Agricultural Conservation
In Missoula County

Assessment of Working Groups’ Recommendations

Prepared by Community and Planning Services

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This report summarizes and evaluates proposals to protect agricultural lands which were crafted in late 2016 by working groups representative of Missoula County residents. In addition, the Commissioners held a public meeting to hear the groups’ recommendations outlined in their reports. Contained herein is an accounting of the working groups’ recommendations and an assessment of how these recommendations might be accomplished. This report also addresses the conflicts and potential solutions involving agricultural preservation in Missoula County, briefly noting potential conflicts between efforts to preserve agriculture land and efforts to address other values, such as housing, wildfire safety, wildlife and wildlife habitat, natural resource areas, and other open spaces.

For many years Missoula County has devoted effort to the issues and opportunities raised in the working groups’ summary reports. Successes noted in the tables that follow include revised zoning and subdivision regulations, the open space bond program, the PLACE Project (Practical Landscape Assessment for Conservation and Enhancement) aimed at mapping information about conservation resources in Missoula County, an updated growth policy, the hiring of a sustainability and conservation coordinator, and an ongoing urban area land use planning and mapping update.

Agricultural conservation is a high priority for Missoula County, and there will be ongoing opportunities for shaping the policies intended to guide the future of agriculture in Missoula, such as the land use planning and mapping update and the joint City-County PROST Project (2018 Parks, Recreation, Open Space, and Trails Plan) now underway. The PROST Project is geared toward ranking public values related to parks, open space (including agriculture and wildlife), trails, and other active recreation areas.

Where opportunities exist to make strides in agricultural protection, this report contains recognition of these opportunities. Recommendations that require action beyond the scope of County government are also noted in the tables in Attachment B. Missoula County is grateful for the efforts of the three working groups (Conservation Development Models, Incentive-based Landowner Tools, and Voluntary Efforts) whose recommended actions are summarized below and described in more detail in this report.

**Working Groups: Primary Recommendations**

- Preserve agricultural lands through voluntary efforts, such as open space bonds, conservation easements, deed restrictions, long term leases, land acquisition and community land trusts.
- Revise the regulatory framework inhibiting agricultural opportunities, e.g., zoning, subdivision, DEQ sanitation requirements.
- Create policies and enhance marketing tools that highlight agricultural opportunities.
- Improve infrastructure and markets to increase agricultural viability.
- Establish economic incentives, such as tax credits, loan or grant programs, or community funds, to incentivize farming.
INTRODUCTION

Missoula County is responsible for adopting policies and regulations to protect and enhance residents’ quality of life and the numerous values held by those residents. Various values often compete for limited resources such as land, state, federal and local funding, and time. Among these many values are wildlife and wildlife habitat, agriculture, hillsides, air and water quality, housing, economic stability and growth, and public health and safety from disasters such as wildfire and flood. Competing interests requires prioritizing the values that are important to a community. In recent years, there has been significant pressure to value the preservation of agricultural land and soils, at times overshadowing other values identified as important to Missoula County residents.

In addition to protecting diverse interests, Missoula County faces the challenge of planning for housing for its growing population. The 2040 projected population is estimated at just over 140,000, up from the 2016 population of approximately 117,000. Much of the land now developed as Missoula’s urban core was at one time productive agricultural soil, illustrating the importance of weighing the need for all types of housing with the value of productive agricultural lands. The choice to build in one location over another is a balancing act of competing values and dynamic market forces. Past public processes led to extending sewer service to areas in the urban fringe to protect water quality. Landowners in these areas have funded extensive portions of the waste water infrastructure, and the market price of land in such areas can be a significant reason why land is now cost-prohibitive for use as agriculture.

Wildlife, agriculture, and open space protection are addressed in the County’s Open Space Program, funded by voters who overwhelmingly supported a County Open Space Bond in 2006, with 70% of County residents voting to pass that bond. This program has been remarkably successful, protecting and leveraging protection of over 29,000 acres of agricultural lands, wildlife habitat, open space, and lands of scenic value in Missoula County. Open space bond funding efforts originate as a privately developed project from initial discussion to formation of support groups to “get out the vote” should a bond be placed on a future election ballot. In addition to the 2006 Open Space Bond, other efforts have resulted in the protection of an additional 34,600 acres of land through conservation easements. As a result, a total of over 63,600 acres have been protected in Missoula County alone. By comparison, roughly 650 acres of private agricultural land was platted for development in the County from 2006 through 2017.

A. Background

In a 2016 amendment to the County subdivision regulations, the Missoula County Commissioners adopted provisions “to reasonably mitigate potentially significant adverse impacts to agriculture and agricultural water facilities resulting from subdivision,” including possible offsite mitigations. These provisions were intended to be flexible and adaptable for a variety of situations, with specific mitigations unique to each development proposal. The amended regulations reaffirmed that developers must assess and propose mitigation for impacts to agriculture and agricultural water user facilities.

The County Commissioners are committed to protecting local agriculture, balanced with other equally important goals. In keeping with one of the recommendations from the Voluntary Efforts working group,
Missoula County adopted a *Right to Farm, Ranch, and Practice Forestry Policy* in August 2016 in combination with exploring initiatives to encourage small-scale farming at the local level through incentive rather than regulation. Since preserving agriculture requires a public commitment, the Commissioners asked the County planning staff and the community to explore policies and funding sources and present viable solutions for their consideration.

To that end, three working groups formed in the Spring of 2016 to explore a wide range of options for improving access to, and preservation of, agricultural opportunities in Missoula County. Participants divided into three self-sorted groups: 1) Conservation Development Models, 2) Incentive-based Landowner Tools, and 3) Voluntary Efforts – also known as the Farm Incubator Working Group. In their November 2016 reports to the Missoula County Commissioners, these groups recommended possible solutions for preserving agriculture, summarized in the sections that follow. A number of recommendations fall outside the purview of local government and may need further evaluation for action by other agencies or organizations. Details of these recommended actions can be found in the full Working Group Reports in Attachment A.

**B. Discussion of Problem / Perceived Problem**

There has been much discussion of protecting agriculture and concern about the actual and perceived loss of agricultural opportunities in Missoula County. Various interests in the community are seeking a solution that preserves portions of the remaining agricultural lands in Missoula County. The specific purposes and the amount of land needed for agricultural soil protection remains unclear. Should we be protecting agriculture soils, agricultural production capabilities, or an agricultural way of rural life? Ultimately, the public must determine the important agricultural values to protect and how to protect them. These questions are further complicated by the desire of the population to concurrently protect the other conflicting values referenced in this report.

The discussions about agriculture have expanded to include agriculture as an important component of Montana’s culture, landscape, and sense of place. There are as many definitions of agriculture as there are methods available to protect it. It is, however, important to understand whether the goal is to preserve land with agricultural capability or to protect our ability to meet our own food production needs, or both. While the two are inextricably intertwined, one seeks to preserve land and the other seeks opportunities for food production which may or may not require extensive acreages for protection.

A basic question follows: Is there a deficit of agricultural land compared to the demand for local food sources today, or will there be a shortage as our population grows? It is imperative that we take a long-term view of agricultural conservation and food production, and community resiliency and climate change must factor heavily into the discussion. It is evident that Missoula could produce significantly more food if necessary, but for a variety of reasons such as cost, competing demands for land, and the need for grains, exclusive reliance upon local farms may not be the best strategy for meeting local food needs. Preserving agricultural land for other reasons – such as preserving a landscape, a culture, a heritage, a lifestyle, or a continually evolving ag economy – requires significant public discussion.
In a striking similarity among all three working groups, preserving agricultural soils through voluntary conservation efforts was strongly supported. Preserving land with agricultural soils, particularly large acreages in the urban area, can be challenging due to cost and development pressure. Improved technologies, planting varied crops, and alternative methods of agriculture can reduce land needs for agricultural activities. Methods with less land consumption may be viable options in Missoula, Montana (see a sampling of vertical, compact, high-efficiency methods in Attachment C).

If a shortage of agricultural land exists or is projected, the governing body would need to continue its ongoing efforts to evaluate the tools considered appropriate to conserve agricultural lands while respecting the land value and equity that generations of farming and ranching families have developed and invested in over multiple decades. One option is to require additional lands to be set aside as mitigation during subdivision review, on top of the 11% parkland/common area dedication. Additional land set aside increases the cost of development and are always carefully considered.

The County could also contemplate zoning land in such a way that land use is restricted to only farmland and agricultural activities, effectively placing a higher value on that use over other community goals in that geographic area. Zoning large intact properties suitable for agriculture outside of the urban area may be a viable way to preserve agricultural land; however, it will also reduce the opportunity for voluntary approaches to conservation in addition to reducing the property’s value. This is especially detrimental to large rural farmers and ranchers who may rely on the ability to subdivide a small portion of their land for operating capital to sustain the farm or ranch.

C. Guiding Documents / Policies
Missoula County decisions are guided by the following policy and regulatory documents:

- The Montana Constitution prescribes that “the legislature shall...enact laws and provide appropriations to protect, enhance, and develop all agriculture.”

- In August 2016, the Missoula County Commissioners adopted a Right to Farm, Ranch, and Practice Forestry Policy in which, “Missoula County recognizes an individual’s right to choose the foods, crops, and livestock they plant, produce, process, prepare, raise, sell, purchase, distribute, retain, preserve, store, or consume, except as otherwise prohibited by Montana State Law.”

- The County Zoning Regulations, revised most recently in April 2017, permit agricultural uses and buildings in all zoning districts, with the exception of intensive agricultural operations which are authorized in industrial areas and larger tract agricultural zones. County Zoning Regulations define “Agriculture” as,

  The use of land for growing, raising, or marketing of plants or animals to produce food, feed, or fiber commodities. Examples include, but are not limited to, cultivation and tillage of the soil; dairying; the raising of livestock, poultry, bees, fur-bearing animals, or biological control insects; and the growing and harvesting of fruits, vegetables, and sod, ornamental, nursery, and horticultural crops that are raised, grown, or produced for commercial purposes. This definition specifically excludes gardening for personal use,
keeping of house pets, kenneling / boarding of animals, landscaping for aesthetic purposes, and residential, commercial, and industrial uses, including the commercial processing of agricultural products. This definition is not construed to exclude ancillary or accessory uses or improvements necessary or related to the function of a bona fide agricultural operation.

- **County Subdivision Regulations** contain the same definition except that they further define “Agricultural Land” as having a soil type defined by the Natural Resource and Conservation Service as having agricultural importance, including prime farmland, prime farmland if irrigated, farmland of statewide importance, and farmland of local importance. This definition of agricultural land is based on soils. None of these guiding documents (referenced above in this section) give much direction for how to protect agriculture from development impacts (or vice versa) and differ in what constitutes agriculture. The term “agriculture” is frequently used interchangeably to describe “agricultural land,” “agricultural products,” “agricultural activities,” and other similar concepts. Moreover, there are a variety of ways to define the term – by use, by taxation, or by other measures of capability such as water availability, etc. To make matters more confusing, state law definitions differ depending on the context in which they are used.

- In addition to impacts on agriculture, according to the Montana Code Annotated, the governing body must consider, and balance, impacts to local services, the natural environment, wildlife and wildlife habitat, and public health and safety.

- Though the **Montana Subdivision and Platting Act** of 1973 authorizes local governments to mitigate for agricultural impacts during subdivision review, there is disagreement about what is deemed an impact and what constitutes “mitigation.” Some feel that counties have a duty to mitigate for the loss of farmland and are seeking regulatory predictability while others believe that the primary review criterion originated from an obligation to protect neighboring agricultural uses from the impacts of subdivision development.

Basic questions have yet to be resolved by the public. Should agricultural mitigations protect agricultural land from development or development from agricultural impacts? Should the County protect agricultural soils and land or actual agricultural-production capabilities? Is protecting agricultural land actually preserving agricultural production capabilities or is it preserving something more difficult to define: a culture, a way of life, open vistas, or the **possibility** of food production? It is difficult to arrive at a solution to a problem that lacks clarity and whose terms are poorly defined.

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**D. Working Groups – Descriptions & Summary**

1) **Conservation Development Model Working Group**

This group evaluated models of conservation design developments and identified zoning, subdivision, and DEQ requirements as potential obstacles to agricultural opportunities in Missoula County. Their stated primary goal was to ensure that agricultural lands “are available for these same purposes for
the future generations of Missoula County residents.” This group agreed that the primary voluntary tool for agricultural preservation is funding through Open Space Bond monies.

This group acknowledged that subdivision regulations are limited in their ability to preserve agricultural land and instead focused their recommendations on zoning regulations, DEQ requirements, and open space (agricultural lands) bonds. This group recommended that bond monies be used to protect soils of local and statewide importance [in addition to prime soils] and not just “working ranches, farms, and forests.”

While zoning regulations do not appear to create significant barriers to agricultural uses in zoned areas, some would argue they do not provide enough incentive or enable creative design. The County Zoning Regulations were recently revised (in April 2017) to clarify that agricultural buildings and uses are permitted in all zones regardless of lot area, with the exception of intensive agriculture which is authorized only in industrial and large tract agricultural zones.

Density Bonus
This group concluded that the density bonus regulations should be revised for use in rural areas. The density bonus regulations are part of the County Zoning Regulations and are currently available for use only in zoned areas which comprise only about 6% of the land area within Missoula County (see map in Attachment D). Hence, their utility is limited. The density bonus regulations were written with more urbanized areas in mind: they can only be used on property zoned for eight (8) dwelling units per acre or greater located within the Urban Service Area with connection to a public sewer system.

The County has had a density bonus available in other forms through rezoning to a Planned Unit Development (PUD) or Planned Variation and through Special Zoning Districts and Rural Zoning Districts. A quick accounting of all these specials zones – 36 in all (shown in Attachment E) -- reveals that the density bonus has seldom been used by developers as a means to facilitate agricultural operations. Reasons for this may include lack of market demand or decreased profitability for developers.

The recommendation to revise the density bonus standards assumes that increased density allowances will encourage agricultural land preservation or that preserving agricultural land should be accompanied by greater density. The County does provide opportunities to protect agricultural land and increase density through rezoning to one of the special zones mentioned above. Rezoning requests are required by law to provide the opportunity for public participation and discretionary review by the governing body at a public meeting. It may be possible to revise the County Zoning Regulations to allow density bonus in rural areas.

Unless such revisions allow a density bonus in areas with densities less than one dwelling unit per acre, water and sanitation regulations established by the Montana Department of Environmental Quality would make it difficult, if not impossible, without requiring a community sewer system or a city sewer. Once sewer and urban-style infrastructure are available, property values increase and the feasibility and affordability of agriculture tends to decrease, making the use of rural density bonuses to preserve agriculture a very unpredictable option.
Conservation Development Design
The County has had “Cluster Development Standards” on the books since January 2001. As originally conceived by Randall Arendt, landscape planner and site designer, advocate of “conservation planning,” and author of more than twenty publications including Rural by Design and Conservation Design for Subdivisions, conservation development is simply a design framework aimed at preserving 50-70% open space amongst low-density residential development in rural, non-sewered areas.
Separate and distinct from a density bonus, conservation design developments have traditionally been a design tool to encourage resource conservation such as wildlife, wildlife habitat, riparian areas and preservation of open space and agricultural land. The Conservation Development Model working group advised some tweaks to the Rural Cluster Open Space Development including reducing the amount of open space required to encourage increased use of this zoning tool. The Rural Cluster Open Space Development is the only option for administratively-reviewed cluster design on land zoned for a residential density of two dwelling units per acre or less.
Practically speaking, this tool is available in rural areas of the County zoned for one dwelling unit per acre or less since greater densities generally require community or public sewer due to regulations from the State’s Department of Environmental Quality. This tool requires setting aside open space lands equal to the net-lotted area. There is no density increase associated with any of the Cluster Development options; however, relief is given to space and bulk zoning requirements, such as no minimum lot size and reduced setbacks.
The tool seems a logical companion to agricultural lands protection, but in Missoula no landowners have pursued such an approach voluntarily, at least not through the Missoula County Zoning Regulations. Like the Density Bonus, the Conservation Development Standards were developed after two years of research and thorough vetting by all stakeholders, but to date no developer has used it voluntarily. The City’s Cluster and Conservation Development design standards were adopted approximately ten years ago and likewise have not yet been used by the private sector. Reducing the area required for land preservation in the Rural Cluster Open Space Development may incentivize use of this tool, but it may not produce the desired outcome of agricultural land preservation.
The County Zoning Regulations also allow clustering to some degree without using the Cluster Development Standards, since many of the zoning districts allow a residential density outright without specifying a minimum lot size. There are only four residential districts with a minimum lot size (C-RR3, C-R1, C-R2, and C-R3); all the rest allow development based on an overall maximum density, not minimum lot sizes. The three commercial zones (C-C1, C-C2, and C-C3) do not have minimum lot sizes for non-residential uses. The minimum lot size for residential uses in these zones is 3,000 square feet, with a minimum parcel area of 1,000 square feet per dwelling unit.
The question of whether to designate certain locations or apply certain conditions to conservation design has been explored in the past. Arendt notes, “Unless ordinances require applicants to inventory natural resources and design around them in a way that avoids undue fragmentation, tracts can be cut up in ways that diminish their value…” The final recommendation from this group was to “specifically
say that preservation of ag land is a valid use of the open space created by a cluster development...” and in Missoula County that is currently possible.

The state legislature has provided opportunities to create agricultural tracts as exemptions to subdivision review, including Agricultural Lease through §76-3-201, MCA, and Agricultural Tract with Covenant through §76-3-207, MCA. Since 2010, seven landowners have used this exemption to create agricultural tracts with covenants in Missoula County, creating approximately 619 acres of agricultural tract land. During that same time period (2010 to present) five landowners were approved to lift the agricultural covenant from their land, totaling approximately 80 acres.

The Conservation Development Model Working Group recommendations and staff considerations are found in Table B-1 in Attachment B.

2) Incentive-based Landowner Tools Working Group
This group evaluated a variety of incentivized methods to preserve agricultural lands, specifically conservation easements, deed restrictions, land acquisition (primarily through use of public monies), and community land trusts. No single method rose to the top for this group, although there was a final recommendation to increase awareness of these voluntary options.

All of the tools identified by this group have been used, or at least have been available to be used, in some form or another as land development and conservation tools in Missoula County. They are all voluntary on the part of the landowner or the community (e.g., through a vote or approved increase in taxes). While the recommended tools have been at the disposal of agricultural landowners, this working group encourages the County to take a more proactive approach to incentivize use of these methods in development review, such as educating subdividers about conservation easement opportunities during pre-application meetings.

Echoing a common thread of the other two groups, this group identified bond money as a potential source of funding to purchase agricultural lands, either outright (fee simple acquisition) or as a purchase then transfer to a conservation organization (pass-through acquisition with conservation easement). All of the incentive-based agricultural lands conservation tools would require additional public funding.

The Incentive-based Landowner Tools Working Group recommendations and staff considerations are found in Table B-2 in Attachment B.

3) Voluntary Efforts Working Group
This group initially focused their efforts on investigating the traditional farm incubator model as a tool for landowners to preserve and enhance agricultural opportunities. The private sector has done significant research on incubator farms and found that they generally do not “pencil out” in Missoula County. Consequently, the group rejected this model in favor of other voluntary approaches. This group emphasized the importance of improving markets as a way to improve agricultural infrastructure, the regulatory framework, and the economic viability of farming.
While almost all of the proposed solutions fall outside of the scope of Missoula County, this group proposed a number of concepts that the County could explore with other partners. In particular, this group identified several funding tools to preserve agricultural lands, including public funding, tax credits, and loan or grant programs. As a final recommendation, this group recognized that what may be needed is more effort from the private sector, especially those directly affected, and less emphasis on public sector involvement.

The Incentive-based Landowner Tools Working Group recommendations and staff considerations are found in Table B-3 in Attachment B.

E. Other Possible Solutions
The agricultural economy in the U.S. has been on a downward trend for decades. More small family farmers are leaving the profession than entering it, and the number of mid-size farms, defined as those earning between $350,000 to $1 million or those comprised of an average of 1,582 acres, is shrinking. Between 1992 and 2012, the country lost more than 250,000 mid-size and small commercial farms, according to the USDA. During that same period, more than 35,000 very large farms started up. Student loan forgiveness and farm transition programs are two national policy initiatives that could help young farmers, according to Lindsey Lusher Shute, Executive Director of the National Young Farmers Coalition.

There are logistical, topographic, and economic reasons why small, local, organic farms can play an important but only a small part of an efficient and effective local food system. First, produce (fruits and vegetables) makes up less than 10% of cropland necessary for food production and only 12% of our caloric needs. Conversely, staple crops, like oats, lentils, barley, corn, and soy satisfy about 60% of our caloric needs and are produced at a massive scale, yielding huge amounts of nutritious, affordable food per acre. The grains and legumes that make up a large portion of the human diet are easily stored and not dependent on long growing seasons. However, at this time, growing these crops at a small-scale is impractical and unaffordable. Nonetheless, farms “of all sizes and production methods” are needed to develop and maintain a responsible local food system, according to Suzy Friedman, senior director of agricultural sustainability at the Environmental Defense Fund.

According to “A Place to Grow: An Informed Discussion on Agriculture and Land Use in Western Montana,” (July 2010), Missoula County has more than enough acreage to supply a vegetarian diet for its population into the foreseeable future. If the entire Missoula County population relied upon a mixed diet including chicken and beef sourced exclusively from local farm and ranch operations, there is likely a “deficit” of land available for such purposes.

Traditional “horizontal” agriculture may be one option in a menu of choices for local food production. With global population poised to reach nearly 10 billion by 2050, sustainable food production practices are of paramount importance to feed increasingly urbanized communities. Missoula, Montana, is no exception where issues of sustainable agriculture have been included in development discussions for over a decade. The “Creative Ag Solutions” paper in Attachment C examines a sampling of agricultural methods that are being explored or used around the country and the world to encourage creative solutions to food
production problems, such as land, soils and water scarcity, effects of climate change, and economic constraints.

According to a recent report in *Atlantic Monthly* (Feb. 12, 2018), interest in using technology in agricultural practices has picked up in recent years. “To meet the growing demand for food, the UN’s Food and Agriculture Organization estimates that there needs to be a 50 percent increase in global agriculture production – a distinct challenge, the UN warns, in the face of climate change and the growing need for water conservation. Vertical farms present a potential solution: There is no fertilizer run-off into the groundwater, fewer CO2 emissions from delivery trucks’ long journeys, and no land to till. They require only a fraction of the acreage and use only a fraction of the water – anywhere from 90 to 97 percent less – that traditional farms do.”

Missoula could contribute significantly more to its local food system than it does currently. The most obvious way to accomplish this would be to grow crops that require less water and to upgrade irrigation systems and technologies for water delivery, *etc.* Water is a scarce resource, and it is becoming even more highly valued than it has been in the past and may become a limiting resource to the establishment of a viable local food system. Federal, state, and local government involvement to protect agricultural activities should help ensure food security for its residents. Whether this is best accomplished through building partnerships and removing barriers or through regulations remains a topic of significant debate.

**F. Conclusion and Recommendations**

Of the multiple competing and complex values found in Missoula County, which values should we be protecting and how should those values be protected?

The answers to these questions are the crux of the issue in determining the next steps the County may wish to consider to achieve the long-debated goal of agricultural protection; however, no single solution will solve housing, wildlife, water quality, or hunger problems or revitalize opportunities for agriculture. The key to solving this problem requires examining all of Missoula County’s constraints and opportunities and recognizing that the many important values held by County residents must be balanced thoughtfully.

The solution of choice evident in the working groups’ recommendations is additional funding through Open Space Bond monies. Land conservation through the [Open Space Bond](#) addresses food security and enhances cultural identity, rural economies, wildlife, and open spaces. With the life of the 2006 Open Space Bond nearing an end, the community may choose to initiate a new bond that could allocate funding specifically for agricultural land preservation. Other potential sources of funding may be attainable by lobbying for state and federal dollars. These solutions could provide financing for many of the suggested voluntary efforts to preserve agricultural lands and production capabilities.

Another place to look for solutions would be in the County’s regulatory arena. The County could continue to explore ways to remove regulatory barriers and encourage conservation development design. County-wide zoning could set aside areas specifically for agricultural use, though this will have the consequence of reducing the value and opportunity for voluntary (donated) conservation easements.
County-wide zoning, however, could create opportunities for expedited review of minor subdivisions and lower costs associated with development due to shortened review times. The cost of land in the urban fringe may simply be too high for agriculture to be considered its highest and best use and restricting it to agriculture could have negative consequences on other community values. City annexation results in application of a different set of zoning and subdivision regulations relative to agricultural activities.

In an effort to aid the governing body and the community in taking the next steps, this paper delved into the recommendations contained in the working groups’ summary reports presented to the Missoula County Commissioners, and tables shown in Attachment B outlined possible solutions to reach the County’s goals of conserving agricultural resources and promoting agricultural opportunities without sacrificing other values. This paper also summarized community preservation goals related to agriculture with the intent to yield a better assessment of possible solutions. It is important to consider that this assessment was prepared from the land use perspective, and other departments, agencies, administration and governing body members may wish to weigh in at a later date.

Identifying and prioritizing one community value at the expense of other widely held values does not lead to the protection and enhancement of the quality of life currently found in Missoula County. The County is working to identify ways to achieve agricultural conservation and has forward momentum along several possible paths.

In the urban area, six recommended courses of action address the various and often competing values such as housing, local services, wildlife, wetlands, agricultural soils, water quality and quantity, and public health and safety. Four of these efforts are underway; the fifth (Creative Solutions) can be included in an already scheduled project, and the sixth (an Open Space Bond) is in the hands of the private sector.

1. **Land Use Plan and Map Update**
   The public should consistently and actively participate in the numerous public meetings scheduled for 2018 involving the Missoula County urban area land use plan and map update. Existing values and resources are being considered in the update.

2. **Implementation Tools**
   Tools to implement the land use plan for the urban area are necessary to protect property values, public investments in infrastructure, and conservation values ranging from agriculture to wildlife. Zoning is one implementation tool that should be adopted for the urban area. A second tool - a capital improvements plan addressing infrastructure - could also be developed.

3. **The PLACE Project (Practical Landscape Assessment for Conservation and Enhancement)**
   The PLACE project continues to be updated to allow the public to track multiple resource values through an online mapping program. Providing facts about these resources in an important part of any future program that is intended to protect open space, agriculture, wildlife and the many other values so dearly treasured by Missoula County residents.
4. Parks, Recreation, Open Space, Trails (PROST) Project
   This project is now underway and will help outline the public’s ranking of values ranging from parks and open space (including agriculture and wildlife) as well as trails and other types of active outdoor recreation.

5. Creative Solutions to Agricultural Conservation
   Missoula County’s policies and regulations should be amended to encourage development of “vertical” gardening and other creative solutions to agricultural conservation in the urban area (see “Creative Ag Solutions,” Attachment C).

6. Open Space Bond
   The private sector generally appears to support development of a second County-wide open space bond. Private interests should combine efforts to explore and establish priorities for protection of various values prior to proposing such a bond to the voters.

This report does not, and cannot, put the complex issue of agricultural protection to rest. It is a review of past efforts, and it outlines how the community can effectively proceed to protect the interests of all its citizens and the County’s numerous conservation resources.

Attachments
   B. Working Groups’ Recommendation Summaries
      1. Table B-1 (Conservation Development Group)
      2. Table B-2 (Incentive-Based Landowner Tools Group)
      3. Table B-3 (Voluntary Efforts Group)
   C. Creative Ag Solutions to Agricultural Conservation
   D. Missoula County Zoning Map
   E. County Special Zones List
   F. Map: Soils of Farmland Importance, Missoula County
   G. Conservation easements: map and data
References List


“Ideas and Information About Potential Agriculture Policies in Missoula County.” Open Lands Citizens’ Advisory Committee Compilation of Agricultural Policy Information, Presented to Missoula Board of County Commissioners, July 2012.

A Report on Missoula County's Agricultural Lands

by

The Conservation Development Models Working Group

for

The Missoula County Commissioners

Date Published: 8/29/2016

Group Introduction:
The Conservation Development Models Working Group was established via a directive of the Missoula County Commissioners. On 2/10/2016, the Commissioners denied proposed amendments to the Missoula County Subdivision Regulations that specifically dealt with onsite agricultural mitigation requirements. On 3/29/2016, at the direction of the Commissioners, the Missoula County Community and Planning Services Department hosted a follow-up agricultural lands discussion. It was during this meeting that the Conservation Development Models Working Group was formed.

The Conservation Development Models Working Group is one of three voluntary groups that were formed on 3/29/2016. The other two groups were established to discuss additional topics pertaining to agricultural land protections. These groups were directed to discuss “farm incubators” and “new tools for landowners.” All three of these groups were given direction to report back with the findings of their group by late summer/early fall.

The Conservation Development Models Working Group consists of twenty members who all have a passion for the preservation and proper development of Missoula’s agricultural lands. These members of the group have a broad spectrum of expertise in areas relevant to the topics that were discussed. The group had nine working session meetings which received an average of ten attendees. The group also participated in a Farmland Tour hosted by the Farm Incubator group, viewed a webinar presentation from the American Planning Association titled “Regulating Urban Agriculture as a Controversial Land Use Discussion”, and the group was welcomed to the Missoula Urban Farming Forum. The following is a list of the group meeting dates and events:

Group Meetings & Events:
1. 3/29/2016 County Kick-Off Meeting
2. 5/3/2016 Working Group Meeting
3. 5/16/2016 Working Group Meeting
4. 5/31/2016 Farmland Tour
5. 6/6/2016 Working Group Meeting
6. 6/21/2016 Working Group Meeting
7. 7/5/2016 Working Group Meeting
8. 7/13/2016 APA Farmland Webinar
9. 7/18/2016 Working Group Meeting
10. 7/21/2016 Missoula Urban Farming Forum
11. 8/1/2016 Working Group Meeting
12. 8/15/2016 Working Group Meeting
13. 8/29/2016 Working Group Meeting
14. TBD Working Group Presentation to BCC

Group Methodology:
The Conservation Development Models Working Group discussed a variety of topics that impact Missoula agricultural lands. The group had in-depth conversations regarding open space bonds, the applicability of tax increment finance districts options, and conservation easements. The group reviewed local and national examples of agricultural conservation developments for their potential usefulness in Missoula.
Conservation Development Models Working Group

The Missoula County Subdivision Regulations were discussed in great detail. A subcommittee was formed with the purpose of reviewing the subdivision regulation layout design standards. The subcommittee evaluated the potential impacts that the subdivision regulations have on agricultural lands and how the design standards influence a subdivider’s abilities to preserve agriculture. The group also talked about the impediments to agricultural preservation in Missoula County’s Zoning Ordinance and the combined water and sanitary requirements of the Missoula City-County Health Department and the Montana Department of Environmental Quality.

The Conservation Development Models Working Group recognized the directive to explore voluntary conservation options. The group also understands the regulatory purpose of the 2/10/2016 County Commissioners meeting and that the 3/29/2016 meeting was established as a follow-up to continue the incomplete onsite agricultural mitigation requirements discussions. The importance of the Commissioners decision regarding this discussion is of great concern to the Conservation Development Models Working Group. The group knows that resolving this topic will relieve a great stress within Missoula’s community. This stress is shared by private landowners, public officials, and private and public agencies. The group acknowledges that the economic opportunities for several of Missoula’s residents, families, and industries will be defined by the resolution of the topic. A resolution will provide our community the regulatory predictability that it was promised when documents such as growth policies, zoning ordinances, and subdivision regulations were established.

The residents of Missoula County have relied on agricultural lands for their food, shelter, and economic opportunities. The Conservation Development Models Working Group primary goal is to ensure that these lands are available for these same purposes for the future generations of Missoula County’s residents.

Summary of Report Findings and Conclusions:
The Conservation Development Models Working Group agreed that the primary voluntary tool for agricultural preservation should be Open Space Bonds voted on by the Missoula County Residents. This has been the primary way Missoula County has preserved lands. Many of Missoula’s hillsides, river corridors, and historic places have been secured this way. The most effective way to preserve the important farmlands is to purchase an interest in these lands for their permanent protection. This could include development rights and/or conservation easements. The group urges the Commission to support open space bond efforts so that the continuing escalation of property value does not impede the perseveration of agricultural lands.

The group discussed existing limitations in the Missoula County’s Zoning. In addition, the Missoula City-County Health Department and Montana Department of Environmental Quality requirements were evaluated for their influence on the local developments. These areas are discussed in more detail in the remainder of the report.

The group agrees the subdivision regulations have a limited usefulness in the perseveration of agricultural lands. Subdivision projects in Missoula County are expensive, time consuming, and lack predictability. These factors limit the flexibility a subdivision applicant has to incorporate agricultural mitigation efforts into their projects. The Conservation Development Models Working Group recommends the Commissioners take a hard look at the Missoula County subdivision regulations to identify existing regulatory requirements that have increased project costs and limited the flexibility of an applicant to be creative once they have entered the subdivision review process. This report adds detailed findings and conclusions regarding this discussion.

Summary of Report Findings and Conclusions:
The following section of this report summarizes the topics discussed by the Voluntary Conservation Development Working Group. Many of the findings regarding each topic have been documented and several conclusions have been provided. The Commissioners should review this section to better understand the recommendations of the Conservation Development Models Working Group:
Open Space Bonds:

Findings:

1. Preserving agricultural soils, working farms and ranches is an important issue for voluntary conservation. Any future bond should include broader language that allows funds to be used for protection of soils of local and statewide importance and not just ‘working ranches, farms and forests’ as the 2006 bond language stated.

2. The cost to secure agricultural lands via the Open Space Bond program is assumed to increase as development pressures in the Missoula urban fringe area increase.

3. Small and large properties with agricultural soils should be considered for protection via the Open Space Bond program.

4. There are significant opportunities for collaboration between the City Open Space Program and County Open Lands program for conservation of working farms and ranches and agricultural soils in the Missoula urban fringe area where lands are outside City limits and in the County but within City’s open space planning region. This area contains agricultural lands under greatest development pressure as Missoula grows.

Conclusions:

1. The Open Space Bond program has the potential to be a very viable option to voluntarily protect lands containing agricultural soils.

2. The County Commissioners should allocate resources and direct the appropriate County staff to evaluate the Open Space Bond program for its use as a mechanism to protect lands with agricultural soils.

3. County staff should seek legal opinion from bond counsel on whether additional conservation tools (conservation servitudes, covenants, funding an agricultural incentive program, etc.) could be bonded for using a general obligation bond.

4. City Open Space Program and County Open Lands Program should identify additional ways to formally collaborate on bond projects to conserve working farms and ranches and agricultural soils in the Missoula urban fringe area where lands are outside City limits and in the County but within City’s open space planning region. This area contains agricultural lands under greatest development pressure as Missoula grows.

5. Missoula County should explore options for long term agricultural leases and identify an appropriate landowner who would own the underlying fee title to land and lease to a producer. This would apply in situations where there is bare ground with important soils for sale but not a committed landowner who wants to stay on the land (where conservation easements have been more effective). Identifying the appropriate long term owners of the land is important in ensuring the land would remain in agricultural production, and could help facilitate the use of bond funds to protect lands with important soils that are not already working farms and ranches.

6. Missoula County should explore different ways that a conservation easement can be used to mitigate the loss of agricultural land prior to the subdivision process. They should work with interested land owners prior to and separate from the subdivision process to discuss land conservation. *

*The group did not reach a consensus on conclusion number six. All agree the conversation is important and have slightly different takes that may venture beyond the conservation development group and in to mitigation policy.
Zoning:

Findings:

1. It appears that the Missoula County Zoning Ordinance was written before locally grown food was a priority. Because of that there are many provisions that impede any attempt to preserve small scale agricultural land in the subdivision process.

2. The Density Bonus section can only be used if it is connected to "a public sewer system". With the exception of the Lolo Sewer District, that would mean you would have to annex into the City of Missoula and be ruled by city zoning. That effectively eliminates the density bonus as a viable tool for Ag land preservation.

3. The Cluster Development Standards do not lend themselves to Ag land conservation for a number of reasons and need to be rewritten. We understand that CAPS is planning on doing that in the near future.

Conclusions:

1. At the present time zoning districts C-A2 (1 dwelling per ten acres), C-A3 (1 dwelling per 5 acres), C-RR1 (1 dwelling per acre), C-RR2 (2 dwellings per acre), C-RR3 (4 dwellings per acre), C-R1 (8 dwellings per acre), C-R2 (16 dwelling units per acre) and C-R3 (32 dwelling units per acre) all allow agricultural use only on lots 5 acres or larger and require all agricultural buildings to have a minimum setback of 50 feet. This has to be changed to allow agricultural use on smaller lots and garden sheds to have setbacks more similar to garages.

2. The density bonus section needs to be changed so it can be used in rural areas. There also should be a density bonus provided for preservation of Ag land. Perhaps a higher density bonus for the best (prime if irrigated) Ag land.

3. We look forward to working with CAPS on a rewrite of the Cluster Development Standards. Some of our suggested improvements are: 1) change the Rural Cluster Development Standards that currently require 100% of the net lotted area to be set aside as open space. 100% of net lotted area is more than 50% of the land and makes most potential development not economically feasible 2) specifically say that preservation of Ag land is a valid use for the open space created by a cluster development, and make it possible to sell or rent the open space to someone who will farm it 3) do not force urban style infrastructure on a Rural Cluster Development just because they created smaller lots to preserve Ag land.

Montana Department of Environmental Quality Subdivision Regulations:

Findings:

1. Rural Development usually requires on-site sewer and water facilities which require review and approval through the MDEQ 76-4 process.

2. Current regulations result in an approximate minimum of 1.5 acres per lot to "fit" the individual sanitary facilities and meet the regulatory setback requirements.

3. MDEQ regulations create a minimum lot size or de facto zoning unless multi-user or public (community) systems can be utilized.

4. The advantage of community system is compromised by maximum effluent per acre rules.

5. Cluster development would require community systems for both water and sewer.
6. Multi-user or public systems often do not meet basic economic thresholds for development potential. They do not “pencil”. The permitting costs, review time frames, infrastructure costs, and ambiguous regulatory requirements make the ability to create this type of development difficult.

7. Water right acquisition is required when proposing water systems larger than 10 acre feet per year.

8. Discharge permits are required for systems over 4,999 gpd.

9. Individual wells and drainfield are often chosen by developers out of necessity to avoid upfront costs and longer review times.

Conclusions:

1. MDEQ review process incentivizes developers to create large lot (> 1.5 acres) subdivisions making saving viable agricultural lands difficult.

2. Clustering homes to save viable agricultural lands is costly due to infrastructure and permitting costs.

3. The viability of community systems is based on the sale price of the housing proposed.

4. Dense rural subdivisions in western Montana are created for “higher end” housing.

Missoula County Subdivision Review & Regulations:

Findings:

Agricultural Mitigation Regulations:

1. On 2/10/2016 the Missoula Board of County Commissioners (BCC) amended the Missoula County Subdivision Regulations via the adoption of Resolution No. 2016-014. The resolution includes an "Agricultural Lands" section (3.1.4) which includes "Agricultural Mitigation Standards" (section 3.1.4.2). This section of the regulations defines what mitigation measures must be provided for "Offsite Impacts" but does not clearly state requirements that mitigating offsite impacts satisfies the "impacts to agriculture".

2. On 2/10/2016 the BCC denied proposed amendments to the subdivision regulations specific to agricultural mitigation. These proposed amendments included standards for "Agricultural Development Design", "Agricultural Land Set Asides", and "Agricultural Mitigation Fees".

3. The "impact on agriculture" is one of seven “primary review criteria” (per Montana Code Annotated 73-3-608 (3) (a)) that must be specifically reviewed for “potentially significant adverse impacts” and mitigation. The other six criteria include agricultural water user facilities, local services, natural environment, wildlife, wildlife habitat and public health and safety. Required mitigation efforts for impacts to agriculture should be reasonably similar in scope to the mitigation efforts required for each of the primary review criteria.

4. The Parkland Dedication standards within the subdivision regulations provide detailed information on how to mitigate an impact to a primary review criterion. This level of detail within the subdivision regulation standards should be provided for the mandatory agricultural mitigation requirements.

5. The subdivision regulations should promote rural designs in areas where agricultural land preservation is the priority. The regulations should provide for reductions in "hard" surface requirements (i.e. roads & pedestrian facilities) in these rural subdivisions.
6. The subdivision regulations should allow park area/common areas to count for both the required parkland dedication requirements and agricultural mitigation requirements.

7. The parkland design standards limit the usefulness of park areas for agricultural areas which could provide agricultural mitigation.

Regulatory Predictability:

8. The subdivision applicant (applicant) relies on the existing comprehensive plan, zoning, and subdivision regulations to determine if they have a property suitable for subdivision. These documents are intended to provide predictability to the development process.

9. In the absence of clear subdivision regulations, an applicant does not know if their project is “approvable” until the BCC makes their decision.

10. Clarifying the subdivision regulations and/or providing a preliminary meeting with the BCC would help applicants determine what is necessary to receive approval of their proposed project.

11. The current subdivision regulations include several inflexible rules that make many residential developments unpredictable and infeasible. The regulations trigger unnecessary requirements that can only be removed with the use of a “variance”. Administrative approval processes should be promoted instead of costly and unpredictable subdivision variances.

Impacts to Housing Supply & Costs:

12. Expanding the subdivision regulations increases subdivision project costs. Requiring additional reports, summaries, plans and/or studies increases the expenditures necessary to prepare a subdivision application, and it increases the cost burden for the County staff responsible for reviewing the project applications.

13. Increasing the cost of subdivision projects increases the cost of housing. Any additional expense that is triggered by subdivision review is directly incorporated into the price of new homes.

14. Increasing the cost of housing limits who in our community can afford housing. Efforts should be made to reduce the cost of subdivisions so Missoula’s workforce and Missoula’s entire economic spectrum can obtain housing at a fair price.

15. Subdivisions create new residential lots that increase our community’s housing supply. Reducing the feasibility of subdivisions limits the housing supply which directly impacts the cost of housing.

16. Yellowstone County (Billings) has a predictable subdivision review process that results in high quality residential subdivision projects. Yellowstone County requires significantly less paperwork within their subdivision submittal requirements than a Missoula County subdivision project requires. The BCC should explore why their regulations require significantly more documentation while creating similar quality developments.

Conclusions:

1. The subdivision regulations do not provide adequate information on the mitigation requirements for onsite impacts to agricultural lands.

2. The BCC should formalize the requirements for agricultural mitigation. The BCC should review impacts and mitigation efforts that they have required for all seven of the subdivision review criteria (impacts to agriculture, agricultural water user facilities, local services, natural environment, wildlife, wildlife habitat and public health and safety). Required mitigation efforts for impacts to agricultural land should be reasonably similar in scope to the mitigation efforts required for each of the seven of the subdivision review criteria.
3. The BCC should review the subdivision submittal requirements to determine what is truly needed for the review of a project. Removing unneeded submittal requirements will lower subdivision costs and will allow the applicant to focus resources on aspects of the project that are most important. In addition, this will allow flexibility to be creative on a project by project basis and reduce project costs. The review should include a “hard look” at exhibits, reports, and other submittal requirements to determine if this is important or non-important information. This review should include the evaluation of existing comprehensive plans, zoning ordinances, the Montana Department of Environmental Quality requirements, and other land use policy or guiding documents. The review of these documents should be done to remove duplicate review requirements that have been or will be addressed via separate review processes.

4. The same levels of detailed calculations that are used for the Parkland Dedication requirement for cash or land donations are adequate to address impacts to agricultural lands. These calculations require proportional mitigation based on the size of the proposed lots. The smaller the parcel the more land dedication or cash donation is needed to mitigate impacts to agricultural lands. The Parkland Dedication requirements provide a defined process for providing “cash-in-lieu” instead of a land dedication. In addition, they establish a process for determining the “unsubdivided” value of required mitigation acreage and they provide a government entity to receive the funds so the appropriate mitigation efforts can be pursued by a qualified party. Using regulatory language similar to the Parkland Dedication requirements should be reviewed to determine if it is appropriate and sufficient to mitigate impacts to agricultural lands.

5. The Commissioners should proactively establish separate regulations which guide use of agricultural mitigation funds in the event these funds are determined necessary.

Overall Conclusions:

It would be possible to design subdivisions that would be economically viable and good places to live and still preserve agricultural lands, buts there are many hurdles standing in the way. They are:

1. County zoning that does not allow, much less encourage many viable design alternatives.

2. A county subdivision process that is difficult, expensive and unpredictable. Attempting innovative designs in that process would be very difficult.

3. Recent changes in MDEQ regulations make small lot clustering very difficult.

4. The demand for agricultural land is struggling to be met with current market land values. Regulatory or subsidized assistance to pair agricultural lands set asides with rural developments without passing all land costs on to residential lots would be beneficial to citizens of Missoula County.
Committee C: Report of Incentive-Based Tools for the Protection of Agricultural Land in Missoula County

Introduction

At Committee C’s meeting on March 29, 2016, the Committee adopted the following objectives:

- Look at existing tools being used in Missoula County and evaluate their pros and cons
- Explore how existing tools can be enhanced to offer more incentive
- Explore successful tools for preservation of agricultural land that are being used elsewhere and evaluate how those tools could be used in Missoula County

After reviewing these tools, the Committee agreed to perform the following tasks:

- Draft, agree on, and finalize recommendations for the County Commissioners
- Develop suggested implementation steps and include them in the Committee’s recommendations

I. Incentive Based Tools Recommended for Protecting Agricultural Land in Missoula County

Documents referenced by the Committee in reviewing tools for preserving agricultural land included the 2006 report submitted by the Missoula County Open Lands Working Group (OLWG) to the Missoula County Board of County Commissioners and the 2012 report prepared by the Open Lands Citizen’s Advisory Committee (OLC). A brief description of each highlighted tool is followed by discussion of the following: pros/benefits, cons/drawbacks, historic use in Missoula County, and the Committee’s recommendations.

1. Conservation Easements

These voluntary agreements are individually tailored to meet the needs of landowners who give up their development rights and protect agricultural land in perpetuity. Landowners continue to own the land after they grant the conservation easement. The easement preserves the opportunity for the landowner and all future landowners to use the property for agricultural purposes. The land trust holding the easement is responsible for monitoring easement on an annual basis and for ensuring the owners of the property comply with the easement’s terms. Conservation values and benefits, such as stream protection, are often negotiated as part of the easement drafting process. In terms of funding for conservation easements, there are three basic models: fully donated easements, bargain-sale easements, and fully purchased easements.

a. Fully Donated and Bargain-Sale Easements

- Benefits: A conservation easement is a real property right that can be appraised and assigned a certain dollar value. An owner of agricultural land may donate the full value
of a conservation easement on his or her property to a “qualified holder” of conservation easements, which is typically a non-profit land trust or a government entity. If the landowner does not receive any payment for the easement, the transaction is considered a full donation, and the landowner may be able to pursue federal tax benefits for the full value of the easement. If the landowner receives payment from the grantee of the easement for some, but not all, of the easement’s value, the transaction is considered a bargain-sale, and the landowner may be able to pursue federal tax benefits for the “donated component” of the easement value. Current federal tax law permits landowners whose major source of income comes from agriculture to deduct 100% of the value of the conservation easement in filing their income taxes over a period of up to fifteen years. Landowners deriving much of their income from off-farm operations may deduct 50% of the easement value over the same time period. Federal estate tax benefits are also available for people who inherit property conserved by a conservation easement. As an additional incentive, Missoula County Open Space Bond funds can be used to offset the costs of appraisals, stewardship fees associated with the easement, costs of title research, and other transaction costs.

- **Drawbacks**: Landowners can be unaware of the benefits associated with a fully donated or bargain-sale conservation easement. The income tax benefits accompanying fully donated or bargain-sale easements may be only a minor incentive to farm families with modest incomes. Some landowners don’t want to give up development rights in perpetuity.
- **Historic Use in Missoula County**: In the past, landowners in Missoula tended to donate the full value of conservation easements. Today, bargain-sale easements are more common.
- **Recommendation**: As an additional incentive, and as endorsed by the County Open Lands Committee, Open Space Bond funds should continue to be used to offset the costs of appraisals, stewardship fees associated with the easement, costs of title research, and other transaction costs. The County should explore resources and perpetual funding sources for preservation. The County should also initiate a collaborative effort with land trusts to educate landowners about the potential financial benefits associated with using conservation easements to protect their land and of the funding available to cover associated transaction costs. Finally, the County should lobby for funding at the state level to protect open space and agricultural lands in Montana.

### b. Fully Purchased Easements

- **Benefits**: Instead of tax benefits, this option provides landowners with a cash payment in the value of the conservation easement for giving up development rights associated with their agricultural properties. Many landowners use the money received for conservation easements to upgrade their agricultural operations, including the purchase of additional farmland.
- **Drawbacks**: The implementation and the continued use of this tool are dependent upon reliable sources of funding. Some landowners prefer to retain development rights and receive full fair market value for their agricultural properties when they sell them, rather
than receiving the lower “encumbered” value of properties that are subject to conservation easements. Other landowners object to the perpetual term of conservation easements.

- **Historic Use in Missoula County:** The 2006 Open Space Bond has made possible 41 open-space projects within our County, 20 of which include the preservation of important working agricultural land, which is defined as land that is being used for agriculture or has been used in the past for agriculture.

- **Recommendations:** Since the use of this tool is dependent upon the availability of funding to pay landowners for giving up their development rights, efforts must be continued to ensure continued funding sources. These efforts include:
  - Passing another Open Space Bond in the near future
  - Lobbying USDA and Congress for the inclusion of funding sources for conservation easements in the Farm Bill. For example, under the current Farm Bill, the Agriculture Land Easements (ALE) program provides 50% matching funds to protect farmland having important agricultural soils.
  - Continue to foster collaborative efforts with land trusts and other conservation-oriented organizations, such as The Audubon Society, Trout Unlimited, etc., who frequently supply funding for projects favoring their missions, which are often associated with agricultural land.

**c. Term Easements**

Although this tool is rarely used in Montana, some landowners who are uncomfortable with placing perpetual conservation restrictions on their properties have expressed interest in limiting development on their properties for an agreed-upon period of time (perhaps 10-20 years) if they were paid an annual fee for so doing. A landowner could eventually decide to agree to a perpetual conservation easement.

- **Recommendation:** In consultation with land trusts, the County should pursue the use and implementation of this tool and should explore options for providing funding for term easements.

**2. Deed Restrictions**

**a. Deed Restrictions**

Deed restrictions are restrictions placed on real property at the time the property is transferred from one owner to the next. The seller can place certain land use restrictions in the deed used to convey the property to the buyer. The subsequent owner will be required by the terms of the deed to limit his or her use of the property in some way. In the context of preserving agricultural land, a deed restriction could be used to limit development on portions of or all of a property in order to protect agricultural land or high-quality soils.

- **Benefits:** Deed restrictions could be a useful tool, especially in offering protection for small-acreage agricultural land. The deed restriction could be drafted to be perpetual, or
to apply only for an agreed-upon time frame. The current Open Space Bond could be used to provide a monetary incentive to landowners to place deed restrictions on their properties because deed restrictions are a type of real property right. The deed restriction could include an annual monitoring right/requirement.

- **Drawbacks:** Unlike conservation easements, deed restrictions can only be placed on a property at the time that it is being conveyed from one landowner to the next. Deed restrictions are a weaker form of legal protection for agricultural land than conservation easements because only the previous owner of the property can enforce the restriction, unless the restriction explicitly gives that enforcement right to a third party.

- **Historic Use in Missoula County:** This tool has been used infrequently for the purpose of protecting agricultural land.

- **Recommendations:**
  - Payments to landowners for deed restrictions would provide incentives for them to consider this option during the planning of subdivisions. The Committee strongly recommends that the County establish a funding source for deed restrictions.
  - For landowners to receive payment for placing deed restrictions on their properties, there should be legal agreements in place to ensure that new landowners comply with the restrictions. The legal agreement could be in the deed as part of the deed restriction, or could be in a separate but corresponding management agreement. Open Space Bond money could be used as a funding source.

### b. Conservation Deed Restrictions

Modification of current deed restriction that is focused specifically on smaller parcels that are too small for management by land trusts. The designated portion of property would be protected for conservation purposes, including agriculture, in perpetuity.

- **Benefits:** Would be an important tool in offering permanent protection for lands involving small acreage. This would be a tool of “last resort” for parcels that conventional land trusts are unwilling to consider. Since annual monitoring would be done by existing CAPS staff, fees to the landowner could be minimal, and County costs small in proportion to the benefit to County residents.

- **Recommendations:** Missoula Board of County Commissioners would direct the CAPS staff to establish a section within the department with responsibility to monitor compliance of the conservation deed restriction on an annual basis. CAPS, with assistance from the Missoula County Attorney’s office, would create the necessary legal documents and procedures to assure that landowners could receive either reimbursements, or tax benefits, for placing conservation deed restrictions on a portion of their property. Open Space Bond money and other sources should be used as a source of funding.

### 3. Land Acquisition
Rather than selling a conservation easement on property, a landowner can sell the entire fee interest to a conservation buyer, which can purchase the property in fee in order to protect important agricultural and natural resources on the property. A fee sale offers the most financial incentive to a willing seller of a property with important agricultural or natural resource values.

a. Fee Simple Acquisition

This tool typically involves the purchase of the land by local government or a land trust. The government entity or land trust becomes the owner of the property and commits to protecting certain identified uses or values of the land, such as agricultural and natural resource values.

- **Benefits**: The original owner of the property can be paid full market price for their important farmland. The farmland can still be protected from future development by a conservation easement. The property can also be leased to a farmer/rancher, thereby keeping resources available and affordable for productive use. Open Space Bond money could be used to finance the fee acquisition. Lease income could provide revenue for the local government or land trust.

- **Drawbacks**: This option is expensive. Local government may not be equipped to monitor the use of the property on an annual basis to ensure that the agricultural resources are being protected.

- **Historic Use in Missoula County**: Although not specifically used to protect agricultural land, fee acquisition has been used successfully in Missoula County on a number of occasions to protect other important open-space values.

- **Recommendations**: When local government uses this tool, it should secure funding for annual monitoring of the land. This could be achieved by placing a conservation easement on the property with a qualified land trust. Doing so would protect the land in perpetuity and provide for the necessary annual monitoring by qualified professionals. Open Space Bond money could be one source of funding for the use of this tool.

b. Pass Through Acquisition Followed by Fee Simple Acquisition Subject to Conservation Easement

A local government entity or land trust could acquire an agricultural property in fee with a conservation buyer already in mind, and subsequently sell the property to the conservation buyer subject to a conservation easement retained by the local government entity or land trust. The placement of a conservation easement on the property would reduce the value of the property and make it more affordable for the conservation buyer. The value of the conservation easement is determined by an appraiser comparing the before-easement value to the after-easement or “encumbered” value of the land. The local government entity or land trust could apply for the use of Open Space Bond money and other funding sources for reimbursement for the difference between the initial cost and the bargain sale price that the conservation buyer pays for the land.

- **Benefits**: The original owner of the property could be paid full market price for their
important farmland that would then be protected from future development by a conservation easement. The local government entity or land trust could avoid the challenges associated with long-term fee ownership, while the conservation buyer could pay an affordable price for productive farmland and be bound by the terms of the easement to protect it in perpetuity.

- **Drawbacks:** The success of this option would be dependent upon the following factors:
  - the clear identification of important farmland to be protected
  - the establishment of a system to identify willing buyers who would purchase the land for agricultural use
  - the availability of funding sources

- **Historical Use in Missoula County:** This process was recently used successfully in Ravalli County by a local land trust to pay full market value to a landowner, place a conservation easement on it, and then sell it at a bargain price to a pre-determined farming couple. Ravalli County Open Space Bond funds reimbursed the land trust for the difference in sale prices.

- **Recommendations:** To provide the necessary funding for this option, the passage of an additional Open Space Bond will be needed in the near future. To facilitate this process, local government should collaborate with land trusts and conservation realtors to inform and advertise resource, such as Farm Link Montana – a database of land seekers interested in purchasing or leasing farms and ranches of varying sized acreage. Farm Link Montana provides an on-line tool for both land seekers and land owners to facilitate connections between the two, and provide resources for successful ownership of those lands.

c. Community Land Trust (CLT) Ownership and Stewardship Utilizing Ground Leases, Resale Restrictions and Ongoing Monitoring of Land Use

- **Benefits:** The model allows lower-income farmers to access land at an affordable rate, with 99-year leases that are inheritable and renewable. Shared equity ownership allows for farmer ownership of the improvements and CLT ownership of the land, removing the price of the land from the equation and permanently removing the land from the speculative market for the community's benefit. The subsidy required for buying the land stays in the project forever due to the resale restrictions written into the ground lease mechanism – these restrictions vary depending on specific ground leases and properties, but generally restrict the amount of equity the farmers can take with them when they sell the improvements, maintaining the affordability for all subsequent buyers of the improvements.

- **Drawbacks:** Acquisition of the land requires funding – the funding sources are varied and application processes are competitive. There are no local funding pots specifically available for CLT properties to use for purchase of land, as yet, in Missoula County, although the Open Space Bond Fund could be utilized in this way, especially if a new Bond is passed.

- **Historical Use in Missoula County:** The CLT shared equity model is used in Missoula County for permanent affordable housing projects developed and stewarded by the
North-Missoula Community Development Corporation. Trust Montana, a statewide CLT, is currently searching for a farm property that will become the pilot farm project/act as a demonstration of how the model works for agricultural purposes.

- **Recommendations**: The Committee recommends that the county explore options for funding mechanisms that would allow for more widespread utilization of this model in an agricultural application.

II. Recommendations for the Implementation of Incentive-Based Agricultural Land Conservation Tools in Missoula County

1. Suggestions for enhancing the use of individual conservation tools are included as part of the recommendations for each specific tool in Part I.

2. Preliminary Steps to be Followed by Owners of Agricultural Land in the Agricultural Portion of Subdivision Review Regulations: To increase awareness of voluntary options for the preservation of important agricultural land, and to provide predictability in the subdivision review process, the Committee recommends that the following steps be taken before specific subdivision plans are finalized:

   a. Identify and describe the important farmland included in the proposed subdivision in terms of acreage, soil type, availability of water for irrigation, historic agricultural use.
   b. Review all voluntary tools available for the preservation of important farmland.
   c. Describe which tools may be appropriate in conserving all or a portion of the important agricultural land considered for subdivision.

3. The County should take a proactive approach to perseverance of agricultural land, including incentives to developers to utilize the tools described in this report, fee waivers, a more streamlined process, etc.
This group reached the conclusion that the traditional Incubator Farm model is not a financially viable alternative in our area at this time. Because farmers in an incubator model move out of that model after a few years, it does not reduce the land access issue. Therefore, we concentrated our efforts on the importance of improving markets for farmers and recommend that Missoula County consider the following actions to improve agricultural infrastructure, the regulatory framework, and the economic viability of farming.

- Create a food purchasing policy for Missoula County, encouraging work with the city as well. This could include schools, jails, and other public facilities, and would create new markets for local producers.
- Develop a Local Food guide. This could highlight local producers and build/expand the market for products.
- Create a branding development program for local food, such as “Buy Missoula Grown,” which would also highlight local producers and expand local markets.
- Conduct a study on opportunities for local food system development, including an agricultural infrastructure assessment, i.e. meat processing, food processing and storage.
- Consider ways for Big Sky Ag program’s upcoming meat processing facility to benefit local producers.
- Develop a loan or grant program for beginning farmers, particularly to make them more competitive in accessing land.
- Develop an Opportunity Development Fund or other community development tool to pay the difference between what a beginning farmer can afford and the value of the land for other purposes.
- Increase tax credits to farmers for selling or leasing land to beginning farmers.
- Implement a solution oriented culture for all in the review process for Health Department, subdivision review (Planning) and others. Give attention to getting food to market without undue difficulties. Right to Farm clause?
- Reach out to Missoula County farmers, ranchers, and landowners, since they are the experts. Many have been alienated because of the past longstanding efforts to take their land to “fund” ag conservation! Participation in this process requires much less effort of people from agencies and organizations whose paid jobs require them to participate. Those who have a bigger stake in this process may find participation more difficult because of the nature of their work. Recognize this, and find ways to accommodate them.

Many citizen volunteers have offered hundreds of hours to this process of developing tools for voluntary conservation of ag land at the direction of the Missoula County Commissioners. We deeply hope that you will respect the time we have invested and do something of value with this information.
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<th>Conservation Development Model Working Group</th>
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</thead>
</table>

**Open Space Bonds**

<table>
<thead>
<tr>
<th>Possible Solutions</th>
<th>Commentary</th>
<th>Missoula County Role</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Evaluate open space / agricultural land bond program</strong></td>
<td>This group recommended that the County determine if Open Space Bond money can be used to protect lands with agricultural soils. This group suggests using general obligation bond funds for similar tools to protect agricultural lands, such as covenants, conservation servitudes, funding incentive programs, etc.</td>
<td>Open Space bond money can be and has been used for this purpose. Private sector can initiate a new Open Space Bond proposal to be placed on the ballot if the governing body agrees. Fee acquisition and conservation easements have been used in the past to conserve agricultural lands, and the other recommended methods could be explored in partnership with the private sector (land owners, realtors, consultants, etc.).</td>
</tr>
<tr>
<td><strong>Establish collaborative partnerships</strong></td>
<td>The City and County currently collaborate on bond projects, and this group suggests identifying if there are any additional ways to formally collaborate on projects that conserve working farms/ranches and soils.</td>
<td>This is occurring through an ongoing effort by CAPS, the City and County, and various land trusts and consultants engaging in regular communications and meetings.</td>
</tr>
<tr>
<td><strong>Explore long term agricultural leases</strong></td>
<td>This group recommended the use of bond funds to protect these lease arrangements, ensuring a long-term commitment to the ag producer. (The entity holding the easement may be a private entity.)</td>
<td>This would require private sector consultants to identify a landowner willing to lease to a producer and the general public to approve bond funding for lease purposes. A County staff position could be added, if adequately funded, to promote conservation easements.</td>
</tr>
<tr>
<td><strong>Conservation easements</strong></td>
<td>This group suggests working with landowners prior to subdivision to explore conservation easement as a means to protect agricultural lands and soils.</td>
<td>This task would be best suited to the private sector and could involve local government when there is a willing land owner. Most subdivisions are already planned by owners prior to County review.</td>
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**Zoning Regulations**

<table>
<thead>
<tr>
<th>Possible Solutions</th>
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<th>Missoula County Role</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Allow agricultural uses on tracts less than five acres</strong></td>
<td>This working group expressed concern that the County Zoning Regulations appeared to require large acreages (five acres or larger) for agricultural uses.</td>
<td>County Zoning Regulations amendments were completed in April 2017, clarifying a past practice of allowing agricultural uses, regardless of lot size. The acreage requirement referenced in prior regulations was not enforced for at least several decades – the new regulations clarify this.</td>
</tr>
<tr>
<td><strong>Reduce setbacks for agricultural buildings</strong></td>
<td>For public health reasons, setbacks for buildings housing livestock are more restrictive than other accessory structure setbacks, requiring 50 feet from all property lines and 100 feet from any watercourse and dwellings under separate ownership.</td>
<td>County Zoning Regulations amendments were completed in April 2017 clarifying that setbacks for agricultural buildings are no more stringent than for any other structure, with the exception of buildings housing livestock.</td>
</tr>
<tr>
<td>Recommendations</td>
<td>Conservation Development Model Working Group</td>
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<tr>
<td><strong>Possible Solutions</strong></td>
<td><strong>Commentary</strong></td>
<td><strong>Missoula County Role</strong></td>
</tr>
<tr>
<td><strong>Revise the density bonus regulations to be used in rural areas</strong></td>
<td>Protection of water quality, and public health and safety through sanitation requirements make revising the density bonus regulations for use in rural areas problematic. To ensure agricultural land preservation from the use of density bonus in rural areas, the regulations must be revised to create a durable link between permanent agricultural protection and the density increase. Otherwise, there is no guarantee that density bonus will yield agricultural land preservation.</td>
<td>This would require changes to sanitation regulations at the state level, since densities greater than one dwelling per acre (generally speaking) require community or public sewer connection. Density bonus for lots greater than one acre can be explored during the County Zoning Regulations amendments process currently underway.</td>
</tr>
<tr>
<td><strong>Revise the cluster development standards</strong></td>
<td>Opportunities for cluster development are more inhibited by state sanitation restrictions than zoning, since protection of water quality, and public health and safety through sanitation requirements tend to make cluster development design with densities greater than one dwelling unit per acre difficult. Additionally, community systems can add to the cost of homes, affecting affordability. Note that preservation of agricultural land is a valid use of the open space created by cluster development.</td>
<td>Reducing the required land set aside reduces the potential preservation of agricultural land; however, doing so may increase frequency of Rural Cluster Open Space developments. Reduction of the open space requirement could be considered during the County Zoning Regulations amendments process currently underway. Ag land is noted as a valid use in the Cluster Development Standards (Section 3.06 K. 1.F.) of the zoning regulations.</td>
</tr>
</tbody>
</table>

**Health Regulations**

<table>
<thead>
<tr>
<th>Possible Solutions</th>
<th>Commentary</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Incentivize small-lot subdivisions</strong></td>
<td>Protection of water quality, and public health and safety through sanitation requirements make small lot subdivisions (i.e. less than one acre) problematic, unless a multi-user or public system can be utilized for sanitation and/or water.</td>
<td>This would require changes to sanitation and/or water rights regulations at the state level and may impact water quality.</td>
</tr>
</tbody>
</table>

**Subdivision Regulations**

<table>
<thead>
<tr>
<th>Possible Solutions</th>
<th>Commentary</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Clarify measures that mitigate “impacts to agriculture”</strong></td>
<td>This group acknowledged that “required mitigation efforts for impacts to agriculture should be reasonably similar in scope to the mitigation efforts required for each of the primary review criteria (i.e., impacts to local services, the natural environment, wildlife and wildlife habitat, public health and safety).</td>
<td>Mitigation is done on a case-by-case basis addressing the issues outlined in state law pertinent to each separate and unique parcel of land. While predictability in subdivision review is beneficial, there is no consensus on what regulations would provide predictability — the debate seems to revolve around how stringent the regulations must be in order to protect multiple community values.</td>
</tr>
</tbody>
</table>
## Recommendations | Conservation Development Model Working Group

<table>
<thead>
<tr>
<th>Possible Solutions</th>
<th>Commentary</th>
<th>Missoula County Role</th>
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</thead>
<tbody>
<tr>
<td><strong>Revise land dedication requirement</strong></td>
<td>This group suggested revising the regulations to allow open areas to meet both the parkland dedication requirement and the impact to agriculture mitigation.</td>
<td>No action is needed. Agricultural lands may be used to meet parkland dedication requirements in major subdivisions (see Section 3.10.5.4). The subdivision regulations allow the governing body to waive the park dedication requirement for long term protection of agricultural resources, balanced with other park and open space values.</td>
</tr>
<tr>
<td></td>
<td>This group suggests the governing body could adopt mitigation standards requiring an agricultural land set aside or cash-in-lieu payment. Parkland dedication requires land set aside or cash-in-lieu of land set aside, based on a percentage of the net lotted area.</td>
<td>Requiring agricultural land set aside and a parkland dedication, during subdivision review would likely increase development costs. This then also prompts the question: are land set asides warranted for other resources needing protection, such as wildlife habitat, riparian areas, steep slopes, etc.?</td>
</tr>
<tr>
<td><strong>Revise regulations to promote rural conservation design</strong></td>
<td>Specifically noted by this group as a means to promote conservation design is to reduce “hard” surface requirements (i.e., roads and pedestrian facilities).</td>
<td>Reducing the required widths of roads and pedestrian facilities is a public health and safety consideration by the governing body, who may grant a subdivision variance in unique circumstances. Other elements of rural conservation design could be considered for inclusion in the County Subdivision Regulations to enable even more opportunities for land preservation. The County is currently considering changes to the widths of “hard” surface requirements in the subdivision regulations and public works manual.</td>
</tr>
<tr>
<td><strong>Revise regulations to provide more regulatory predictability</strong></td>
<td>“Clarifying the subdivision regulations and/or providing a preliminary meeting with the BCC would help subdividers determine what is necessary to receive approval of their proposed project.” During the process of subdivision review, the governing body must be careful to conduct meetings in compliance with the Open Meeting Law.</td>
<td>Additional public process extends the timeframe for subdivision review, and therefore the cost. The County Subdivision Regulations were overhauled in 2016, including governing body action regarding agricultural mitigations.</td>
</tr>
</tbody>
</table>
| | This group suggested allowing more administrative review of subdivisions to avoid regulatory inflexibility and costly, unpredictable subdivision variances.  
- To qualify for an administrative review, major subdivisions must be located within the urban area, must be zoned, and must have an adopted growth policy and capital facilities plans, with services to efficiently serve the development ($76-3-616, MCA).  
- Minor subdivisions may undergo expedited review if zoning is in place which addresses subdivision review criteria ($76-3-609 2(d), MCA). | With the exception of administrative review described in §76-3-616, MCA, state law requires governing body review of major subdivisions, including a public hearing to satisfy the public’s right-to-know. A capital facilities (infrastructure) plan and county-wide zoning that addresses all of the subdivision review criteria could make this approach more feasible and set the stage for reviewing subdivisions administratively. Ultimately, public input and review will be a significant factor when considering new zoning and new subdivision regulations. |
<table>
<thead>
<tr>
<th>Recommendations</th>
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<tbody>
<tr>
<td><strong>Possible Solutions</strong></td>
<td><strong>Commentary</strong></td>
</tr>
<tr>
<td><strong>Reduce costs of subdivision</strong></td>
<td>This group noted that the cost of subdivisions increases the cost of housing and suggested reducing subdivision costs, specifically application preparation, such as removing unneeded reports, summaries, plans, and studies that must accompany subdivision applications.</td>
</tr>
<tr>
<td></td>
<td>This group suggests a predictable subdivision process similar to that done in Yellowstone County.</td>
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### Recommendations | Incentive-based Landowner Tools Working Group

#### Conservation Easements: Fully Donated & Bargain Sale, Fully Purchased, and Term Easements

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<thead>
<tr>
<th>Possible Solutions</th>
<th>Commentary</th>
<th>Missoula County Role</th>
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<tbody>
<tr>
<td><strong>Fund conservation easements with open space / agricultural land bond funds</strong></td>
<td>This group encourages continued use of Open Space Bond funds to offset cost of appraisals, stewardship fees, title research, transaction costs.</td>
<td>This is being done on an ongoing basis by the City and the County; however, the Bond fund is likely to be exhausted in 2018.</td>
</tr>
<tr>
<td></td>
<td>This group suggests passing another City-County Open Space / Agricultural Land Bond to secure funding sources for preservation.</td>
<td>The private sector must initiate a bond proposal for possible placement on a County-wide ballot.</td>
</tr>
<tr>
<td><strong>Develop educational campaign</strong></td>
<td>This group recommends working with land trusts to develop an educational campaign about the benefits of conservation easement, available funding and tax benefits.</td>
<td>This is accomplished by existing conservation organizations and land trusts with whom staff regularly communicates.</td>
</tr>
<tr>
<td><strong>Lobby for state and federal funding</strong></td>
<td>This could include state funding to protect agricultural lands and lobbying Congress to include funding sources for conservation easements in the Farm Bill.</td>
<td>Missoula County is an affiliate member of the Montana Association of Land Trusts which advocates and lobbies for state and federal funding sources. Federal conservation easement funding through the Farm Bill requires a non-federal match, which has been provided by the Open Space Bond in many cases. Supplying funding through the Farm Bill requires state and/or congressional action.</td>
</tr>
<tr>
<td><strong>Foster collaborative relationships with conservation organizations</strong></td>
<td>Conservation organizations such as The Audubon Society and Trout Unlimited supply funding favoring their missions, which can include agricultural land.</td>
<td>This is being done on an ongoing basis. Over $35,000 has been contributed to County Open Space projects by conservation organizations other than land trusts (not including conservation grant programs), including Ducks Unlimited, Audubon groups, and the MT Wild Sheep Foundation.</td>
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#### Restrictions: Deed Restrictions and Conservation Deed Restrictions

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<tr>
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<tbody>
<tr>
<td><strong>Fund deed restrictions</strong></td>
<td>This group did not suggest a funding source but “strongly recommended” that the County research and establish such a fund.</td>
<td>This would require additional funds, through tax increases or a fee in lieu of taxes.</td>
</tr>
<tr>
<td><strong>Enforce deed restrictions</strong></td>
<td>This group recommends using Open Space Bond money to create a County staff position to monitor and enforce compliance with conservation deed restrictions.</td>
<td>By statute, bond monies may not be used for staffing. This task is already completed by existing land trusts.</td>
</tr>
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Attachment B
Table of Incentive-based Landowner Tools Working Group Recommendations
Table B2 – Page 1
# Recommendations | Incentive-based Landowner Tools Working Group

**Land Acquisition: Fee Simple, Pass Through Followed by Fee Simple Acquisition with Conservation Easement, and Community Land Trust**

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<thead>
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<th>Possible Solutions</th>
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<tbody>
<tr>
<td><strong>Fund land acquisition and monitoring of the land</strong></td>
<td>Open Space Bond money may be a possible source of funding for land acquisition. Placing a conservation easement on the land could accomplish the goal of monitoring the land to protect it in perpetuity.</td>
<td>With Open Space Bond money, land trusts are doing this on an ongoing basis. Any future bond proposal must be initiated by the private sector for placement on a County-wide ballot and include language that ensures funds can be directed to ag land conservation.</td>
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**Increase Awareness of Voluntary Options for Agricultural Land Preservation in Subdivision Review**

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<thead>
<tr>
<th>Possible Solutions</th>
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<tbody>
<tr>
<td><strong>Identify and describe important farmland</strong></td>
<td>This recommendation is to “Identify and describe the important farmland included in the proposed subdivision in terms of acreage, soil type, availability of water for irrigation, and historical agricultural use.”</td>
<td>This is being done on an ongoing basis in the subdivision review process.</td>
</tr>
<tr>
<td><strong>Review voluntary tools available for the preservation of important farmland</strong></td>
<td>Information about voluntary tools available for the preservation of important farmland is available to landowners; however, it is not part of the formal subdivision review process. This group recommends the formal subdivision review process include considering the appropriate tools available for conserving important agricultural land proposed for subdivision.</td>
<td>This is being done on an ongoing basis. Enhanced educational efforts can be explored; however, subdivision applications are typically submitted for County review far into the design process when developers are not necessarily receptive to such changes. Private sector consultants may play a larger role in this effort.</td>
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## Table of Voluntary Efforts Working Group Recommendations

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Voluntary Efforts Working Group</th>
<th>Possible Solutions</th>
<th>Commentary</th>
<th>Missoula County Role</th>
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</thead>
<tbody>
<tr>
<td><strong>Create a food purchasing policy for Missoula County</strong></td>
<td></td>
<td>This could include a strategy for sourcing local foods to serve schools, the detention center, and other public facilities. As described by this working group, a food purchasing policy that favors local agriculture could be pursued by the County with additional staff funding and policy direction.</td>
<td>The County only purchases food for the detention facility. While the County has determined that local sourcing for the detention center is not financially feasible at this time, the County may be open to revisiting creative ways to utilize locally-sourced food for some portion of the detention center’s needs. School programs are not under the purview of the Missoula County Commissioners.</td>
<td></td>
</tr>
<tr>
<td><strong>Develop a local food guide</strong></td>
<td></td>
<td>Create a guide to local food availability.</td>
<td>This task would be best suited to the private sector.</td>
<td></td>
</tr>
<tr>
<td><strong>Create a branding program</strong></td>
<td></td>
<td>Create a “brand” for local food producers.</td>
<td>This task would be best suited to the private sector.</td>
<td></td>
</tr>
<tr>
<td><strong>Study opportunities for local food system development</strong></td>
<td></td>
<td>This could include an assessment of agricultural infrastructure in Missoula County such as processing and storage facilities.</td>
<td>This may be an opportunity for the private sector and the County’s Extension Office to pursue grants and other opportunities to fulfill this recommendation.</td>
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</tr>
<tr>
<td><strong>Create a fund or develop a loan or grant program for beginning farmers</strong></td>
<td></td>
<td>This could be particularly useful in making beginning farmers more competitive in their efforts to acquire land. This group suggested creating an Opportunity Fund or other comparable tools that could pay the difference between what a beginning farmer can afford and the value of the land for other purposes.</td>
<td>Private sector partners could propose a project and funding to the County, similar to efforts which resulted in an open space bond in 2006.</td>
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<tr>
<td><strong>Tax structure changes</strong></td>
<td></td>
<td>Examples include changing the tax structure and tax credits. A solution specifically noted by this group is increasing tax credits to farmers for selling or leasing land to beginning farmers.</td>
<td>This would require legislative changes at the state level and approval by the governor. A private sector effort would provide the best opportunities for successful tax reform.</td>
<td></td>
</tr>
<tr>
<td><strong>Remove regulatory barriers to getting food to market</strong></td>
<td></td>
<td>The recommendation to “implement a solution-oriented culture for all in the review process for Health Department, subdivision review (Planning Dept.) and others” is advocated by all groups. Could the County explore code changes that would remove barriers to agricultural uses? For example, structures considered commercial agricultural production buildings require an ADA-compliant access and a bathroom, as was the case in the “Wicked Good Greens” example listed in Attachment B where a vegetable farm operates from a shipping container which has no employees or customers and much of the plant care is done remotely.</td>
<td>County departments work collaboratively to create a solution-oriented culture, and there is always room for improvement. State and federal regulations, such as building codes, health regulations, and the Americans with Disabilities Act establish rules such as access requirements that are implemented at a local level but are beyond the control of County departments.</td>
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</tr>
<tr>
<td><strong>Adopt a Right to Farm Policy</strong></td>
<td></td>
<td>The Missoula County Commissioners have adopted a Right to Farm, Ranch, and Practice Forestry Policy.</td>
<td>Completed in August 2016.</td>
<td></td>
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</tbody>
</table>
“The goal is to create a world where farms restore instead of deplete and allow every community to feed itself.”

~ Dan Barber
Missoula, Montana: Wicked Good Greens
This is a local example of a closed-loop hydroponic food production system housed in an upcycled, refrigerated, shipping container from Freight Farms. According to their website, Freight Farms provides the tools for farmers to “create local produce ecosystems on a global scale,” regardless of past experience or geographic location. Freight Farmer Jennifer Stackpole runs this growing operation year-round with an agrotech control box – meaning she controls the growing environment remotely. The system requires 84 kilowatts of energy and 10 gallons of water per day, 6 of which are recycled back into the system. With a footprint less than 400 square feet, this freight farm can produce leafy greens equivalent to two acres (87,120 square feet) of farmland.

High tunnels are movable to fit crop needs while reducing the threat of disease and pests

Montana: NRCS - High Tunnel Initiative
Montana Natural Resources Conservation Service (NRCS) provides technical and financial assistance grants to beginning farmers interested in diversified organic food production for local markets. NRCS financial assistance covers the plantings and the seasonal high tunnel and micro-irrigation system. NRCS also provides technical assistance with organic nutrient management, pest monitoring, and adding single and multi-species cover crops into the rotation. High tunnels, also known as hoop houses, increase harvest yield, protect crops from damaging weather, and extend growing seasons for high value crops in an environmentally safe manner. High tunnel benefits include better plant and soil quality and fewer nutrients and pesticides in the environment.

Jackson Hole, Wyoming: Stacked Greenhouse
“Jackson Hole, Wyoming, is home to one of the world’s first vertical greenhouses located on a sliver of vacant land next to a parking garage. This 13,500 sq. ft. three-story stacked greenhouse utilizes 1/10 of an acre to grow an annual amount of produce equivalent to 5 acres of traditional agriculture. Vertical Harvest sells locally grown, fresh vegetables year round to Jackson area restaurants, grocery stores, and directly to consumers through on-site sales. Vertical Harvest replaces 100,000 pounds of produce that would be trucked into the community each year. In addition to fresh vegetables, Vertical Harvest produces jobs and educational opportunities.”
Vertical carousel rack systems in the three-story greenhouse allow for optimal light exposure and easy harvest (Vertical Harvest, Jackson Hole, WY)

**Madrid, Spain: Vertical Gardens**

Since Madrid, Spain, is one of the hottest, driest cities in Europe, the city aims to cover as much of its surface as possible with greenery — roof gardens, walls, and empty lots. Installed in 2008, CaixaForum’s vertical garden is part of Madrid’s low-cost strategy to fight climate change with more than 15,000 plants from 300 native species coating an entire outer wall stretching the length of a city block. Benefits of this vertical garden and walls like this one include noise reduction, oxygen production and CO2 absorption, building insulation, temperature reduction of the urban heat island, and aesthetic value.

This vertical garden consists of a polyurethane sheet, plastic mesh, and a non-biodegradable felt blanket coating the exterior wall of a former power plant adjacent to a museum. To water these areas of greenery, the city is re-paving plazas with porous material that captures rainwater. Irrigation hoses line the top, and the felt layer acts as a sponge, absorbing water and allowing the plants to take root without soil. There are tax breaks for companies that coat their roofs or facades with greenery. Research shows that if 10 percent to 25 percent of Madrid’s buildings were to coat their roofs or facades in greenery, it could reduce urban noise by up to 10 decibels, reduce temperatures by up to 18 degrees Fahrenheit and reduce particle pollution by up to 20 percent.

Vertical gardens can serve multiple purposes, including food production. Proponents of vertical farming call it the “third green revolution” and tout the potential of such technology to address food shortages as world population continues to grow.

**Participatory Marketing Methods**

The Voluntary Efforts Working Group recognized the importance of building and expanding local markets for agricultural products. Participatory Marketing Methods empowers rural communities to engage more effectively in the marketplace to increase their income, their capacity to innovate, and ultimately improve their livelihood options. Traditionally, agricultural support has focused on increasing production which works well if there is a buyer ready to absorb the increased supply. However, increasing production in the absence of market knowledge can lead to local markets being oversupplied, causing prices to fall and reducing income for ag producers. In an era when consumers turn to other consumers – efficient
“hyper-connectors” and expert recommenders of products and services – rather than brands, more emphasis is placed on peer interaction. In participatory marketing\textsuperscript{10}, sellers learn how to market \textit{with} customers, instead of at them. One effective tool to accomplish this and gather market information is the Rapid Market Assessment\textsuperscript{11} (RMA), a collaborative peer-based market analysis.

**SMART FLOATING FARMS**\textsuperscript{14}
While Missoula, Montana, is separated from the nearest ocean by over 500 miles, smart floating farms may have far-reaching ties to Missoula and Montana that can “provide food and fuel – and clean up the environment and fight climate change.” To meet the hungry demands of the global population in 2050, food production will have to increase by 70%. Floating farms, with a combination of aquaculture (fish), hydroponics (crops), and photovoltaics (solar power), produce food year-round regardless of water scarcity and natural disasters. Smart Floating Farms (SFFs) are “automated offshore multi-layer food and energy production platforms.” Smart Floating Farms are by no means exclusive to oceans; such “floating islands” can be built on freshwater lakes and rivers as well.

**DIY Growroom: IKEA Garden Sphere**\textsuperscript{12}
Space10 has developed a “Growroom” to allow communities to affordably“ grow their own food...locally in a beautiful and sustainable way.” Plans for this flat-pack garden structure are available online for free, and building your own Growroom\textsuperscript{13} requires just 17 sheets of plywood, a rubber hammer, some metal screws and a CNC milling machine (or access to a local fab lab). Marketed as easy to assemble, this 730 cubic foot (9’ x 9’ x 9’) spherical, multi-level Growroom can be constructed in only 17 steps.

The Growroom can grow enough food for an entire neighborhood but is small enough to fit in a backyard.

**The three-story SFF system is made up of a range of farming facilities.**
- The lower level is primarily used for fishing operations. There are also boat docks, shipping and storage areas, and a processing plant.
- On the second floor is the automated hydroponics, which uses nutrient-rich water and a soil-like base of rock wool, coconut wool, or clay (instead of soil) to feed plants and crops. No rain is required, nor fertile land—just treated water.
- And finally, on the top floor is the solar plant, a hub of fans, microclimate controls, and irrigation tools. This is where the nitty gritty business of waste and energy management takes place, including bio-digesters, water recycling, and organic energy creation.
**Urban Farming**

Urban agriculture, loosely defined as growing food in populous areas, is often confused with community gardening; however, urban farming assumes a level of commerce rather than growing food for personal consumption. Large tracts of land are not needed for urban farm operations, and there is no prescribed sales outlet for an urban farm. Distribution can be to restaurants, markets, farmers’ markets, and even directly to the consumer. Successful urban farming creates a cost-effective, sustainable alternative to large-scale agricultural operations.

Missoula has an abundance of organizations and resources dedicated to creating opportunities to establish urban farms of varying size, output, and income production. In summer 2016, the non-profit Alternative Energy Resources Organization (AERO) hosted a forum on urban farming in Missoula to strengthen community food and agriculture networks. With all of the available resources and strong community interest, Missoula has the opportunity to become a premier example of urban farming in the United States.

**BIBLIOGRAPHY**


Missoula County Zoning

<table>
<thead>
<tr>
<th>Categories</th>
<th>Zoning Codes</th>
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<tr>
<td>Agricultural and Residential</td>
<td>C-A1, C-A2, C-A3, C-R1, C-R2, C-R3, C-RR1, C-RR2, C-RR3</td>
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<tr>
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<tr>
<td>Commercial</td>
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<td>Industrial</td>
<td>C-I1, C-I2</td>
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<td>Unzoned</td>
<td>UZ</td>
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County Zoning (Part 2)

ZDs & Special Districts

Unzoned

Water Bodies

US Forest Service

Major Waterways

US Highways

City of Missoula

All maps in this presentation were created by Missoula County Communities and Planning Services staff in October 2016. All property lines and boundaries are approximate. The information on these maps is for reference only. No reliance should be placed on the completeness or accuracy of information without first consulting original records and personally verifying the accuracy of any and all information displayed on these maps.
Planned Variations
1. Maloney Ranch Phase VIII
2. McAfee
3. Cheyenne Lane
4. Braaten
5. Miners Addition
6. Running W
7. Susan Lane – Renae Court
8. Stillwaters on the Clark Fork
9. Canyon Gate Apartments/Ole’s
10. Hidden Heights
11. Evans Ridge

Planned Unit Developments
1. Miller Creek View Addition
2. Canyon Creek Village
3. Taylor Acres
4. Katoonah Lodges
5. El Mar Estates
6. Grizzly Dens
7. Grantland
8. New Castle

Special Zoning Districts
1. Grove Street
2. Water’s Edge
3. JTL-Allen (Mullan)
4. Dougherty Ranch
5. Miller Creek Land Sensitive Zone

Rural Zoning Districts
1. Valley West
2. SD #2
3. Kona East
4. E. Butler Creek Foothills Circle H Ranch / West Pointe
5. Fort Missoula Historic District
6. Sawmill Meadows
7. Missoula Development Park
8. JTL Wheeler
9. Primrose Heights
10. Target Range West End
11. North Lolo
12. Olde Dairy

County Special Zones
November 2017
Missoula County Open Space Bond Summary

Amount of Open Space Bond Funds Spent per Year

$9,321,104
Spent To-Date

Overall Project Match of 1: 2.8
County-Portion Project Match of 1: 4.6

Every $1.00 of bond funding has been matched with $4.60 in other funding sources

Acres Protected By Region

Swan Valley 1,494 acres
Seeley Lake 987 acres
Evaro 177 acres
Frenchtown & Huson 3,122 acres
Missoula 2,739 acres
Potomac & Greenough 5,785 acres
Clinton & Turah 358 acres
Lolo 435 acres

More than 30,000 acres have been protected throughout Missoula County

*Updated Feb 2018

This work would not have been possible without the generous private landowners and these partners.