional open spaces and landscape.

View of campus and Bozeman from the "Campus M" foothills trail (2006).

Ten-Year Projected Build Out Profile

- Remove the 1950s housing units between Jefferson Street and Garfield Street, and replace with transitional surface parking lots.
- Construct additional apartment-style housing in the Housing Neighborhood on Garfield Street.
- Create additional residence hall housing near existing North and South Hedges housing.
- Develop infrastructure and begin initial implementation of faculty, staff and student housing near Fowler Road.
- Increase density within the existing core.
- Further establish districts and identify neighborhoods.
- Initiate the migration of Facilities Services west of South 19th Avenue.
- Establish collaborative development of College Street and South 19th Avenue Enterprise Zone.
- Initiate development of Huffine Lane and Fowler Road Enterprise Zone.
- Support evolution of agricultural programs through building and facility improvements.
- Establish gateways, edges and boundaries of campus.
- Initiate development of the Mixed-Use District.
- Establish concepts for pedestrian crossing of South 19th Avenue at Garfield Street.
- Initiate modifications to establish Garfield Street as a primary entrance to campus.
- Incrementally develop transportation and circulation network elements.
- Establish concepts for pedestrian crossing at South 19th Avenue, connecting the Garfield Street and Centennial Mall corridors with west campus.
- Initiate implementation of parking strategies, such as construction of parking garages at key locations that serve universal use, such as athletic, auxiliary and academic areas.
- Establish the fundamental concepts of the future open space network, such as connecting Garfield Street to the Centennial Mall.
- Formalize the lawn north of Montana Hall.
- Create the east-west green corridor through the future academic district west of South 11th Avenue.
- Initiate restoration of Mandeville Creek (natural flow, vegetation and building setbacks).
- Create and implement a campus landscape master plan.
- Implement athletics facilities improvements such as stadium expansion and practice facilities (Athletic District).
- Create an entry to Fieldhouse and Athletics' Indoor Practice Facility (Athletic Neighborhood).


N
FOWLER
19TH AVE
GARFIELD



10-year Projected Build Out

- Existing Buildings
- New Buildings
- Agricultural Research and Teaching Facilities

25-year Projected Build Out

See referenced maps on following pages.

The 25-year projected build out anticipates development to occur between years 11 and 25. The focus of this part of the plan is to continue to refine and advance the principles, elements and strategies of the framework plan established during the first 10 years. Primary goals will include the continued growth of the districts with an emphasis on the expansion of the Academic District to the west.

Stephen Hunts

View of campus from South 19th Avenue (2005).

25-year Projected Build Out Profile

- Remove Grant Chamberlin Family Housing units and replace with transitional surface parking.
- Develop apartment-style housing incorporated with parking garage at Lincoln Street and South 11th Avenue (Housing Neighborhood).
- Complete second stage of faculty, staff and student housing near Fowler Road.
- Continue to infill within the campus core.
- Complete migration of Facilities Services west of South 19th Avenue.
- Continue development of Enterprise Zones.
- Transition use in South 6th Avenue and Grant Street area created by Facilities Services vacancy (increase Academic and Public Venue neighborhoods).
- Replace Marsh Laboratories, partially or completely.
- Remove Haynes Hall and open pedestrian connection between South 11th Avenue and South 19th Avenue.
- Replace Cheever Hall with a new building that has a smaller footprint.
- Replace McCall Hall with a new building.
- Continue implementing development along Garfield Street, west of South 19th Avenue.
- Replace Johnstone Center with mixed-use housing and retail.
- Replace Branegan Court Housing with parking garage for Housing, Academics and Enterprise Zone districts.
- Replace surface parking lot with parking garage at South 6th Avenue (Athletic Neighborhood).
- Develop pedestrian/bicycle bridge over South 19th Avenue.
- Open Harrison Street for transit connection from South 8th Avenue to South 11th Avenue.
- Develop parking lots at South 12th Avenue and Antelope Street.
- Complete Garfield Street pedestrian connection between South 11th Avenue, and Centennial Mall following removal of Cheever.
- Complete restoration of Mandeville Creek (return it to more natural flow, increase indigenous vegetation and establish building setbacks).
- Develop athletics “Walk of Fame” that connects Athletics Neighborhood south of Kagy Boulevard and the campus core.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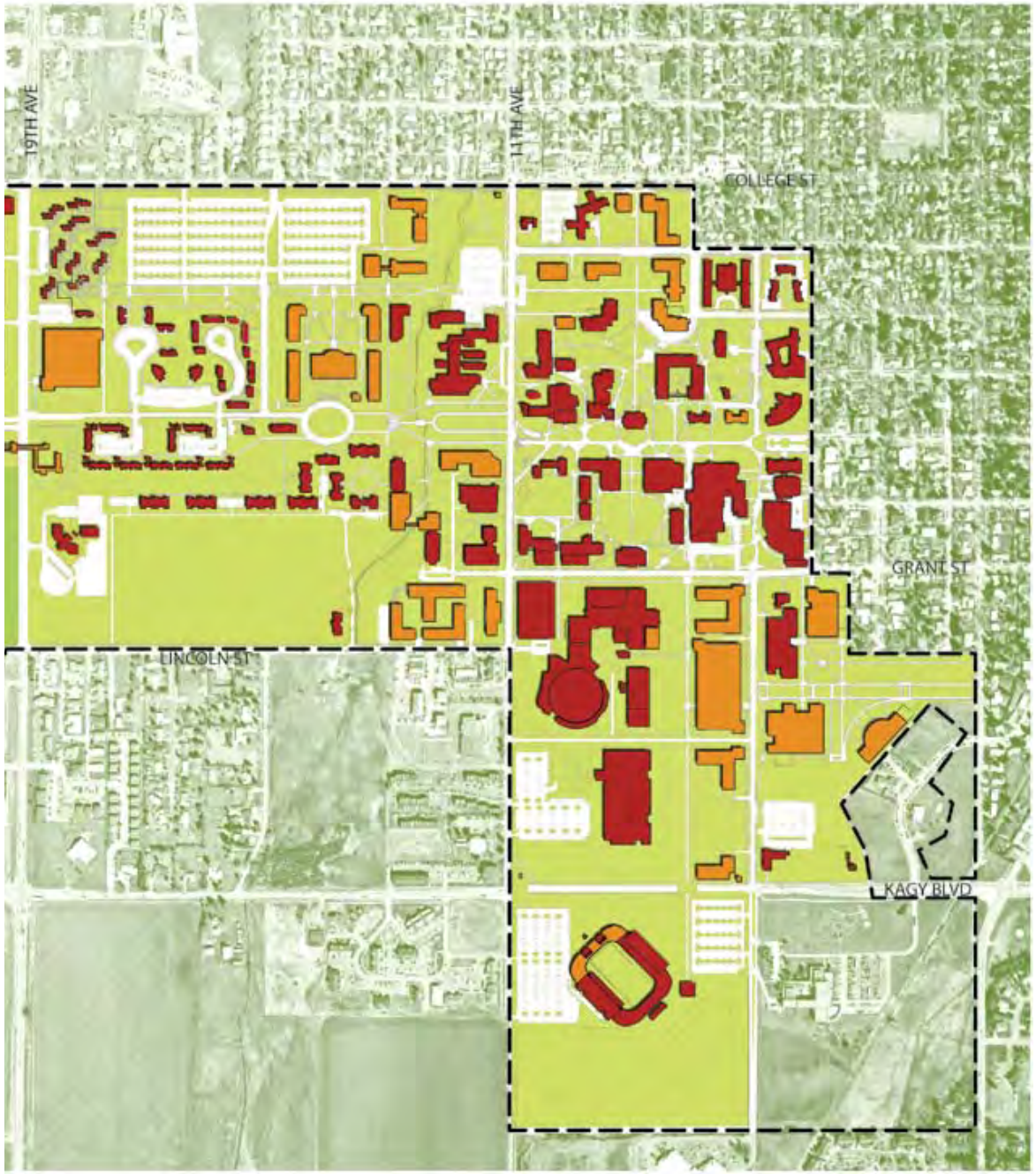
FOWLER
19TH AVE
GARFIELD



25-year Projected Build Out

- Existing Buildings and Proposed Buildings from 10-Year Buildout
- New Buildings
- Agricultural Research and Teaching Facilities

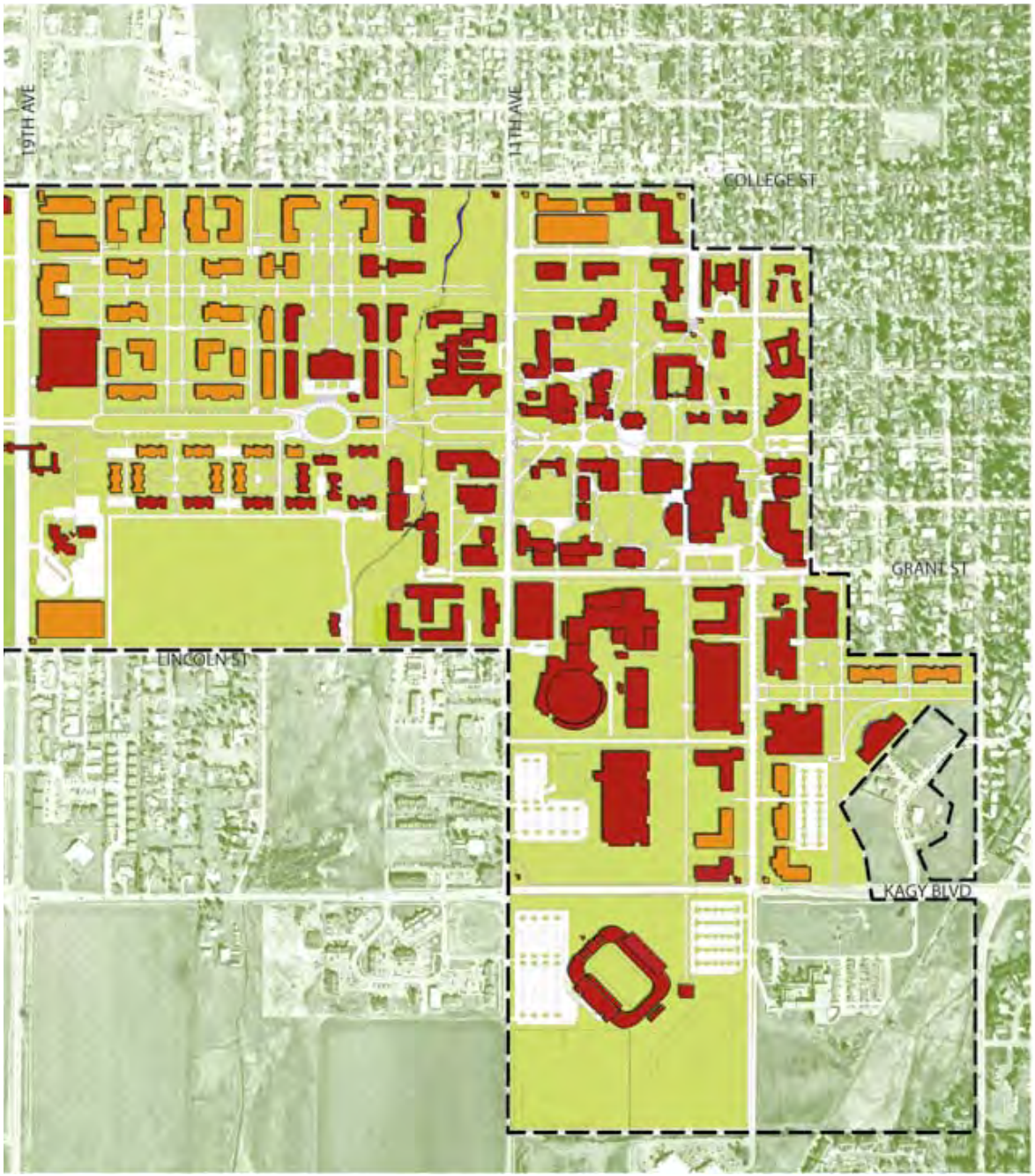
Long Term Vision

The projected final build out is a vision of how the campus physical environment could evolve if the university adheres to principles and framework strategies of the Plan. Although the vision may evolve over time, a continued focus on the framework elements of the Plan will result in a dynamic and well-conceived campus that is conducive to teaching and learning.

The critical element of the framework plan is infrastructure, and more specifically that the appropriate infrastructure is located where it needs to be for connection and access, and that it is in place prior to the development. Infrastructure guides the development and accommodates and organizes the buildings and their access throughout campus and the community.

Sunrise campus panorama with Spanish Peaks in the background (2007).


N
FOWLER
19TH AVE
GARFIELD



Long Term Vision

Existing Buildings and Proposed Buildings from 25-Year Buildout

New Buildings

Agricultural Research and Teaching Facilities

University Facilities Planning Board

Successful implementation of the Plan relies on involvement and oversight by its campus constituents. The University Facilities Planning Board (UFPB) has had an active role in advising the president and administration in guiding the development of the campus' physical environment. UFPB will continue to be a significant contributor in advancing the implementation of the principles and concepts of the Plan.

In its current role, UFPB serves in an advisory capacity to the president for design projects related to the development and utilization of campus facilities and grounds. The UFPB board will review design projects with respect to the Plan principles and elements, with an emphasis on quality of open space, land use, landscape, architectural form, and exterior and public space appearance, as well as the project's relationship and contribution to the campus context. The charge of the board will include:

- Review and advise on the implementation, review cycles and modification of the Plan.
- Review and recommend action on the development of the Campus Design Guidelines.
- Review and participate in establishing priorities for the MSU Long Range Building Program.
- Review and recommend action on the development of new building programs and the siting of all new buildings and structures.

The students are an integral part of all university planning efforts. Their input is sought for short term improvements and long term endeavors.

Stephen Hunts

- Review and recommend action on all remodeling requests that necessitate changes in physical configuration of space in major public areas.
- Review and recommend action on all proposed changes to the campus grounds, including pedestrian, vehicular, parking, lighting, and signage systems.
- Provide conceptual architectural review of projects to assure consistency with overall campus development.
- Review and recommend action relating to any issues that may affect public spaces or the exterior campus environment.

The Long Range Campus Development Plan Advisory Committee

The Long Range Campus Development Plan Advisory Committee is an oversight body representing campus constituents and administration. The committee's responsibilities will be to guide and advise FPDC and UFPB in the cyclical revision of the Plan documents with respect to changes in the university's aspirations and goals.

Students walking along the Centennial Mall.

Relationship to Other Planning Efforts

1. Five-Year Vision Strategic Plan
2. Major Maintenance and Capital Improvement Plan
3. Long Range Campus Building Program
4. Utility Infrastructure Plan
5. Parking Plan
6. Construction and Design Guidelines
7. Campus Landscape Plan
8. Wayfinding and Signage Plan
9. Student, Faculty and Staff Housing Plan

Appendix J

SJR 14: State laboratories
Cost Evaluation for Construction of New Facility for
Veterinary Diagnostic Lab, Analytical Lab and Wildlife Lab
Bozeman, MT

Submitted by Jim Whaley, Bureau Chief, Design and Construction Bureau, Dept. of Administration
1/28/2010

Introduction:

In November 2009, Legislative Services contacted A&E for cost estimates to construct a combined facility to house the Veterinary Diagnostic Lab, Analytical Lab and Wildlife Lab in Bozeman, MT. The labs are all executive branch responsibilities and provide quality control and analytical services to industry and the public. They have little association with research at MSU, but may employ a limited number of MSU students. Jim Whaley toured the three labs on November 18th and this cost estimate is based on observations from that visit.

Assumptions:

Analytical Lab:

- The lab occupies the entire McCall Hall, a 10,545 square foot, single story building originally constructed in 1952. Space is comprised of laboratories, receiving, storage, sample prep and offices. The lab analyzes milk, feed, fertilizer & pesticides; it employs 11 full time staff and 2 MSU student assistants.
- Because the building was converted from other uses, there are some inherent inefficiencies with the layouts and configuration of existing spaces.
- Program needs have been fairly stable and are not projected to grow significantly.
- A new building of equal size will accommodate all the existing programs growth for the foreseeable future. There may be some opportunity for minimal size reduction but without an in-depth programming exercise it is not prudent to make any reductions.

Veterinary Diagnostic Lab:

- The lab occupies 13,236 square feet of Marsh Veterinary Research Lab, a 28,092 square foot, single-story building originally constructed in 1961; the building was partially renovated and a 3,106 square foot necropsy addition constructed in 1996 to increase the total area to 31,198. The lab includes histology/pathology, clinical pathology, milk lab, serology, virology, bacteriology, molecular biology, office space, receiving, media preparation and storage.
- Because the building was converted from other uses and renovated over time, there are some inherent inefficiencies with the layouts and configuration of existing spaces. Some portions of the building are significantly unused (room 73).
- The lab has 21 employees and volume of work has been relatively stable but can expect to have spikes in demand and testing requirements associated with any of a variety of health pathogens such as the recent avian influenza and brucellosis.
- A new building of equal size will accommodate the existing programs including integration of FWP lab and necropsy functions provided the collection of samples in the loft at FWP remains stored where it is. An in-depth programming exercise has not been conducted to confirm individual space requirements and may require some modest increase in area.

FWP Lab:

- The lab occupies approximately half of the 7,007 square-foot Shop/Lab building constructed on 19th Avenue in 1988. Their area includes specimen lab, offices, storage, necropsy area and walk-in freezer/cooler.

- Lab and office space are adequate, but fully utilized. The necropsy area does not have adequate hoist and rails to facilitate efficient movement and storage of large carcasses, lacks bio-security and is used by regional staff and public.

- The lab employs 3 FTE, 6 -8 work study students and 3-5 seasonal employees.

Cost:

- The project will be constructed on property owned by MSU and there is no cost identified for land acquisition.

- Because of the need for separation of samples so that there is no cross contamination, I have not considered combining laboratories or reducing the number of laboratories. There may be some opportunities, but it will take a more in-depth analysis to confirm opportunities. The greater potential for improving efficiency is by starting with a clean slate to configure labs and improve sample flow.

- Samples will be received at a central location (large animals being the exception) and distributed to their respective isolation area for unpackaging, preparation and analysis.

- The project will construct a new 24,000 sf production lab building. The building will provide safe, efficient work environment for the staff; it will have finishes comparable to the renovated health lab in Helena and will provide for needed separation and processing of various samples received. The building will comply with current health and laboratory standards.

- Project costs included 3,600 sf (15%) shelled in space that could be used for additional storage or be remodeled for emerging technologies or other future laboratory needs.

- The building's assignable area will be portioned to be approximately 30% office, 15% storage and receiving and 55% sample prep/ analytical laboratories. While the cost for office space and storage is less than laboratory space, an aggregate cost is comparable to a college laboratory. The basis of cost is 2010 R.S Means cost estimating guides for a single story CMU/brick veneer college laboratory.

- No cost escalation is included to project a cost to construct beyond 2010. Construction costs are determined by market conditions which have been fairly volatile in the past but are now generally stable.

- The building will be constructed as a high-performance building with emphasis on energy efficiency, employee health and comfort, durability and sound sustainable practices to the extent that is cost-efficient.

- The project costs include reasonable site access (similar to Marsh lab), paved parking for staff and visitors, shipping & receiving, site lighting and a general landscape buffer around the building. Site work does not include extraordinary site conditions/soil conditions, security fence or site intrusion detection systems.

- The project costs include nominal utility extensions, but do not account for a site that is not readily served by city utilities or located in a more remote setting.

- The project costs include voice and data systems, door security systems on exterior doors and select interior locations, but does not include extensive interior video monitoring and control systems.
- Project costs include site survey, soil testing, professional services, construction, commissioning and validation of mechanical systems.
- Project costs includes new lab casework and hoods, but assumes that existing equipment and furnishings that has a useful life will be relocated, nominal office furnishings and relocation of existing analytical equipment, walk--in coolers/freezers, and the existing carcass incinerator. It does not include new equipment, computer systems or operating durables.
- According to R.S. Means, Montana's construction costs are about 15% less than the national average. No downward adjustment has been made to account for the regional cost as state contract requirements likely push our construction costs somewhat above Montana's average costs.
- Costs identified are best estimates based on available information. Line item costs will vary, but the intent is to provide a total cost that is a reasonable projection of the cost to construct the identified facility.
- A 10% contingency has been added to the estimated cost to account for unforeseen costs or minor increases in the project scope.

Calculations:

Description qua	ntity	unit	cost	total	Comments:
Single story lab building	24,000 sf		216.00	5,184,000	College Laboratory, Brick on CMU
Shelled enclosure with minimal systems	3,600 sf		90.00	324,000	Warehouse
Casework 8,580		sf	50.00	429,000	55% of net area lab
Mechanical, BSL 3 & energy efficiency upgrade	24,000	sf	18.00	432,000	Doubled means mech cost
BSl Emergency generator upsize	1 ls		45,000.00	45,000	100 Kw
Pavement, curb & gutter, sidewalks	18,000	sf	6.00	108,000	10" base
Landscaping inc irrigation system	6,000 sf		3.50	21,000	
Utilities (water, Sewer, power T-1, gas)	300	lf	100.0	0 30, 000	300 lf to entry
Site lighting poles	6	ea	4,500.00	27,000	
Site survey	1	ls	8,000.00	8,000	
Geo tech	1	ls	15,000.00	15,000	
10% design fee in base costs plus2%	1 ls		121,800.00	121,800	
Commissioning 1		ls	51,840.00	51,840	
Moving costs	1	ls	40,000.00	40,000	
IT systems	1	ls	35,000.00	35,000	
Furnishings	30	employee	1,000.00	30,000	

% for art	0
Subtotal	6,901,640
10% Contingency	690,164
Cost	7,591,804
Rounding	7,600,000

Total cost/squate foot	$275		
Cost per employee (43)		$176,744	
Finished area per employee (43)			558 sf

Summary:

Based on the above assumptions it will cost $7,600,000 to construct a new building to house the Bozeman area Veterinary Diagnostic Lab, Analytical Lab and Wildlife Lab. No consideration has been given to the Helena health lab, Great Falls grain lab or Missoula forensic lab.

This analysis does not consider costs to renovate existing buildings to address identified deficiencies, nor does it include any consideration of how the abandoned spaces will be used, or costs associated with modifying the existing space for future functions.

This analysis does not consider what MSU programs are located in the remainder of Marsh lab, their association with lab space currently being constructed on the third floor of the new Animal Bioscience Building, or the feasibility of renovating/expanding Marsh Lab to house the consolidated labs.

The cost estimate includes a number of elements such as moving costs, IT, and furnishings that will be incurred regardless of whether the state chooses to relocate to leased or owned space and should be accounted for in any comparison of lease vs. own.

Appendix K

From: Powers,Barb
To: Stockwell, Hope
Subject: RE: Montana Veterinary Diagnostic Lab study
Date: Tuesday, June 08, 2010 3:36:01 PM

Dear Hope

Bill is correct, private labs in general do not do large animal testing as there is no profit in it. I know of no private labs that do any significant large animal work. An exception might be some private labs doing large volume of BVD testing, but the only way they will do this is if they are connected to large feedlots or dairies, or vaccine companies or the company that makes the test kits and can make a profit with very large volumes. This is never stable in large animal work however, when cattle prices fall this will decrease submissions, so it is not profitable and not sustainable. Here we either break even or take a loss on large animal testing, therefore many labs will charge an out-of state fee for submissions out of state (see California and Texas for example) so as to discourage out of state large animal submissions. We will not subsidize out of state large animal testing either, they pay full cost and so may not submit as it gets too expensive.

The government (USDA) will subsidize regulatory testing like Brucellosis, Tuberculosis, etc but the government will NOT delegate this type of work to private labs, only AAVLD accredited labs. I am also unaware of FDA working with private labs (your lab has a large FDA program in milk/dairy products). And you have a large Brucellosis program there that could NOT be sent to private labs.

There is also a large public health component that is very difficult to regulate in private labs, state government labs are much more reliable to collect and transmit data to the appropriate public health officials.

Then there is the whole accreditation issue and conflict of interest issues with private labs, state/university labs are viewed to be more unbiased and free of any conflicts.

Any attempts to privatize testing of large animal work in your state would be a huge disservice to the cattlemen of Montana, they could not afford it, services would be reduced and the health of your cattle would be in jeopardy. Your state being on the border with Canada could also affect trade, not to mention the need to be vigilant of introducing any foreign animal diseases. Have you noticed the Foot and Mouth Disease outbreak in Japan/Korea ?

barb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*****************************************************************
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* Colo State Univ Diagnostic Laboratories
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* PHONE 970-297-1281  FAX 970-297-0320
* http://www.dlab.colostate.edu
* EMAIL barb.powers@colostate.edu
*****************************************************************
```

From: Stockwell, Hope [mailto:HStockwell@mt.gov]
Sent: Tuesday, June 08, 2010 2:56 PM
To: Powers,Barb
Subject: Montana Veterinary Diagnostic Lab study

Hi, Dr. Powers-

I continue working on the legislative study of Montana's Veterinary Diagnostic Lab. As the legislative oversight committee considers the options, some lawmakers have asked whether the testing services could be outsourced

or privatized, instead of having a state-run lab in Montana.

Dr. Bill Layton has testified to the committee that most private labs deal in small animal health and that most large animal testing is conducted by state/government labs. Are you aware of any private labs that conduct the type of large animal testing services as those provided by our VDL? If possible, I'd like to make a comparison of the testing services private labs offer, the fees, the time it takes to get results, etc.

I appreciate your time. Thanks for any suggestions you may have.

Best,

Hope

Hope Stockwell
Research Analyst
Environmental Policy Office
Montana Legislative Services Division
406-444-1640
hstockwell@mt.gov

Appendix L

SJR 14 State Lab Testing Service Comparison

as of June 9, 2010

Test	Montana	Michigan	Minnesota	Colorado	Washington	Wyoming
	Additional 50% surcharge on out-of-state submissions. Minimum lab fee is $7. Additional $7 handling fee for submissions referred to another lab, plus shipping, and other lab's fee.	Shipping not included in fees or result times.	Most prices include $10 accession fee and $10 hazardous waste disposal fee; additional 10% out-of-state surcharge may also be applied. Shipping not included in fees or result times.	Minimum lab fee is $10. Additional $13 fee for tests that must be referred;Shipping not included in fees or result times.	Prices include $10 accession fee and 50% out-of-state surcharge. Shipping not included in fees or result times.	$10 additional fee if sent to another lab. Shipping not included in fees or result times.
SEROLOGY TESTING						
Anaplasmosis – cELISA						
Fee	$7.50		$23.25		$6	$7
Results ready (in days)	1 to 8		2 to 6		10 to 14	
Avian Influenza – AGID						
Fee	$5.50	$3	$11.75	$10	$35-40 (PCR)	$30 (PCR)
Results ready (in days)	2 to 8	3 to 5	3 to 7	1 to 2	2 to 7	
Bluetongue – ELISA						
Fee	$8.25		$26.25	$30 (PCR)	$48	$7
Results ready (in days)	1 to 7		2 to 7	run twice/week	3 to 7	
Bovine Leukemia Virus – ELISA						
Fee	$6.50	$9	$25.50	$25 (PCR)		$17 (referred)
Results ready (in days)	1 to 2	1 to 4		run twice/week		
Bovine Respiratory Syncytial Virus – SN						
Fee	contact lab	$35 (PCR)	$27 (BRSV)	$30	$32.50	$6
Results ready (in days)	5 to 7	4 to 7	10 to 16	run twice/week	6 to 12	
Bovine Virus Diarrhea – ELISA						
Fee	$5.00	$6	$26.25	$10	$62.50-76	$4
Results ready (in days)	1 to 2	2 to 14		same day	3 to 6	
Bovine Virus Diarrhea – SN						
Fee	$13	$9 (VN)	$27	$10	$62.50-76	$5
Results ready (in days)	5 to 7	7 to 12	7 to 14	4	5 to 12	
Brucella abortus - BAPA, card, RIV, SPT, STT						
Fee	$1.50-$2.50 each	$7 (BAPA)	$22	$60 (PCR)	$16 (BAPA)	in-state no charge (state subsidized); $3 out-of-state
Results ready (in days)	1 to 8	3 to 5	2 to 8	2	1 to 8	

SJR 14 State Lab Testing Service Comparison

as of June 9, 2010

Test	Montana	Michigan	Minnesota	Colorado	Washington	Wyoming
Brucella abortus – CF						
Fee	$2.50		sent to referral lab			
Results ready (in days)	1 to 8					
Brucella ovis – ELISA						
Fee	$7.50		sent to referral lab	$23	$16	$7
Results ready (in days)	2 to 8			sent to other lab	1 to 7	
Equine Infectious Anemia – AGID						
Fee	$7.00	$10	$19	$8	$23.50	$7
Results ready (in days)	2	1 to 5	2 to 6	1	1 to 2	
Equine Infectious Anemia – cELISA						
Fee	$12.50	$10	$17.25	$13	$23.50	$9
Results ready (in days)	1	1 to 3	2 to 5	same day	1 to 2	
Epizootic Hemorrhagic Disease – AGID						
Fee	$10.00		$26.25	$30	$58	$6
Results ready (in days)	2 to 8		2 to 4	run twice/week	3 to 7	
Brucella Canis						
Fee	$22.00	$18	$24	$12	$23.50	$10
Results ready (in days)	1	3 to 5	1 to 6	same day	1	
Feline Infectious Peritonitis						
Fee	$25.00		$39.50	$35		
Results ready (in days)	1 to 2			run twice/week		
Feline Leukemia Virus						
Fee	$15.00	$10	$47.75		$37.00	
Results ready (in days)	1 to 2	1 to 4			2	
Feline Leukemia Virus/Feline Immunodeficiency Virus						
Fee	$25.00	$20		$35	$50.50	
Results ready (in days)	1 to 2	1 to 4		run twice/week	2	
Infectious Bovine Rhinotracheitis – SN						
Fee	$6.50	$9 (VN)	$27		$16	$6
Results ready (in days)	3 to 5	7 to 12	7 to 14		5 to 12	
Johne's (Paratuberculosis) – AGID						
Fee	$11.00	$11	$30.25	$30 (PCR)		
Results ready (in days)	2 to 8	3 to 5	2 to 4			
Johne's (Paratuberculosis) - ELISA						
Fee	$7.50	$7	$26.25	$30 (PCR)	$16	$8
Results ready (in days)	1 to 8	3 to 5	2 to 8		1 to 8	

SJR 14 State Lab Testing Service Comparison

as of June 9, 2010

Test	Montana	Michigan	Minnesota	Colorado	Washington	Wyoming
Leptospirosis (8 serovars) – MAT						
Fee	$7.00	$18 canine, $13 other	$30.25 (6 serovars)	$7	$32.50-43	$10 (5 serovars)
Results ready (in days)	1 to 2	1 to 3	2 to 5	1 to 7	1 to 8	
Ovine Progressive Pneumonia/Caprine Arthritis Encephalitis -- AGID						
Fee	$5.50	$8	$25	$25 (PCR)	$16	$6
Results ready (in days)	2 to 8	1 to 5	2 to 4	run twice/week	1 to 8	
Parainfluenza-3 – HI						
Fee	contact lab	$9 (VN) or $40 (VI)	$26.75	$10	$23.50 (VN)	$6
Results ready (in days)	2 to 7	7-12 (VN) or 14 (VI)	2 to 7	1 to 3	6 to 14	
Pseudorabies Virus - Latex Ag.						
Fee	$5.50	Psuedorabies VI $40	$25	$10 (ELISA)	$16	$5
Results ready (in days)	2	7 to 10	2 to 4		1 to 7	
Pseudorabies Virus - SN						
Fee			$23.50	$10 (ELISA)	$16	
Results ready (in days)	2 to 5		3 to 8		1 to 7	
Salmonella pullorum – MAT						
Fee	$4.50	$3.50	$28.50 (ELISA)	$12.50	$28.75-$47.50 (culture)	
Results ready (in days)	2 to 8	3 to 5	2 to 8			
Vesicular Stomatitis (Indiana & New Jersey strains) - SN						
Fee	$13.00		$27.25	$10	$22	$15
Results ready (in days)	3 to 5		3 to 8	4	5 to 12	
Vesicular Stomatitis CF						
Fee	$40.00			$17.50		$20
Results ready (in days)				1		
West Nile Virus – IgM ELISA (June – October)						
Fee	(June-Oct) $15	$30	$19.25	$15	$58	$20
Results ready (in days)	2 to 3	2 to 7	3 to 5	1	3 to 8	
BACTERIOLOGY TESTING						
Campylobacter, culture						
Fee	$11	$20	$43		$25	$12
Results ready (in days)	5	4 to 6	6 to 14			
Chlamydia stain/ELISA						
Fee	$17	$35-40 (VI)	$38.75	$25-35 (PCR)	$37	$25
Results ready (in days)	1 to 2	varies	2 to 3	run twice/week	6	
Clostridium FA						
Fee	$11	$57 (ELISA)	$25 (ELISA)	$26	$25	$12
Results ready (in days)	1 to 2	2 to 3	2 to 7			

SJR 14 State Lab Testing Service Comparison

as of June 9, 2010

Test	Montana	Michigan	Minnesota	Colorado	Washington	Wyoming
Cryptosporidium smear						
Fee	$6	$12	$36.75	$14		$7
Results ready (in days)	1 to 2	2 to 3	1	same day		
Dirofilaria immitis (heartworm) ELISA						
Fee	$9	$18	heartworm $51.75 (canine/feline); Knott's test - dirofilaria $43.50	$18		$9
Results ready (in days)	1 to 2	2 to 3	1	same day		
Fungal culture						
Fee	$20	$25	$40.50	$18	$29.50	$6 (direct exam) cultures are referred
Results ready (in days)	10 to 30	3 to 14	4 weeks	2 to 6 weeks	at least 14	
Giardia examination						
Fee	$25	$24	$46.50	$23 (ELISA)		$35
Results ready (in days)	1 to 2	2 to 3	1	same day		
Parasite ID, fecal flotation						
Fee	$10	$24	$50.25	$15	$19-28	$6-8
Results ready (in days)	1 to 2	5 to 7	1 to 4	1+		
Trichomonas, culture						
Fee	$5.50	$17	$37	$10		$8
Results ready (in days)	5	12 to 14	6 to 14			
VIROLOGY						
Electron microscopy						
Fee	$25		$49			$25-50
Results ready (in days)	2 to 3					
Fluorescent antibody tests						
Fee	$8/agent		$20-24.50			$8
Results ready (in days)	1		same day			
Rabies, FA			$35	$60		
Fee (large animal)	$50					No charge
Fee (small animal)	$25					
Results ready (in days)	1		1 to 2	1 to 3		
Virus isolation						
Fee	$25/virus		$52.25	$25-45		
Results ready (in days)	21		14 to 35			

SJR 14 State Lab Testing Service Comparison

as of June 9, 2010

Test	Montana	Michigan	Minnesota	Colorado	Washington	Wyoming
OTHER						
Livestock abortion study: includes histopathology, aerobic, Brucelloa, Campylobacter, Trichomonas cultures and darkfield examination						
Fee	$40			$80-150	$137.50	
Results ready (in days)						
Necropsy (with histology)						
Cattle and horses	$60-140	$150-$240	$122 (horses); $96.50 (cattle)	$210	$72	$75-120
Sheep and goats	$60-75	$150		$50	$57	$75
Swine	$60-100	$150	$117.50	$50	Up to 250 lbs:$57 Over 250 lbs $72	$75
Dogs and Cats	$100	$200	$122	$150	$114	
Other species	$40 minimum	$170	$85.25 (wildlife & exotics)	$60 for wildlife		
Carcass disposal (companion animals)	$25-85		25 cents/pound			$20
Carcass disposal (livestock)	$20/100 wt.		25 cents/pound			$1 per lb.
Insurance and Legal Cases	$150/hour	$385 surcharge	charged @ cost	$260		$150/hr + other lab charges
Spinal cord removal	$45-85	$130				$50

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Economic Affairs Interim Committee

61st Montana Legislature

Christian Mackay, Executive Officer
Department of Livestock
301 N. Roberts, Room 101
Helena, MT 59620

May 26, 2010

Dear Mr. Mackay,

On behalf of the Legislative Economic Affairs Interim Committee, I am writing to ask that your agency and the Board of Livestock work with the director of the Department of Fish, Wildlife, and Parks and the president of Montana State University-Bozeman to craft a proposal to combine the Veterinary Diagnostic and Wildlife Laboratories in a new, joint facility on the MSU campus. The goal would be to increase collaboration and communication between these state laboratories and various academic units at MSU while improving workflow, biosafety, and budgetary conditions for all.

The Economic Affairs Interim Committee makes this request as it continues to study state laboratories per Senate Joint Resolution No. 14 passed by the 2009 Legislature. The information gathered so far indicates that the Veterinary Diagnostic and Wildlife Labs are in need of new facilities to maintain accreditation and effectively continue monitoring animal and wildlife health and diseases in Montana. Of the labs under consideration, the Veterinary Diagnostic and Wildlife Labs appear to have the greatest compatibility of function and mission and potential for increased collaboration with MSU to provide additional educational opportunities for certain degree programs.

In order to further consider whether to pursue this possibility, the committee respectfully requests that representatives of DOL, BOL, FWP, and MSU meet as soon as possible to discuss interest in such a proposal, what a combined facility could look like (size, location, cost), how work with MSU degree programs could be incorporated, and what funding sources might be sought. The committee also asks that the legislative research analyst conducting the SJR 14 study be included in these discussions and that an update on your progress be provided at our next meeting June 29.

Mr. Mackay, the committee appreciates the time and attention you, the Board of Livestock, and your staff give this matter. Please let me know if I, or the EAIC staff, can be of assistance.

Sincerely,

Senator Jim Keane, Chair

MONTANA
STATE UNIVERSITY

June 4, 2010

Senator Jim Keane
Economic Affairs Interim Committee
P.O. Box 201706
Helena MT 59620-1706

Dear Senator Keane:

Thanks for your letter dated May 26, 2010, inviting Montana State University to participate in a proposal to combine the Veterinary Diagnostic and Wildlife Laboratories in a new facility. We will be glad to participate in this discussion and provide whatever information might be helpful to your consideration of this facility proposal.

Jeff Jacobsen, Dean of the College of Agriculture and Director of the Montana Agricultural Experiment Station, will be our representative.

We appreciate the opportunity to provide input on this proposal. We look forward to working with our colleagues from the Board and Department of Livestock, and Fish, Wildlife and Parks.

Sincerely,

Waded Cruzado
President

WC/sm

cc: Dr. Sheila Stearns, Commissioner of Higher Education

Office of the President
211 Montana Hall
P.O. Box 172420
Bozeman, MT 59717-2420
www.montana.edu

Tel (406) 994-2341
Fax (406) 994-1893

TO: Sen. Jim Keane, Chairman, Economic Affairs Interim Committee

FROM: Art Noonan, Deputy Director

DATE: June 25, 2010

RE: SJ14

As part of our discussions regarding SJ14, Fish, Wildlife and Parks has attempted to pull together important data that will be necessary to facilitate productive discussion with our current or potential partners at the Department of Livestock and Montana State University - Bozeman. To that end we have compiled recharge information and per unit payments by FWP and DOL, analyzed available lands in and around the existing lab, and are preparing to enter into conversations with MSU.

Attached below you'll see the recharge information by DOL to MSU for rental of the Marsh Laboratory space:

Department of Livestock recharge payments to Montana State University	
FY 2010	$109,414
FY 2011	$114,808

Attached below you'll see the per year payment information from FWP to DOL for animal incineration at the necropsy facility:

Fish, Wildlife and Parks payments to Department of Livestock*	
FY 2010	$14,000
FY 2011	$14,000

**NOTE: The MOU expires in 2011 and is attached for your review.*

These amounts provide us an opportunity to prepare net present value calculations to determine long-term funding for new lab space. We or your staff can run various iterations using these funds and inflation rates over any given payback period at any given interest rate as you may request. It is important to note that given the general fiscal constraints presented by current economic realities we do not foresee any additional general fund appropriation requests to assist in constructing new lab space.

FWP and DOL do have a mutual interest in pursuing new lab space in order to maximize efficiencies and to maintain and improve Montana's current provisional accreditation with the American Association of Veterinary Diagnostic Laboratories.

We anticipate meeting with President Cruzado of MSU during July to engage MSU in these discussions. We are at somewhat of an impasse until such time as we garner additional information from MSU about their interest in land exchanges or purchases.

Christian Mackay of the DOL or I will keep you apprised of the situation as it develops.

Attachment: FWP/DOL MOU

MEMORANDUM OF AGREEMENT BETWEEN THE

MONTANA DEPARTMENT OF LIVESTOCK DIAGNOSTIC LABORATORY DIVISION AND THE MONTANA FISH, WILDLIFE AND PARKS

FOR VETERINARY LABORATORY DIAGNOSTIC SERVICES

This agreement is entered between the Diagnostic Laboratory Division, hereinafter referred to as the Diagnostic Laboratory and the Montana Department of Fish, Wildlife and Parks, hereinafter referred to as FWP. This agreement specifically provides for veterinary diagnostic services by the Diagnostic Laboratory for the FWP. The purpose is to facilitate cooperation between the two units, prevent costly duplications, allow administrators to accurately budget for these services and to generate timely, accurate records regarding wildlife health. The goal is to provide maximum service at minimum costs to Montana taxpayers and sportsmen.

I. GENERAL TERMS:
   A. The effective date of this agreement will be when signed by the authorized representatives of both the Diagnostic Laboratory and the FWP.
   B. The agreement is based between the times July 1, 2009 to June 30, 2011.
   C. The representatives of the Diagnostic Laboratory and FWP will review the terms of the agreement in the month of May prior to renewal.
   D. The agreement may be terminated at any time by mutual consent of both parties. Unilateral termination of the agreement is permitted only after providing notice to the other party at least thirty (30) days prior to termination. The remaining balance of the contract prepayment will be returned within 60 days of completion of the last testing procedure.

II. RESPONSIBILITIES OF THE DIAGNOSTIC LABORATORY
   A. Provide those laboratory services as deemed necessary in the order to establish a diagnosis in a timely manner.
   B. Perform diagnostic and disease surveillance testing that is currently offered and listed in the Diagnostic Laboratory Fee Schedule in the scientific areas of pathology, clinical pathology, bacteriology, parasitology, immunology/serology, and virology.
   C. Recommend additional testing as indicated. Tests not currently within the services of the Diagnostic Laboratory will be referred to an accredited laboratory providing the specified test. Referral laboratory fees and shipping costs will be billed.
   D. Dispose of carcasses and animal remains at a time coinciding with a routine laboratory incineration. FWP staff will be informed of times in which upcoming incinerations are to be conducted. Diagnostic Laboratory pathologists or

necropsy room personnel must approve special incineration requests on an individual basis. Material to be incinerated is to be delivered to the Diagnostic Laboratory by FWP personnel. Incineration is only to be performed on animal tissues and items/materials approved in the use permit granted by the Montana Department of Environmental Quality.

E. Send written reports of test results and conclusions for all diagnostic cases within two (2) working days of the completion of the procedures and for research/surveillance cases within 14 days of completion of in house procedures or receipt of test results from a referral laboratory.
F. All state and federal reportable disease suspects and test results will be conveyed as legally required to the office of the State Veterinarian and FWP officials.
G. Final reports are to be mailed to Wildlife Laboratory Supervisor, FWP, Bozeman.
H. Cooperate with and advise the managers of the various FWP units to coordinate tissue deliveries with laboratory schedules. Provide appropriate forms and instructions to FWP personnel.
I. It is not within the scope of this agreement for the Diagnostic Laboratory to provide diagnostic services for research projects in which test animals and controls are sacrificed and examined according to a project design.

III. RESPONSIBILITIES OF THE FWP

A. Deliver specimens for testing and disposal to the Marsh Laboratory, Montana State University, Bozeman. Deliveries will normally be made during regular Diagnostic Laboratory hours of 8am-12 noon and 1 pm-5 pm. Deliveries can be made at other times provided they are arranged with the Diagnostic Laboratory personnel prior to actual deliveries.
B. Complete SV43 and/or SV2A/B submission forms for each case submission and state on the form the account to be billed.
C. Contact appropriate Diagnostic Laboratory section supervisors prior to submission of research/surveillance samples if greater than 10 animals are to be tested. Section supervisors must approve large case submissions for schedule organization and procurement of testing materials.
D. Observe restricted traffic areas within Marsh Laboratory in order to avoid exposure to and possible spread of infectious disease agents.
E. Pay fourteen-thousand dollars ($14,000.00) per year to the Montana Department of Livestock in one installment no later than August 15 of each fiscal year. If requested services exceed the $12,000.00 reimbursement amount, FWP agrees to pay the published rate for additional services by the Diagnostic Laboratory Division.
F. Pay up to Two thousand dollars ($2,000.00) each fiscal year for incinerator maintenance and incineration costs.

IV. Conclusion

It is hoped that this agreement will be beneficial to the Montana Department of Fish, Wildlife and Parks and the Montana Department of Livestock. Cooperative efforts, such as this, help maximize the use of existing, high quality services available in the state, without duplication of effort.

_____ _____

Department of Fish, Wildlife and Parks Date

Neil Anderson, Laboratory Supervisor

_____ _____

Montana Department of Livestock Date

Board of Livestock

Christian Mackay, Executive Officer

_____ _____

Diagnostic Laboratory Division Date

Montana Department of Livestock

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Economic Affairs Interim Committee

61st Montana Legislature

June 29, 2010

To: Christian Mackay, Executive Director, Department of Livestock
Jan French, Chair, Board of Livestock
Joe Maurier, Director, Department of Fish, Wildlife, and Parks
Jeff Jacobsen, Dean, MSU-Bozeman College of Agriculture

From: Sen. Jim Keane, Chair, Legislative Economic Affairs Interim Committee

Re: SJR 14 Study of State Laboratories

On behalf of the Legislative Economic Affairs Interim Committee, I am writing to thank you for your willingness to participate in discussions about the future of the state Veterinary Diagnostic and Wildlife Laboratories in Bozeman and their possible consolidation in a new, joint facility on the MSU campus.

The Economic Affairs Interim Committee encourages you to undertake these discussions as quickly as possible in order to include your input in its final SJR 14 study report. The Committee's next and last meeting before the 2011 Legislative Session is scheduled for August 19 and 20. At that time, the Committee must finalize the content of its SJR 14 report for publication.

As stated in a previous letter dated May 26, 2010, the Economic Affairs Interim Committee requests your input in order to further consider whether to pursue the possibility of combining the two laboratories. The Committee asks that representatives of DOL, BOL, FWP, and MSU discuss interest in such a proposal, what a combined facility could look like (size, location, cost), how work with MSU degree programs could be incorporated, and what funding sources might be sought. The Committee again also asks that the legislative research analyst conducting the SJR 14 study be included in these discussions so that the SJR 14 study report may be completed in as expeditious a manner as possible.

The Economic Affairs Interim Committee appreciates the time and attention each of you and your staff give this matter. Please let me know if I, or the EAIC staff, can be of assistance.

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Economic Affairs Interim Committee

61st Montana Legislature

Dr. Beverly Byrum, Chair
AAVLD Accreditation Committee
American Association of Veterinary Laboratory Diagnosticians, Inc.
PO Box 647034
Pullman, WA 99164-7034

Dear Dr. Byrum and Members of the AAVLD Accreditation Committee:

As directed by the Montana Legislature's passage of Senate Joint Resolution No. 14 in March 2009, the Economic Affairs Interim Committee has spent the past year studying the condition of the Montana Veterinary Diagnostic Laboratory in response to your committee's concerns about the laboratory's facility and funding. The EAIC appreciates the provisional accreditation your committee granted through December 2010 in order to allow our analysis to be conducted. A copy of the EAIC's final study report is attached.

The EAIC finds that the MVDL, located on the Montana State University campus in Bozeman, is in need of additional space better suited to its mission and function. The EAIC also finds that the MVDL and the Montana Wildlife Laboratory, operated by the state Department of Fish, Wildlife, and Parks across the street, have enough commonality in function and need for additional space and greater biosecurity that discussion about the possibility of combining these laboratories in a new, joint facility is desirable, though not economically feasible at this time.

The EAIC recognizes the mission of and value and service provided by the MVDL and Wildlife Laboratory to monitor and protect livestock and wildlife health in Montana and therefore public health. The EAIC understands the importance of and supports maintaining the MVDL's full accreditation with your organization to fulfill that mission.

To that end, the EAIC has asked the Montana Departments of Livestock and Fish, Wildlife, and Parks to initiate discussions with Montana State University officials about the future of these laboratories and their relationship with MSU academic units. The goal of these discussions, which have already begun, is to find efficiencies in mission and workspace in order to increase collaboration, communication, workflow, biosafety, and budgetary conditions for all. Already, MSU officials have agreed to dedicate additional space in the building that houses the MVDL to address the laboratory's needs in the short term.

Although a new facility is not immediately economically feasible, the EAIC asks the AAVLD Accreditation Committee to recognize the progress being made to address the conditions of the MVDL and to approve continued accreditation of the facility as the agencies and Legislature continue to discuss the laboratory's future.

Dr. Byrum, your consideration and that of the Accreditation Committee in this matter is much appreciated. Please let me or the EAIC staff know if we can be of any assistance.

Sincerely,

Sen. Jim Keane, Chair