

AGENDA

CITY COUNCIL WORK SESSION

August 10, 2020

4:00 PM, City Council Chambers
130 S Galena Street, Aspen



WEBEX

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I. WORK SESSION

- I.A. Affordable Housing Progress and Policy Resolution Check In
- I.B. Cozy Point Ranch Discussion



MEMORANDUM

TO: Mayor Torre and Aspen City Council

FROM: Ben Anderson, Principal Long-Range Planner

THROUGH: Phillip Supino, Community Development Director

MEMO DATE: August 5, 2020

MEETING DATE: August 10, 2020

RE: Work Session Discussion
Land Use Code enforcement issues

REQUEST OF COUNCIL: Staff requests Council direction on two issues that have caused staff difficulty in application and enforcement of provisions in the Land Use Code (LUC). Options include maintaining the status quo or exploring targeted amendments to the LUC in response.

SUMMARY AND BACKGROUND:

Issue #1 – In 2012, Council passed an amendment to the land use code that prohibited the establishment of new free-market residential units and the expansion of existing free-market residential units in the CC and C-1 Zone Districts. Subsequent amendments in 2014 and 2017 expanded the sentiment of this policy to other zone districts – including the Mixed-Use Zone District. These amendments were implemented primarily in an effort to protect available commercial spaces from conversion to residential use.

Over the years, enforcement of violations of this policy has been difficult – and consistent with the City’s general enforcement practices, is complaint-based. Anecdotally, staff knows that unpermitted residential use in commercial space is occurring. When the City has received complaints and has evidence of unpermitted residential use, staff does enforce, but in general, there is no data available to understand the prevalence of this issue.

In recent years, staff has noticed a trend in tenant finish permits that include features in commercial spaces that are residential in nature. Examples of this include full kitchens, shower facilities, and laundry facilities. The Land Use Code does not currently prohibit these types of features in commercial spaces. Staff, when reviewing permits that include these amenities, are justifiably suspicious of the eventual use of the space. Staff understands the importance of past community conversations and policy decisions surrounding this issue and are trying to prevent violations of the intent and letter of the LUC.

Issue #2 – In Aspen’s Residential and Mixed-Use Zone Districts, incentives have been created to encourage additional units of density on a lot. This generally involves the allowance of duplex units by right if the lot is of a minimum size. Additionally, duplex development is granted an additional floor area allowance to accommodate the additional unit (360 – 420 square feet, depending on the zone district). Aspen was a leader in creating this mechanism to encourage more density in our residential zones. However, today, because of the value of the additional floor area and the market demand for single family residences – duplexes create a scenario that is ripe for violation.

Like the first issue, data is unavailable to measure the scale of the problem. Anecdotally and through complaints, staff is aware that owners are creating unpermitted openings between duplex units creating de facto single-family residences. While these are violations, unapproved and unpermitted, they are difficult to discover and difficult to prevent with the tools currently available in the LUC (and building code). Given the benefits of additional floor area and the resulting significant financial benefit, there is an incentive built-into the regulations for speculative developers to engage in this unpermitted activity. This has the potential to create precedents which undermine Community Developments regulations and enforcement authority, as well as run counter to the intent of the City’s community development policies.

QUESTIONS FOR COUNCIL:

Ultimately, both of the outcomes discussed here are prohibited by the LUC. In both cases, enforcement occurs when staff is made aware of a violation. While the status quo could be maintained if these are not a priority item for City Council, staff struggles with the regulations and enforcement authority as they currently exist to properly enforce the regulations. Alternatively, staff recommends code amendments to prevent these situations by further discouraging conditions that make violations more likely.

Issue #1 – Residential features in Commercial spaces.

- Should staff pursue amendments to the LUC to discourage unpermitted residential use by limiting the types of features (example: full kitchens) that can be installed in commercial spaces and clarifying what constitutes a residential use within a mixed-use building?

Issue #2 – Unpermitted conversions of duplexes into de facto single-family residences.

- Should staff pursue amendments to the LUC that will prevent or further discourage unpermitted conversion of duplex units to single-family? This may include removing the floor area incentive for duplexes or requiring certain physical elements, such as complete structural separation, to ensure the units may not be combined.

FINANCIAL IMPACTS: N/A.

ENVIRONMENTAL IMPACTS: N/A

ALTERNATIVES: N/A

RECOMMENDATIONS: N/A

CITY MANAGER COMMENTS:



MEMORANDUM

TO: Mayor Torre and Aspen City Council

FROM: Ben Anderson, Principal Long-Range Planner

THROUGH: Phillip Supino, Community Development Director

MEMO DATE: August 5, 2020

MEETING DATE: August 10, 2020

RE: Work Session Discussion – Affordable Housing Goals and Coordination with the Land Use Code
(Continued discussion from 6/2/20)

REQUEST OF COUNCIL: This work session’s purpose is to follow up on an extensive conversation with Council on June 2, 2020 related to Affordable Housing Goals and Coordination with the Land Use Code (LUC). In June, staff presented several possible areas in the LUC that could be evaluated for amendments to further support the creation of new affordable housing. Council was generally supportive of staff’s suggestions, but it was made clear during the discussion that some of the possibilities had more potential than others – and importantly were more feasible to pursue in the near term.

This memo outlines staff’s recommended priorities in our work to evaluate the LUC related to affordable housing over the coming months. Staff asks for Council support of these priorities – or that Council provide additional direction. Staff also seeks direction to initiate the first round of code amendments for Council consideration in September.

SUMMARY AND BACKGROUND: During the June discussion Council provided support for the following Guiding Principles as staff begins this work:

- 1) Be holistic in analysis of relevant LUC regulations which affect the development, financing, maintenance, and supply of affordable housing.
- 2) Provide Council with broader, contextual information and potential alternatives to ensure affordable housing regulations are legally defensible, innovative, and deliver on Council’s policy objectives.
- 3) Staff will ensure analysis of all regulations and alternatives includes financial information to inform holistic decision making.

4) Structure the process to allow Council to understand and consider individual pieces of the LUC regulations incrementally, within the context of the larger system.

Staff presented the following areas in the LUC for consideration of evaluation:

- 1) *Affordable Housing Fee-in-Lieu*
- 2) *Affordable Housing Credits Program*
- 3) *Growth Management Quota System*
 - Employee Generation and Mitigation Rates
 - Multi-Family Replacement
 - Lodge Incentives
 - Existing Floor Area Credit – Residential
- 4) *Subdivision*
- 5) *Zone District Standards*
- 6) *Calculations and Measurements*
- 7) *Affordable Housing Revenue and Financing*

For discussion and further detail on each of these topics, please see the staff memo from June 2nd – attached as Exhibit B.

STAFF DISCUSSION: Following the direction from Council on June 2nd, staff has created a refined set of recommended priorities for ComDev’s work in the coming months. While these topics are complex and require study (and demand caution as we move to recovery from COVID-19), staff believes these are topics that have immediate importance, are tangibly scaled, and are feasible to achieve in the near term. Potential amendments on these topics could be packaged and presented to Council for consideration as soon as September. They will all require some degree of consultation with outside experts and outreach to the development community and to a more general audience. These recommended focus areas can be evaluated, and potential amendments proposed within ComDev’s current budget authority.

Recommended Study Areas

1) *Affordable Housing Credits Program*

Staff continues to believe in the promise of the AH Credits Program to encourage private sector development of affordable housing units. In the evaluation of this program, staff will look to identify improvements that bring additional clarity to the supply and demand mechanisms behind the credits program – and importantly propose additional incentives within the development of AH units. Initial ideas for improvements include:

- Phased issuance of approved credits during the construction process. This could provide additional flexibility to developers in creating a revenue stream as a project moves through construction. Additionally, this could help the credits market by bringing credits to the market incrementally, rather than the current situation where a large batch of credits hits the market at project completion.

- Policies that provide flexibility, yet certainty in the number of credits issued for a particular project. This has importance both to new construction and projects that propose the conversion of existing free-market multi-family to deed-restricted affordable housing. This specifically involves the relationship of the LUC to APCHA's development requirements for unit sizes – and the credits that can be generated as a consequence.
- Create a multiplier in the credits generated calculation for designated historic properties. This would acknowledge the additional costs of preservation in projects that are proposing redevelopment to affordable housing. This could be particularly important in the Main Street Mixed-Use and R/MF Zone Districts – where we already encourage affordable housing projects through other policies.
- Provide direct language in the LUC to promote the availability of AH Credits to private development projects that are additionally pursuing LIHTC (Low Income Housing Tax Credits) units. Currently the LUC does not provide this direct encouragement, and if read in a particular way actually prohibits a project from pursuing both Federal and Aspen-based incentives. This change beyond encouragement of credits projects in general – could also result in units directed at lower income categories.

Staff sees real potential in these improvements based on previous conversations with developers of affordable housing. Staff will work with the development community to further confirm the potential of these ideas and refine the details that would be included in any additional policy changes. Staff does not see this as a particularly controversial set of potential improvements. These potential changes would not alter the underlying purpose or structure of the program. They may increase the financial viability of future affordable housing credits projects, resulting in a possible increase in the frequency and scale of such projects. Additionally, beyond conversations with the development community and perhaps review by third-party experts, these changes would necessitate minimal consultant engagement.

2) Affordable Housing Fee-in-Lieu (FIL) Update

This would finalize the work previously completed by the consultant team of White and Smith, and TischlerBise. The report that was delivered this spring confirmed that the general framework of Aspen's FIL is legally defensible and provided a clear methodology for how to calculate and update the FIL. Staff and consultant efforts would provide specific figures for the FIL and would potentially respond to other recommendations from the report.

As it is estimated that current FIL figures are artificially low having not kept up with construction costs in the Aspen market, this work could result in significant increases in the FIL – and consequently the cost of required AH mitigation. As such staff will be carefully working with consultants to ensure that calculations are grounded in legally defensible procedures. Because of the potential impacts to overall development costs, staff does recommend that more general outreach will be required as proposed changes come forward. This is a topic that staff will be particularly careful of in assessing impacts in the context of COVID-19 recovery.

3) Existing Credits and Incentives Related to Required AH Mitigation

AH mitigation calculations, over time, have been used in the LUC to incentivize or disincentivize different kinds of development outcomes. Staff has identified three such calculation methods that have had real impacts on mitigation calculation:

- Lodge Density/Unit Size Incentives – The LUC currently provides significantly reduced mitigation requirements for lodge projects that provide smaller units and use land efficiently. This has the effect of reducing the required mitigation rate from 65% (consistent with other commercial uses) to as low as 10%. While this has resulted in the intended outcome of smaller lodge unit sizes, it has also created community discussion related to AH mitigation on recent high-profile lodge projects.
- Existing Lodge Unit Credit – this provides a full credit for existing lodge units during redevelopment of lodge projects – regardless of whether the existing lodge units ever provided AH mitigation. This credit during redevelopment of other commercial buildings is being phased out – starting from 2017.
- Existing Residential Floor Area Credit – this currently provides a full credit for existing residential floor area during redevelopment – regardless of whether the existing residence ever provided AH mitigation. This type of credit for commercial buildings is being phased out – starting from 2017.

These three existing “incentives” have had significant consequences on required AH mitigation for Lodge and Residential development and redevelopment. Changes to these existing regulations will require fundamental policy considerations for Council and the community. If Council supports exploring changes to these credits, particularly to the Residential credit, staff recommends a robust outreach campaign. Staff does not at this point foresee significant consultant engagement requirements for these topics.

4) Improvements to Multi-Family Replacement Requirements

The multi-family replacement regulations in the Growth Management chapter of the LUC is simultaneously difficult to interpret and apply and yet absolutely essential in retaining free-market, multi-family units as part of Aspen’s housing stock – and in the creation of deed-restricted affordable housing during redevelopment scenarios. Staff, property owners and the development community are often perplexed by the requirements of this section. Additionally, there has been some concern over time that re-development scenarios have not always resulted in projects that meet the intent of the code.

Of the proposals contained in this memo, this is the one that staff believes will require the most study and support from consultant expertise. Clearly understanding the potential development outcomes of proposed changes will be essential – as will be a significant outreach campaign to HOAs and property owners. At this time, staff believes that this work will generate several proposed scenarios for eventual consideration by Council and the community.

NEXT STEPS: With direction from Council, staff will begin the work necessary to the further study these issues, create policy analyses, and draft possible code amendments. Necessary contracts for consultant support will be initiated and public outreach efforts defined. Following Council direction to staff on each of these topics, the next step in the process with Council will be a Policy Resolution followed by the ordinance development and adoption process.

These initial areas of focus are anticipated to be addressed before the end of 2020 or into early 2021. Other items discussed at the June 2nd work session not included in this initial focus, remain on staff's radar, but will not be pursued without further direction from Council.

FINANCIAL IMPACTS: Following Council direction, further analysis will be required to determine financial impacts.

ENVIRONMENTAL IMPACTS: N/A

ALTERNATIVES: N/A

RECOMMENDATIONS: N/A

CITY MANAGER COMMENTS:

EXHIBITS:

- A – Summary table of proposed work plan
- B – Staff Memo – June 2, 2020; Work session

**EXHIBIT A - Summary table of proposed work plan - Fall 2020 / Winter 2021
Affordable Housing Goals / Land Use Code Coordination**

Proposed Work Area	Land Use Code Section(s)	Summary of Issue and Proposed Study	Outreach Required	Consultant Engagement
AH Credits Program	<u>26.540</u> AH Certificates <u>26.470.050</u> Growth Management Calculations	Identify and implement enhancements to existing Credits program - this may include	<u>Directed</u> - to development community, particularly those in affordable housing	Minimal
AH Fee-in-Lieu (FIL)	<u>26.470.050.E</u> Growth Management Calculations	Finalize AH mitigation FIL calculation and confirm method for yearly update	<u>Directed</u> - to development community	Limited - finalizing previous work
Existing Credits and Incentives	<u>26.470.100.G</u> Lodge Mitigation <u>26.470.070.F</u> Credit for Existing Lodge Units <u>26.470.090.A</u> Credit for Existing Residential Floor Area	Evaluate impact to AH mitigation requirements in redevelopment scenarios for lodge and single-family/duplex residential projects	<u>More general</u> - these potential changes have broad impact to development community and property owners	Minimal
Multi-Family Replacement	<u>26.104.100</u> Definitions <u>26.104.110</u> Use Categories <u>26.470.020</u> Terminology <u>26.470.100.D</u> MF Replacement <u>26.470.100.H and I</u> Residential Mitigation	Clarify requirements and limitations to ensure preservation of multifamily residential units for Aspen's full-time and part-time residents during redevelopment scenarios	<u>More general</u> - this policy area has impacts for development community and property owners - special efforts will be made in outreach to Condo HOAs	More Significant



MEMORANDUM

TO: Mayor Torre and Aspen City Council

FROM: Ben Anderson, Principal Planner
Phillip Supino, Community Development Director

MEMO DATE: May 27, 2020

MEETING DATE: June 2, 2020

RE: Work Session Discussion – Affordable Housing Goals and
Coordination with the Land Use Code

REQUEST OF COUNCIL: This work session’s purpose is to re-initiate Community Development staff’s work toward Council’s affordable housing goals and improved coordination with regulations in the Land Use Code (LUC). Staff was poised to begin a conversation with Council on this topic in early March of 2020, just as the City was beginning to respond to the Covid-19 crisis.

In this work session, staff will outline those aspects of the LUC which fall within the scope of the project previously approved by Council, identify project goals moving forward, and define the process of analysis and potential amendments. Staff will pose specific questions of Council to inform and prioritize staff’s work over subsequent months.

Note: Staff is approaching this project with additional caution. The world has fundamentally changed in the last three months and the short and long-term impacts to Aspen’s development economy are yet to be understood. While it is clear that affordable housing is and will continue to be a community priority, understanding the downstream effects of any potential policy change is a process outcome that is important now more than ever.

SUMMARY AND BACKGROUND: Affordable housing in Aspen dates to the 1977 adoption of the Growth Management Quota System (GMQS). Since then, inclusionary zoning, affordable housing mitigation requirements, and the assessment of impact fees on development for the provisions of affordable housing have become keystones of Aspen’s approach to maintaining community character, social equity, and a functional in-town economy.

The regulations related to affordable housing mitigation have evolved in significant ways over time in response to changing values and priorities within the community. Today, this means that impacts of both residential and commercial development on the generation of new employees is required to be mitigated. A complex system of calculations that

touches on several chapters of the LUC reflects layers of change over time that have pursued both the mitigation of generated employees, and the use of incentives, bonuses, and credits to incentivize or disincentivize different kinds of development outcomes.

The current Council has identified the development of additional affordable housing units, the maintenance of existing units, and the long-term health of the whole system as priority projects. In response to this prioritization, staff suggested in 2019 that the 2020 Community Development Work Program include an analysis of the existing LUC regulations which impact the affordable housing system.

Through Resolution #16, Series 2020 Council established the following 2020-2021 goals related to affordable housing:

Affordable Housing – *Advance the quality of life through affordable housing opportunities that address financing, incentives, and maintenance through partnerships.*

A. Resources: *Increase the City’s resources for affordable housing development by leveraging existing funds in tandem with partnering with regional entities.*

B. Incentives: *Review adopted regulations that affect the development of affordable housing including a study of the affordable housing fee-in-lieu rate, the Certificate of Affordable Housing Credit program, employee generation and mitigation rates, and multi-family replacement requirements.*

C. Financing: *Establish and utilize a financial advisory board to advise, evaluate, and make recommendations on the long-term economic stability of affordable housing development.*

D. Maintenance Focus: *Work with partner agencies and homeowner associations to formulate options to address delayed affordable housing maintenance, including insufficient capital reserves policies.*

AFFORDABLE HOUSING / LAND CODE COORDINATION PROJECT:

Process Overview

Depending on Council’s priorities with respect to which sections of code to analyze and possibly amend, the timeline for this project could vary dramatically. Given Council’s comments during the fall work session regarding the project, staff anticipates this project taking between 12 and 18 months. During that time, staff plans to conduct multiple studies, analyses, and amendment processes, with staff work, consultant assistance, public outreach, and Council consultation and reviews happening concurrently. Each aspect of the project will require a different level of analysis with consultants, stakeholders, and staff. Likewise, each element will require tailored public outreach. As we move through the project, staff will consult with and seek guidance from Council on how to approach the analysis, outreach, and potential amendments for each element as needed.

QUESTIONS FOR COUNCIL: (See Exhibit A for a summary worksheet)

Process - Guiding Principles

Council's goal statements underpin staff's approach to the affordable housing LUC coordination project. In order to provide clarity of process and direction, staff has identified the following project guiding principles:

Principle #1: Be holistic in analysis of relevant LUC regulations which affect the development, financing, maintenance, and supply of affordable housing.

In 2020 work program discussions with Council, Council directed staff to look holistically at the standards in the Land Use Code related to affordable housing. This ought to include incentives, generation and mitigation rates, growth management requirements, zoning standards, definitions, fees, and financial components. Staff will provide Council with the information needed to understand each relevant code section, how it relates to the delivery of affordable housing, how they influence development outcomes in commercial and residential projects, and how each fits into the larger system of leveraging commercial and residential development for the financing and development of affordable housing.

Principle #2: Provide Council with broader, contextual information and potential alternatives to ensure affordable housing regulations are legally defensible, innovative, and deliver on Council's policy objectives.

With the holistic assessment of the LUC affordable housing standards in mind, staff seeks to provide Council when appropriate with relevant information about how other communities use regulation and incentives to meet their affordable housing need. Contextual information rooted in national best practices will help Council understand how similar systems and regulations are work in other communities. That work may also present innovations and alternatives to assist Council in determining areas where improvements may be made and inform discussions about whether the current set of regulations are optimized to deliver the housing Council and the community desire.

Principle #3: Staff will ensure analysis of all regulations and alternatives includes financial information to inform holistic decision making.

It is important to consider financial implications when analyzing LUC affordable housing regulations. Many of the regulations leverage commercial and residential development activities to generate affordable housing development revenue. While not necessarily financial in nature, there is a close relationship between LUC regulations and the market forces that finance affordable housing development and maintenance. Staff believes that the analysis of existing regulations or the potential of modified or new regulations should be understood systematically and holistically.

Principle #4: Structure the process to allow Council to understand and consider individual pieces of the LUC regulations incrementally, within the context of the larger system.

Note: This is particularly important as staff and Council analyze potential impacts of proposed policy changes on the development economy in the recovery from the impacts of Covid-19.

The final project goal relates to the process by which staff will present topics to Council, seek input, and propose possible actions. Staff will present related code sections and case studies incrementally to Council for discussion and potential amendment. While all the affordable housing standards are interrelated, taking an incremental approach to presenting and responding to distinct sections of code will provide Council the opportunity to prioritize and address specific regulations on their desired timeline. Further, this approach will ensure that no one topic or regulation impedes progress on the whole project. There are a lot of regulations to unpack. Staff is focused on assisting Council to do so efficiently and with opportunities for progress and successes throughout.

Finally, the incremental approach will aid staff in breaking this significant undertaking into digestible parts and retaining third-party support on an as-needed basis. The varied sections of code which Council may wish to consider may require professional services with unique, specific skill sets. For example, analyzing the appropriateness of employee generate rates is different than modelling development allowances in zone districts or optimizing the affordable housing credits program. Thus, an incremental approach allows Council and staff to obtain the outside expertise required for each piece of the project, reducing cost and increasing efficiency of time and effort.

Question: Does Council support staff's proposed process-related guiding principles?

Areas for Land Use Code Coordination with Council's AH Goals

It cannot be overstated how inter-related and varied are the number of LUC code sections which impact the affordable housing system. The LUC is a living document, having evolved in response to shifting dynamics in development and changes to the community's expectations of it. Aspen's built environment is the physical manifestation of these changes over time. The affordable housing LUC coordination project requires analysis of a number of those layers. The following describe them in general categories and asks Council to provide direction on their desire (or not) to include each in the scope of the project.

1) Affordable Housing Fee-in-Lieu (FIL)

In March of 2020, White and Smith, LLC and TischlerBise, Inc., completed a draft report that analyzes Aspen's affordable housing FIL. The report provides recommendations related to the calculation methodology, methodology for regular updates, and other related policy questions. The Executive Summary of this report is included as Exhibit B. Council has previously been presented with the full draft study.

While FIL currently plays a small role in its direct relationship to provision of affordable housing mitigation and in the overall revenue of the 150 Affordable Housing Fund, it does have important purposes:

- Establishes a legal and cost basis for required affordable housing mitigation
- Provides an important signal to the market value of Affordable Housing Certificates
- Sets a value of required mitigation for small projects and other by-right FIL payments (example: removal of ADU deed restrictions)

Efforts to further study and implement the recommendations of the report would be conducted by staff, with support of White and Smith, and TischlerBise.

Question: Does Council support finalizing an updated FIL calculation and/or the further study of other recommendations as proposed by the draft FIL study?

2) Affordable Housing Credits Program

The affordable housing credits program is a unique and innovative approach to incentivizing private sector development of affordable housing. It permits the City to avoid the burdens of land acquisition, financing, permitting, and project management while bringing more affordable housing units to market. Ten years after the creation of the program, challenges to its success have come into view. Relative to City-financed projects and the development of on-site affordable housing since the inception of the GMQS regulations, the credits program has brought relative few units to market. For those developers attempting to leverage the credits program and build affordable housing units, there are structural challenges which limit its utility. Inclusion in the affordable housing LUC coordination process will provide Council with an opportunity to assess opportunities and constraints to the program's success in the context of its role in the larger affordable housing program.

Question: Should staff include the Affordable Housing Credits program in the coordination project?

3) Growth Management Quota System

Of all the sections of the LUC relevant to this project, none are as esoteric, or as impactful to the AH program than GMQS. This section provides the regulatory foundation for the relationship between private-sector commercial and residential development activities and the provision of units for financing for the AH system. Originally envisioned as the regulator governing the pace and scale of development in Aspen and Pitkin County, GMQS has evolved into a complex of regulations and incentives.

At its heart is the policy that development 'pays its own way' by leveraging private sector development resources to require the provision of affordable housing units or financial resources in-lieu of units. This is the system of employee generation (FTEs by use type) and mitigation (percent of those FTEs required to be housed by used type). Following, is

an overview of the relevant regulations and incentives staff proposes to include in the LUC coordination project.

- **Employee Generation and Mitigation Rates**

The number of full-time equivalent employees generated by commercial and residential land use types provides the baseline for establishing a specific projects affordable housing requirement. Affordable housing *mitigation rates* are then assessed on top of the generations rates. These are the 65% (commercial) and 30% (residential) numbers, which translate the FTE generation rate into a unit or dollar figure for a development. For example, a commercial development generating 10 FTEs would have to provide housing (in some form) for 6.5 FTEs. As such, employee generation rates set the ceiling and mitigation rates set the floor for development meeting its AH requirements.

Modifying generation rates requires a detailed study. Commercial generation rates were last updated in 2012; Residential in 2015. Because generation rates create the baseline for development's AH mitigation requirements, staff recommends Council include an employee generation study as part of this project. With the current fee-in-lieu study in progress, a generation rate study would be informative to Council regarding the relationship between the employee generation from different development types and subsequent demand on housing.

A topic that is perhaps more pressing – is a needed analysis comparing Residential and Commercial mitigation rates. Over the years, Commercial mitigation has evolved to be 65% of employee generation at Category 4. Residential mitigation is set at 30% at Category 2. This distinction has two implications: 1) How does this difference incentivize or disincentivize different development outcomes? And 2) What impact does this have on the development of related affordable housing?

The study of generation and/or mitigation rates will require professional services and will take time (12-18 months). However, staff believes this analysis could re-set the foundation of the entire affordable housing program – and could also be used to support other Council goals related to development outcomes.

Question: Does Council support the investment of time and dollars in a study of generation and/or mitigation rates?

- **Multi-Family Replacement**

GMQS requires that existing multi-family developments (apartments, condos, etc.) be replaced in proportion to their impact on the free-market and affordable housing stock. When the policy was adopted in 1989, it was rooted in the idea that multi-family residential units contributed to development density (a community benefit in the context of Aspen's constrained development area and open space values) and the availability of less expensive free-market housing units in the community. It is important to consider that much of Aspen's multi-family housing stock is aging and is increasingly under pressure for re-development.

In their current form, the regulations require that the redevelopment of existing, free market or affordable multi-family buildings replace the units with specified proportions of free-market and affordable units. The regulations are complex and challenging to administer. In some circumstances, they permit an increase in the proportion of a development for free-market units and reductions in the proportion for affordable units. In spite of the challenges and shortcomings of the current regulation, multi-family replacement is an important tool for the City in leveraging redevelopment to ensure it delivers on AH goals.

Staff recommends Council consider the effectiveness of the regulations in maintaining existing affordable housing, developing new or redeveloped affordable housing, and the nexus with Council's larger AH program goals, including the ability of the AH Credit program to deliver privately financed affordable housing.

Question: Does Council wish to analyze the Multi-Family Replacement regulations as part of the LUC affordable housing coordination project?

- **Lodge Incentives**

GMQS includes incentives for new lodge development to provide smaller average lodge units. The regulations were a response to community concern in the 2000's over data showing the decline in affordable lodging bed base. The intent was to motivate smaller lodge unit sizes through breaks in employee generation. Since the regulations were adopted, Council has expressed concern over the FTEs and affordable housing lost through these incentives. In recent years, staff has observed new lodge developments combining larger (more expensive) rooms and smaller (less expensive) lodge units. While this configuration meets the requirements of the LUC, analysis is required to determine whether it is delivering on the policy goal of creating affordable or moderately priced lodging products, particularly in light of the losses to the affordable housing system.

Question: Should staff analyze the effectiveness of the lodge unit size incentives in the context of Council's affordable housing project goals?

- **Existing Floor Area Credit – Residential**

Provisions which provide a credit of existing commercial and residential floor area to redevelopment projects have been historically embedded in GMQS. This results in scrape-and-replace development providing affordable housing at a rate lower than that required for new development on vacant land. The policy concept behind this credit is that the development being scraped and replaced may have been constructed prior to the adoption of affordable housing requirements or that mitigation for the existing development may have already been provided. The result is redevelopment which only provides AH mitigation for the new square footage added to the site.

The credit for existing commercial square footage which had not previously mitigated was addressed through a 2017 code amendment, which set a phased increase for that share of a redevelopment project shown to not have provided affordable housing mitigation in the past. That rate is set to catch up to the current 65% mitigation rate for commercial in 2034. The continuation of the credit for existing residential floor area was not amended at that time.

Question: Does Council wish to include credit for existing residential floor area in the analysis of GMQS affordable housing regulations?

4) Subdivision

At a recent City Council meeting regarding a lot split application, Council clarified with staff that lot splits, which are classified as a minor subdivision, do not trigger compliance with the affordable housing and growth management allotment requirements of GMQS. The City's subdivision regulations require that major subdivisions comply with some GMQS standards to which minor subdivisions (including lot splits) are not subject. The relationship between various subdivision regulations, growth management, and affordable housing is a topic which Council may want to explore. This is primarily a question about growth management allotments, rather than impacting mitigation requirements.

Question for Council: Should study of subdivision regulations that impact GMQS be included in the project?

5) Zone District Standards

Part 700 of the LUC includes all the zone districts which govern the mass, scale, uses, and physical form of development throughout town. The dimensional and use regulations in this section have the single biggest influence on the built environment of any aspect of the LUC. This section establishes where affordable housing can be located, at what mass, scale, and density, and with what associated or surrounding uses. As such, the zone district regulations are essential tools for meeting current and future AH policies and goals.

Including zone district standards in the AH coordination project may involve analysis of the potential build out of affordable housing in various zones under the current regulation, and analysis of how changes to specific standards in the zone districts may influence potential future build out. Both processes will provide vital information to Council about the potential to meet current and future AH demand within the current City limits, as well as what changes to zoning standards may be helpful to achieve Council's AH goals.

Because of the land constraints within Aspen – both in terms of availability and price – policies and regulations that would have the effect of increasing resources for building affordable housing should be supported by an analysis of where and at what density actual units could be built. A review of Part 700 of the LUC would provide this type of analysis.

Question for Council: Should analysis of current zoning standards and potential future zoning scenarios be included in the AH coordination project?

6) Calculations and Measurements

Section 26.575.020 establishes the means through which the City measures the physical dimensions of development. This section reflects previous community decisions to incentivize or disincentivize different types of development outcomes on the built environment. Some of these regulations impact affordable housing mitigation. An example of this is the exemption of basements from Floor Area calculations. Instituted primarily as a means to incentivize less mass and scale above ground, this provision has had the effect of excluding significant gross floor area from required residential affordable housing mitigation while not necessarily reducing above-grade floor area.

Question: Should review and analysis of potential impacts to affordable housing within Section 26.575.020; Calculations and Measurements, be included in the AH coordination project?

7) Affordable Housing Revenue and Financing

There is a direct relationship between LUC standards like employee generation and mitigation rates and the annual revenue for the AH program that are generated through impact fees on development and other economic activities. Changes to economic and development dynamics can have a significant impact of the City's short and long-term revenue generation, adding risk and uncertainty to the capacity to the City to build and maintain affordable housing.

There are several policy assumptions embedded in the current financing model. Fundamental to these is the idea that development pays its own way and that the cost to develop affordable housing is covered in large part by the employee-generating development that creates much of the demand for AH. In short, the development of new affordable housing, whether by the City or the private sector – is fully dependent on new commercial and residential development.

It is not a coincidence that affordable housing mitigation regulation resides in the chapter on growth management. The tension between this reliance on development to underpin the AH system and community concern about the pace and scale of development are an important dynamic for Council to consider

Analysis of the relationship between various revenue streams and projections of future revenue under different economic and development scenarios is essential to making future policy choices about how best to fund the system in the future. This process would include analysis of the current factors influencing AH revenue, and how changes to economic and development dynamics may impact the AH program in the future. Development-neutral alternatives to the current revenue model could be evaluated with Council direction.

Question: Should AH revenue and financial analysis be included in the project?

In addition to the code sections referenced above, amendments to other sections may be required in response to Council's direction on these larger topics. These sections might include Definitions, Common Development Review Procedures, and *other sections as maybe identified*. As the process unfolds, staff will discuss with Council the relationship between the primary code sections and the secondary code sections. Should the need to amend those sections arise, staff work with Council on developing the scope for those amendments.

Question: Are their additional LUC regulations and City policies Council wishes to add to the scope of work of this project?

NEXT STEPS

Establishing Council Priorities

For staff to develop a detailed scope of work, timeline, and work plan, and to begin the process of identifying and contracting with subject matter experts to assist in the project, staff suggests Council begin to prioritize the various elements of the scope proposed herein. The questions posed above are a mechanism to begin building this list of priorities.

To inform Council's thinking, staff envisions a phased approach and has taken a first pass at prioritizing the elements outlined in this memo. Staff is primarily concerned with making progress toward the larger goal of this project while addressing items that are manageable and politically feasible in this uncertain time. Secondly, staff is interested in prioritizing items with Council which will help to establish policy and regulatory guidance that inform later stages of the process.

With those principals in mind staff suggests the following items be prioritized for the first phase of the project:

- 1. Finishing the work of the FIL study**
- 2. GMQS, Lodge Unit Size Incentives**
- 3. Improvements to Certificates of Affordable Housing Credit program**
- 4. GMQS, Multi-Family Replacement**

While these topics are complex and require study (and demand caution as we move to recovery from Covid-19), Staff believes these are topics that have immediate importance and are tangibly scaled. Potential amendments on these topics could be packaged and presented to Council for consideration sooner, rather than later. They will all require some degree of consultation with outside experts and outreach to the development community. This can be achieved within ComDev's current budget authority.

With direction from Council on the initial scope of this project provided at this work session, staff will return to Council with a detailed timeline and further information to support the first phase of the project. Future phases and scoping of the project will be

identified based on the direction given by Council in response to the questions posed by this memo.

FINANCIAL IMPACTS: At this time, N/A.

ENVIRONMENTAL IMPACTS: N/A

ALTERNATIVES: N/A

RECOMMENDATIONS: N/A

CITY MANAGER COMMENTS:

EXHIBITS:

A – Worksheet for questions posed to Council

B – Executive Summary of Fee-in-Lieu Study



MEMORANDUM

TO: Mayor and City Council

FROM: Mike Tunte, Landscape Architect and Construction Manager, Parks and Open Space

THROUGH: Matt Kuhn, Parks and Open Space Director
Austin Weiss, Parks and Recreation Manager

MEETING DATE: August 10, 2020

RE: Farm Collaborative Learning Center Building, Cozy Point Ranch

REQUEST OF COUNCIL:

The Farm Collaborative and their project consultant team have developed a plan and building design for a new learning center at the City of Aspen owned Cozy Point Ranch. They would like to present the concept for the new education facility, listen to Council's feedback and ask for Council's support to proceed with developing their facility and pursuing the land use application process.

SUMMARY / BACKGROUND:

The City of Aspen purchased the Cozy Point Ranch property in 1994, with the original intent of preserving the agricultural heritage of the upper Roaring Fork Valley and as a possible location of additional affordable housing. In 2003 the property became a part of the City of Aspen Open Space program and was put under a conservation easement with the Aspen Valley Land Trust. This conservation easement is intended to protect the property from further development but does not prohibit the property's existing agricultural, equestrian and other recreational uses.

The property consists of approximately 60 acres of irrigated hay meadows and pasture lands, 30 acres of equestrian facilities and 70 acres of rolling sagebrush shrub lands. In addition to the historic ranching and equestrian operations, the property also has an active archery range and has recently become the home of a four-season greenhouse that is being used for community-supported agriculture and education as a part of the Farm Collaborative program.

In 2017 City of Aspen Parks and Open Space Department staff worked to develop a management plan for Cozy Point Ranch. Throughout the planning process, the goals have been to identify ways to enhance the ecological health of the properties, examine the current uses and other suitable uses of the ranch, and to identify opportunities to upgrade the existing facilities and programming of the ranch.

The Farm Collaborative (formerly Aspen Tree), along with Cozy Point Ranch, LLC which operates the equestrian facilities, is one of two lease holders, located at Cozy Point Ranch and operates a sustainable

farm whose mission is, “connecting children and community through farming and food”. On June 18, 2020, the Farm Collaborative presented their proposed learning center to the Open Space and Trails Boards, where it received unanimous support.

DISCUSSION:

The proposed Farm Collaborative learning center aligns with the intended goals identified in the management plan. The Farm Collaborative has worked with City staff and the Open Space and Trails Board through several iterations of design, culminating in the design as shown in the Farm Collaborative attachment.

We welcome City Council’s feedback on the conceptual design and approach and ask for Council’s support for the Farm Collaborative to proceed with developing their facility and pursuing the land use application process

FINANCIAL/BUDGET IMPACTS:

The proposed learning center will be privately funded and is not anticipated to have financial impacts to the City budget.

ENVIRONMENTAL IMPACTS:

The proposed structure is within the activity envelope of the approved conservation easement. The proposed learning center is intended to be one of the most sustainable in Aspen.

STAFF RECOMMENDATION:

Staff recommends supporting the Farm Collaborative’s efforts to realize a new learning center. We will continue to monitor the project’s development and keep the Open Space and Trails Board informed to ensure the community’s values are represented.

ATTACHMENTS:

- Farm Collaborative presentation
- Cozy Point Management Plan

August 3rd, 2020

City of Aspen City Council
130 S Galena Street
Aspen, CO 81611

RE: Farm Collaborative Learning Center Building, Cozy Point Ranch

Dear City of Aspen City Council:

We are pleased to submit for your review and approval the Farm Collaborative Learning Center at the City of Aspen owned Cozy Point Ranch. After years of thoughtful planning and consideration, the Farm Collaborative is ready to proceed with bringing the vision of an integrated agricultural learning center into fruition. This building will essentially formalize the current agricultural learning activities occurring at Cozy Point today by bringing these activities under one roof. The following outlines project specifics and details for how the new structure will reorganize the Farm Collaborative leased area. On June 18th, 2020, the Farm Collaborative received unanimous City of Aspen Open Space and Trails approval for the project. As property owner, City of Aspen Council approval is also requested.

As you may know, the City of Aspen recently engaged in a Cozy Point Master Planning process that was intended to fully integrate an array of different uses at the Ranch, which included the development of this Learning Center. At this time, the City has suspended their master planning process. Independent submittal of the Farm Learning Center proposal for review absent the City of Aspen Master Plan will provide the Farm Collaborative with a path forward. Further, construction of the Learning Center does not limit the City of Aspen Master Plan efforts when it is ready to proceed. With review and approval by the City Council, we will proceed with making application to Pitkin County for a Location and Extent Review and an Activities of Local and State Interest Review, both public hearings.



Figure 1: Rendering of proposed Learning Center, looking northwest

Cozy Point and Farm Collaborative Lease Area:

The Farm Collaborative is located on the 166-acre Cozy Point Ranch that is home to multiple uses and structures including a riding horse arena, an historically designated Barn, archery range, and Cozy Point LLC worker housing. The subject property is accessed off Juniper Hill Road via Hwy 82. Cozy Point Ranch, though owned by the City of Aspen, is encumbered by a conservation easement held to the benefit of the Aspen Valley Land Trust (AVLT). The Farm Collaborative current leases approximately 15 acres for food production and education, with 1.46 acres dedicated to public learning space.

Farm Collaborative – Current Operations

The Farm Collaborative currently hosts an array of youth, community, and school programs as well as operates a town park (a Farm Park) that engages the public about where our food comes from, demonstrates options for carbon sequestration, and explores methods for solving our global climate challenges through local food production. The Farm Collaborative provides agricultural learning experiences at the property for school children from Aspen to Glenwood Springs year-round, with heightened attendance and operations during the summer into fall harvest. The current operations occur mostly outdoors and within a diversity of make-shift buildings that need consistent maintenance and attention. Off the farm, the organization hosts a partner agriculture production campus at the Pitkin County Lazy Glen Open Space. In addition, The Farm Collaborative hosts the annual Farm to Table FREE community meal at the Jerome which feeds 1,200 guests and garners approximately 250 volunteers. The group also offers a diversity of farmer support programs, including an equipment library, farmer loan program, and housing library. The Farm Collaborative recently acquired the edible ASPEN publication and will use this platform to expand its effort in increasing the resilience and success of our local food economy.

Farm Learning Center

With generous donations from the Community, the Farm Learning Center proposes to construct a new educational facility within the same location of the current Farm operations. The new building will house existing operations, with outdoor learning classes and programming now able to have a much more efficient and effective central learning component which formalizes the Farm Collaborative experience. The new building is especially desirable during inclement weather. The building includes multiple classroom spaces, a Welcome Center for the arrival of community visitors, school children, and guests, a demonstration and learning kitchen, a root cellar, and a 2nd floor office and pollinator garden roof. In addition, equipment storage and wash station, and outdoor classroom space is included on the exterior of the facility. The Learning Center



Figure 2: Rendering of proposed Learning Center, looking northeast

replaces 8 make-shift structures currently being used to conduct operations. The aim of the Farm Learning center is to consolidate current uses and operations into one (1) sensitivity designed and attractive building that the Community encompasses community pride.

Continued operations:

The new Farm Learning Center will operate in an almost identical fashion and location as the current operations. The following outlines continued uses and current operations at Cozy Point:

- Continue to offer free public visitation
- Continue to offer free community events
- Continue to host community workshops
- Continue to offer farm to table meals
- Continue vegetable production;
- Continue grazing of animals and livestock;
- Continue to offer children's programming for schools up and down the Roaring Fork Valley;
- Continue to further the Farm Collaborative mission of agricultural learning with an emphasis on personal and environmental health benefits from local food production.

New Operations:

The Farm Collaborative respectfully requests support for the following new onsite operations:

- With the development of the Farm Learning Center, the Farm Collaborative will be able to expand school programs to year round and better meet state health code requirements for summer programming and in product processing.
- The Farm Collaborative will be able to increase the aesthetic of the site for our neighbors and visitors, eliminating the scattered buildings and centralizing operations.
- The Learning Center will allow for better organization of onsite farm to table meals, which currently require tenting and make-shift infrastructure.
- The facility will allow for more integrated learning opportunities with the use of a learning and demonstration kitchen.
- The facility will allow for expanded production across the Roaring Fork Valley by offering a large root cellar space available for storage of crops from multiple farmers.
- The existing large and dilapidated loafing shed that has a roof top classroom will be eliminated and replaced with two (2) mobile loafing sheds (west of the Learning Center) that will be mobile and increase the well-being of animals in the field during rotational grazing.
- The option for increasing the square footage of the currently approved greenhouse over time.
- A Farm stand, located at the Welcome Center, will operate similar to the tack shop in Cozy Point LLC's operation, and is proposed for the sale of Farm agricultural products including, vegetables, milk, and meat.

Details and Dimensions:

The Farm Collaborative proposes to operate in the following capacity:

- Summer: 7 days / week.
- Fall/Spring: Monday – Friday with weekend workshops during the fall harvest.
- Maximum of 65 children or people onsite for educational programming at any one time (same as current maximums).
- Farm Stand – open Sunday through Monday. For sale of locally produced vegetable and Farm products.

The Farm Collaborative proposes the following dimensions for the new Learning Center:

- 26' 9" in maximum height – this height is below the County regulated height limit of 33' to a ridge.
- Main Level: approximately a 4,000 sq. ft. of floor area encompassing the Welcome Center, educational classrooms, and learning kitchen.
- 2nd Floor: approximately 850 sq. ft. of floor area encompassing an office and pollinator garden living roof.
- Subgrade Basement: approximately 4,000 sq. ft. of floor area encompassing the root cellar and the food processing kitchen.
- An estimated 3,000sq. ft. of existing buildings will be removed from the lease area and replaced with the Learning Center.

ADDITIONAL PROJECT CONSIDERATIONS:

Access: Juniper Hill Road is proposed as the main access to Cozy Point Ranch and the Farm Collaborative operation. An existing secondary access exists just up valley of Juniper Hill Road and is proposed to be closed. Closure of this access along Hwy 82 is consistent with the Colorado Department of Transportation (CDOT) and the multiple governmental agency approved CDOT Access Control Plan.

Traffic and Parking: The Farm Collaborative is aware of parking and traffic concerns in the Cozy Point Ranch neighborhood and the Brush Creek Village Subdivision. The proposed site plan includes adequate onsite parking for the Learning Center. Offsite parking or parking on Juniper Hill Road is not part of the proposal. We have engaged a traffic professional to study baseline uses on Cozy Point and any potential impact from the development of the Learning Center. We will be working with CDOT using the adopted Access Control Plan requirements, with heightened analysis of the Juniper Hill/Hwy 82 Intersection. We expect that this aspect of the proposed Learning Center will be reviewed thoroughly by Pitkin County during the land use review process.

Aspen Valley Land Trust (AVLT) Easement: The Farm Collaborative is in active contact with AVLT regarding their easement holding at the Cozy Point Ranch. The Farm Collaborative requested and received a letter from AVLT stating that the proposed project is not inconsistent with the Cozy Point Conservation Easement.

Summary:

The Farm Collaborative thanks City Council for the opportunity to present the Learning Center and its vision for an integrated agricultural experience. With unanimous approval from the City of Aspen Open Space and Trails Board, the Farm Collaborative is ready to move forward with the project and City Council approval is requested.

Thanks,



Mike Kraemer
BendonAdams, LLC

Attachments:

- A. Learning Center renderings
- B. Site Plans
- C. Elevations and Floor Plans



Bendon Adams



rowland + broughton
architecture / urban design / interior design



Bendon Adams



rowland + broughton
architecture / urban design / interior design



Exhibit B



LEGEND

- | | | |
|---|---|---|
| 1 Access from HWY 82 | 7 ADA Parking & Drop Off | 13 Farm Collaborative Materials Storage |
| 2 Access from HWY 82 to be Abandoned | 8 Maintenance Building | 14 Vegetable Production |
| 3 Overflow Parking for Camp Cozy Point & Farm Collaborative | 9 Employee Housing Unit | 15 Heritage Tree Orchard |
| 4 Access to Camp Cozy Point & Farm Collaborative | 10 Ranch Office | 16 Proposed Walkway to Farm Center |
| 5 Camp Cozy Point Check In | 11 Pan Abode | 17 Proposed Farm Center |
| 6 Camp Cozy Point/Farm Collaborative Parking | 12 Farm Collaborative Equipment Storage | 18 Existing Septic Field |
- existing well location - - - activity envelope



FARM COLLABORATIVE



LEGEND

- 1 Historic Red Barn
- 2 Camp Cozy Point Check In
- 3 ADA Parking & Drop Off
- 4 Proposed Walkway to Farm Center
- 5 Employee Housing Unit
- 6 Maintenance Building
- 7 Pan Abode
- 8 Existing Septic Field
- 9 Access Road per Fire Code
- 10 Produce Unloading Area
- 11 Equipment Library
- 12 Farm Center
- 13 Outdoor Classroom
- 14 Pollinator Roof Garden
- 15 Existing Food Forest to Remain
- 16 Flex Lawn
- 17 Existing Grow Dome
- 18 Existing Rolling Greenhouse
- 19 Proposed Greenhouse
- 20 Future Greenhouses
- 21 Dry Lot w/ Chickens, Goats, Sheep
- 22 Mobile Chicken Coop
- 23 Mobile Loafing Shed
- 24 Mobile Hay Storage
- 25 Proposed Septic Field
- 26 Existing Fence
- 27 Proposed Fence
- 28 Vegetable Production
- 29 Section of Fence to be Removed
- 30 5' Setback

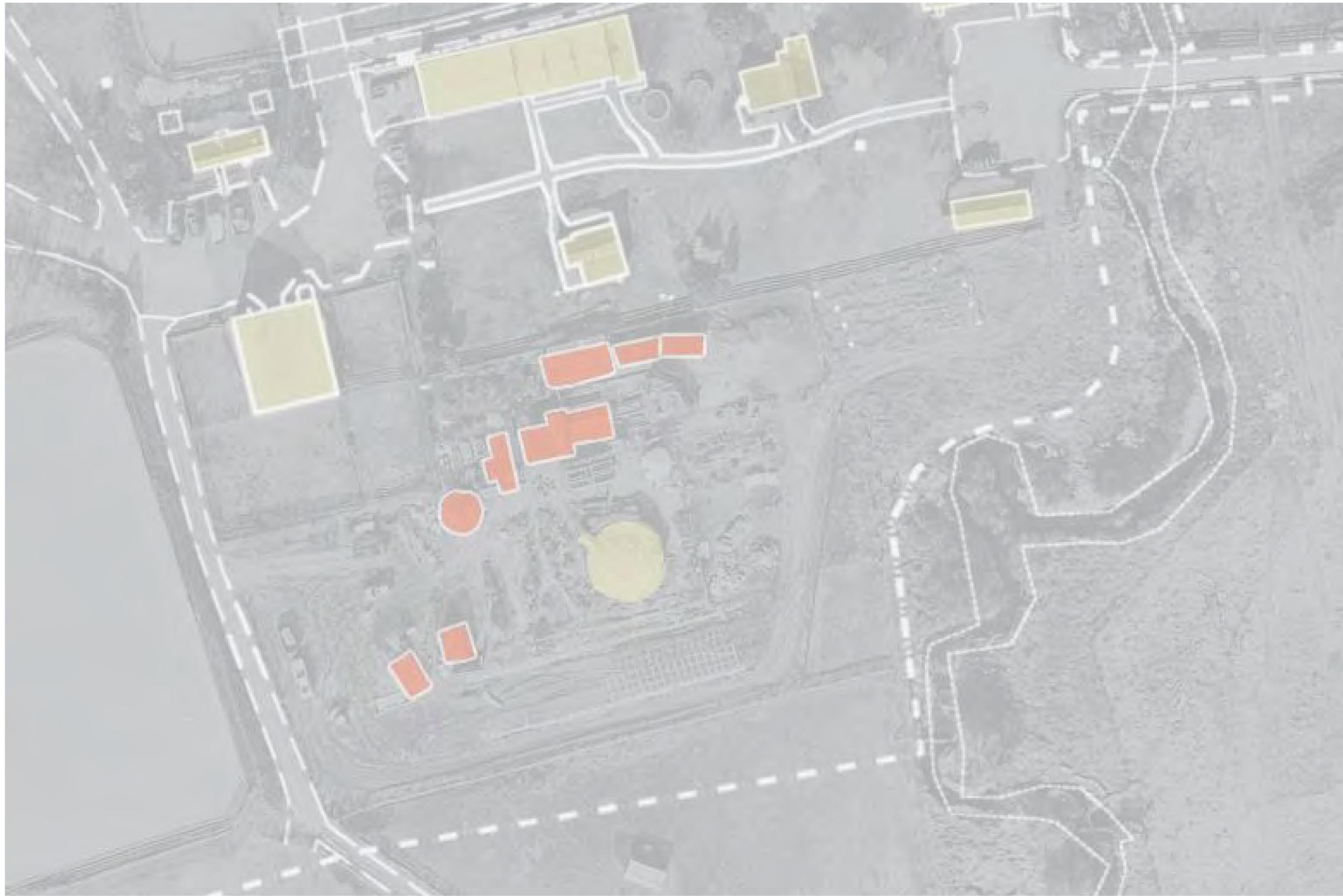


0' 25' 50' 75' 100'



may 20 2020 | schematic master plan

THE FARM COLLABORATIVE



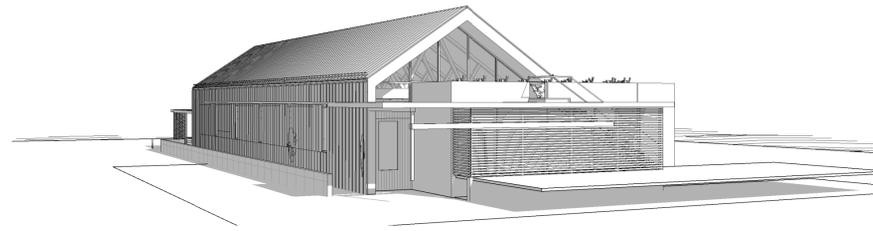
LEGEND

- structures to remain
- structures to be removed

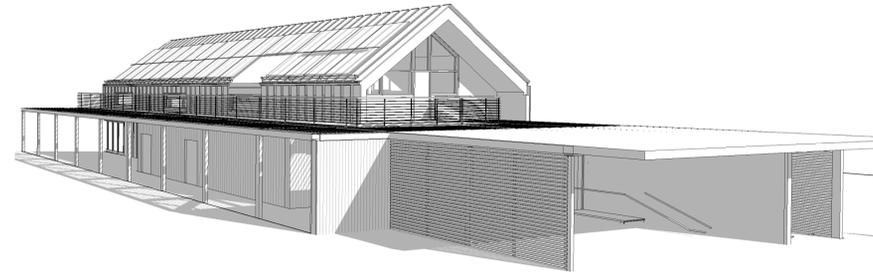


PROJECT IMAGES

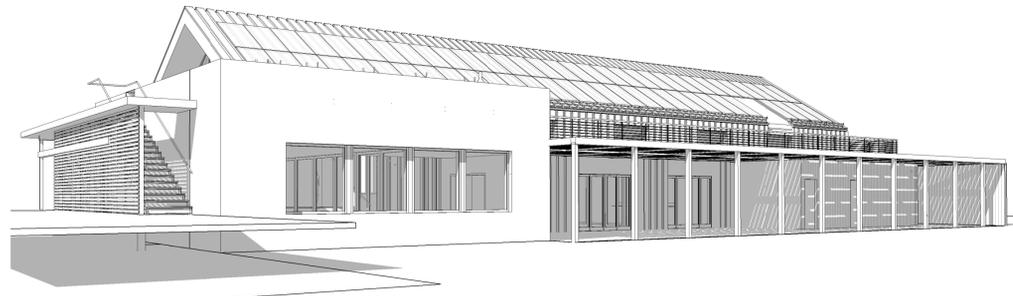
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MAIN ENTRY APPROACH - NORTHWEST VIEW

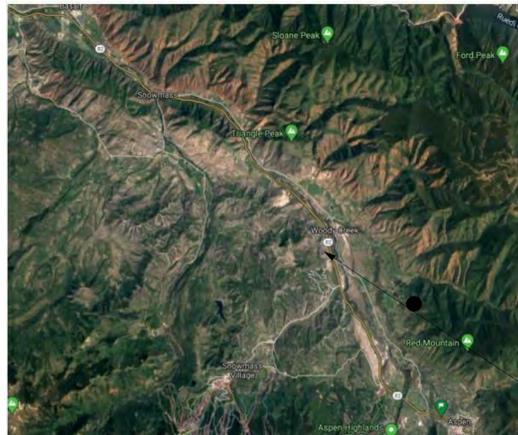


FARM CENTER - SOUTHEAST VIEW



FARM CENTER - SOUTHWEST VIEW

VICINITY MAP (N.T.S.)



220 JUNIPER HILL RD
ASPEN, CO 81611

PROJECT DIRECTORY

OWNER: FARM COLLABORATIVE
220 JUNIPER HILL RD
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ASPEN, CO 81611
PHONE: (970) 379-2323
CONTACT: EDEN VARDY
email: eden@thefarmcollaborative.org

ARCHITECT: ROWLAND+BROUGHTON
ARCHITECTURE AND URBAN DESIGN
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FAX: 970.544.3473
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SHEET INDEX

ARCHITECTURAL	
A0.1	COVER
A1.1	CONTEXT PLAN
A1.2	SCHEMATIC MASTER PLAN
A1.3	DEMO PLAN
A2.0	LEVEL 0 FLOOR PLAN
A2.1	LEVEL 1 FLOOR PLAN
A2.2	LEVEL 2 FLOOR PLAN
A2.3	ROOF PLAN
A4.1	EXTERIOR ELEVATIONS
A4.2	EXTERIOR ELEVATIONS
A5.1	BUILDING SECTION
A5.2	BUILDING SECTION

Exhibit C



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970.544.9006 303.308.1373

Consultants:

Issuances and Revisions:
05.21.20 BRUSH CREEK METRO DISTRICT MEETING
06.08.20 OST BOARD REVIEW

NOT FOR CONSTRUCTION

FARM COLLABORATIVE

210 JUNIPER HILL ROAD
PO BOX 8064
ASPEN, CO 81612

PROJECT NO:
21819.00

SHEET TITLE:
COVER

SCALE: 12" = 1'-0"

A0.1

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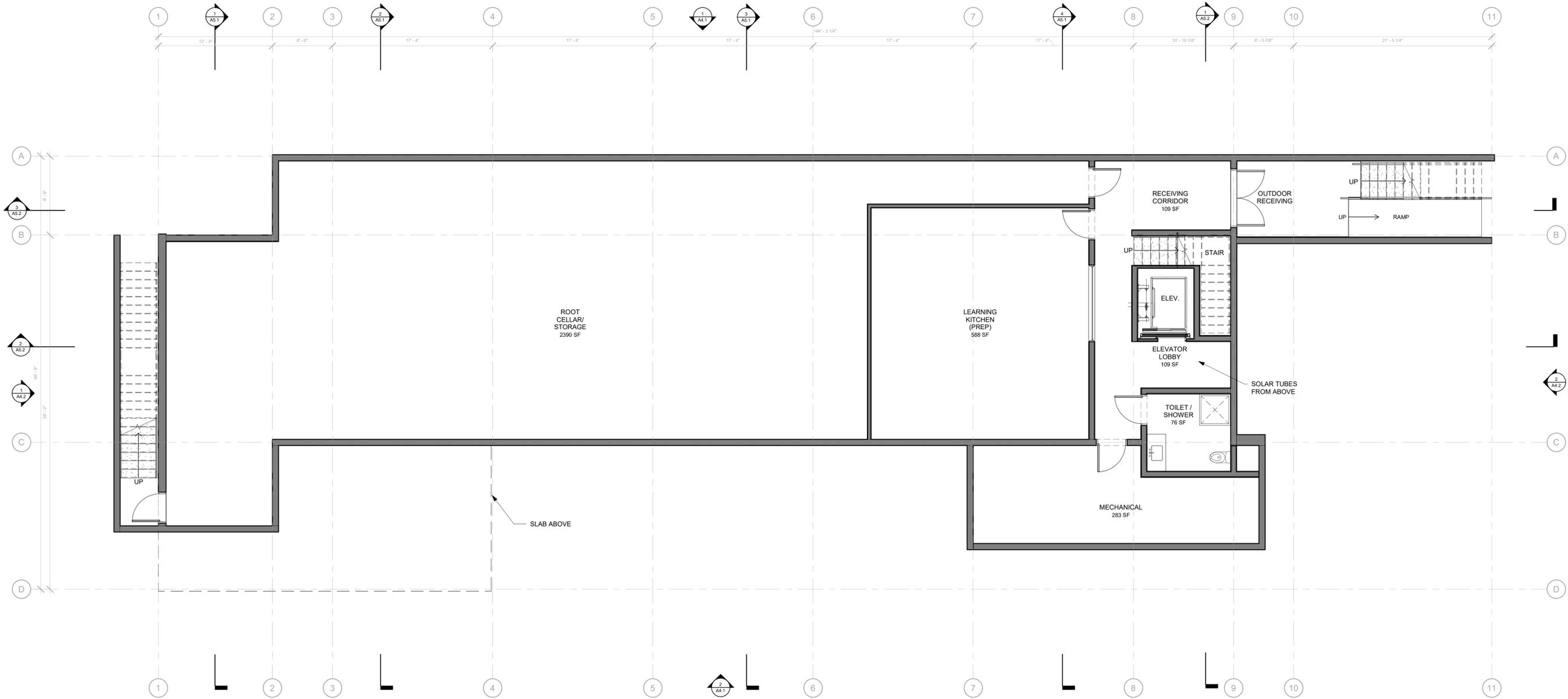


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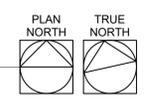
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06.08.20 OST BOARD REVIEW



1 LEVEL 0 FLOOR PLAN
A2.0 SCALE: 3/16" = 1'-0"



LEVEL 0 FLOOR PLAN - 3,752 SF

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FARM COLLABORATIVE

210 JUNIPER HILL ROAD
PO BOX 8064
ASPEN, CO 81612

PROJECT NO:
21819.00

SHEET TITLE:
LEVEL 0 FLOOR PLAN

SCALE: 3/16" = 1'-0"

A2.0

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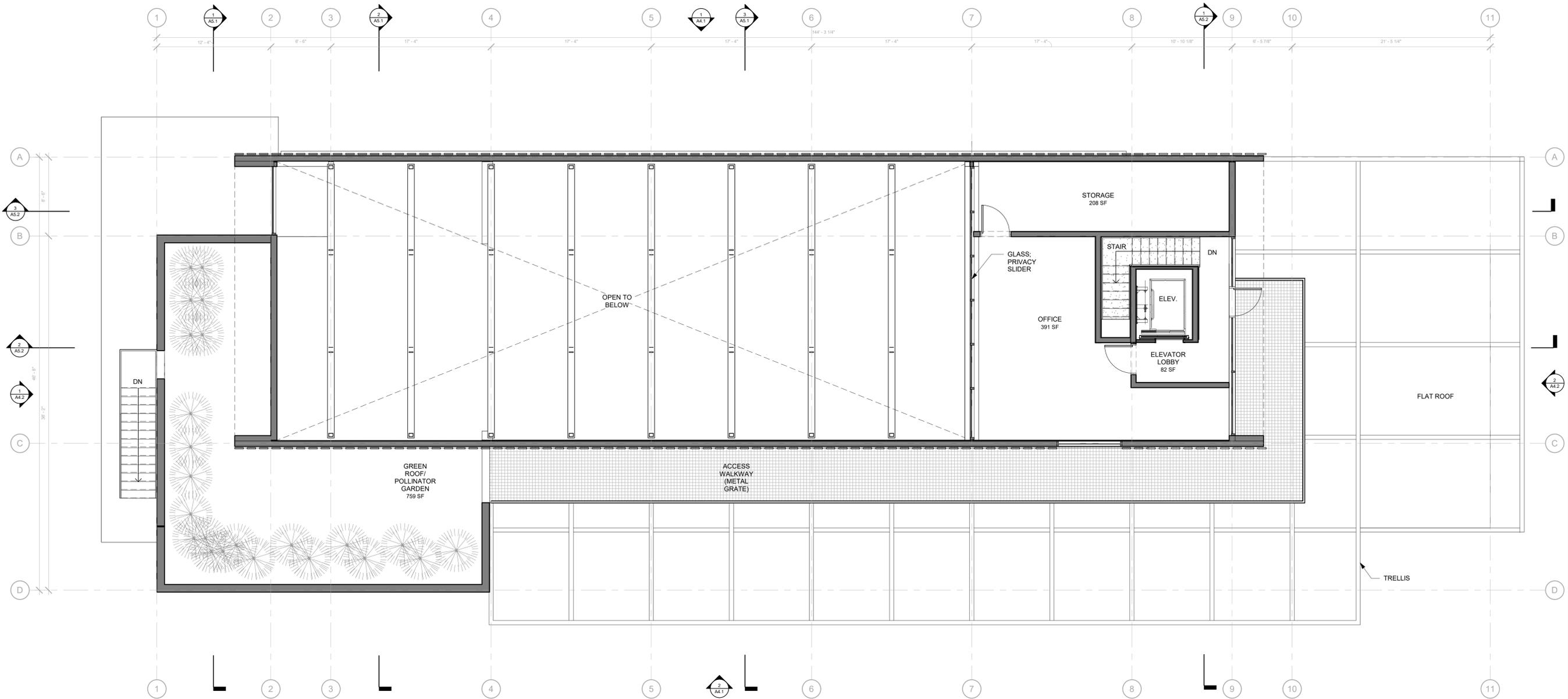


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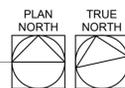
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06.08.20 OST BOARD REVIEW



1 LEVEL 2 FLOOR PLAN
A2.2 SCALE: 3/16" = 1'-0"



LEVEL 2 FLOOR PLAN - 852 SF

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FARM COLLABORATIVE

210 JUNIPER HILL ROAD
PO BOX 8064
ASPEN, CO 81612

PROJECT NO:
21819.00

SHEET TITLE:
LEVEL 2 FLOOR PLAN

SCALE: 3/16" = 1'-0"

A2.2

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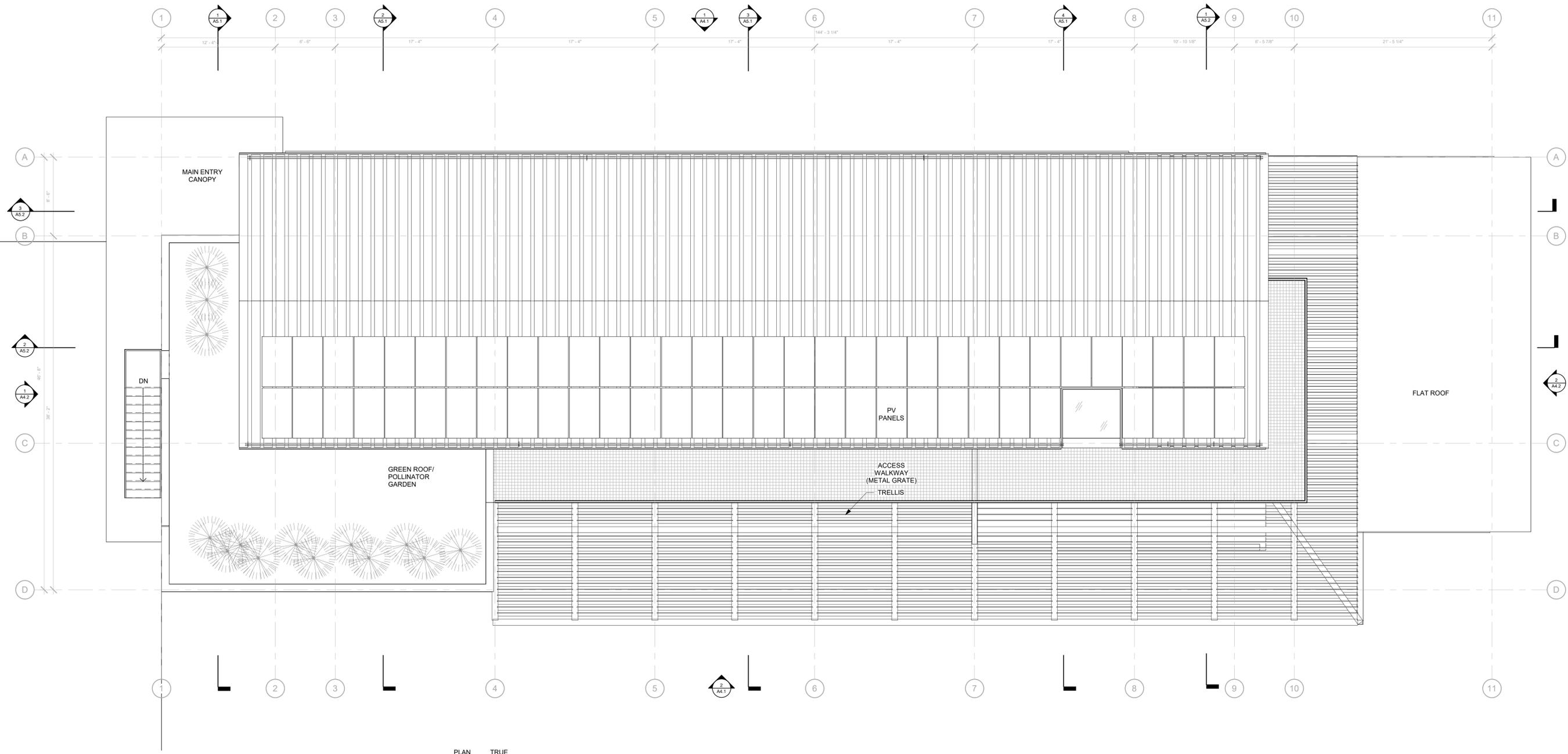
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SHEET TITLE:
ROOF PLAN

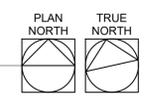
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A2.3

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1 LEVEL ROOF
A2.3 SCALE: 3/16" = 1'-0"



FILE: 210 JUNIPER HILL ROAD - FARM COLLABORATIVE - SITE - CENTRAL - 04/20/2020.rvt
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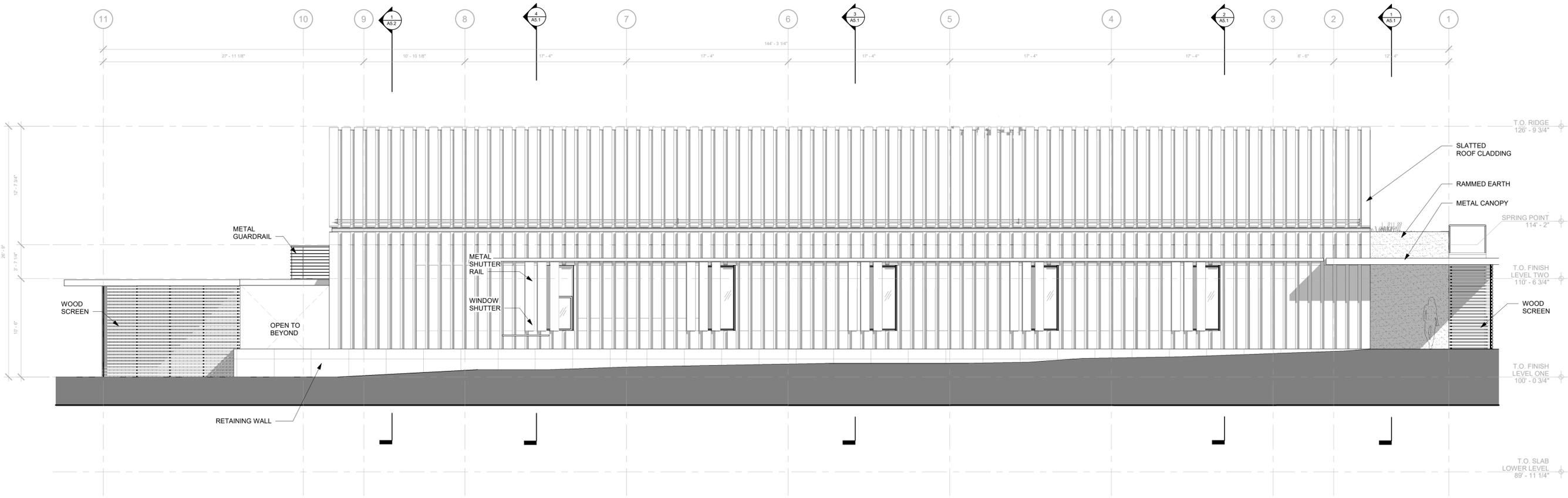


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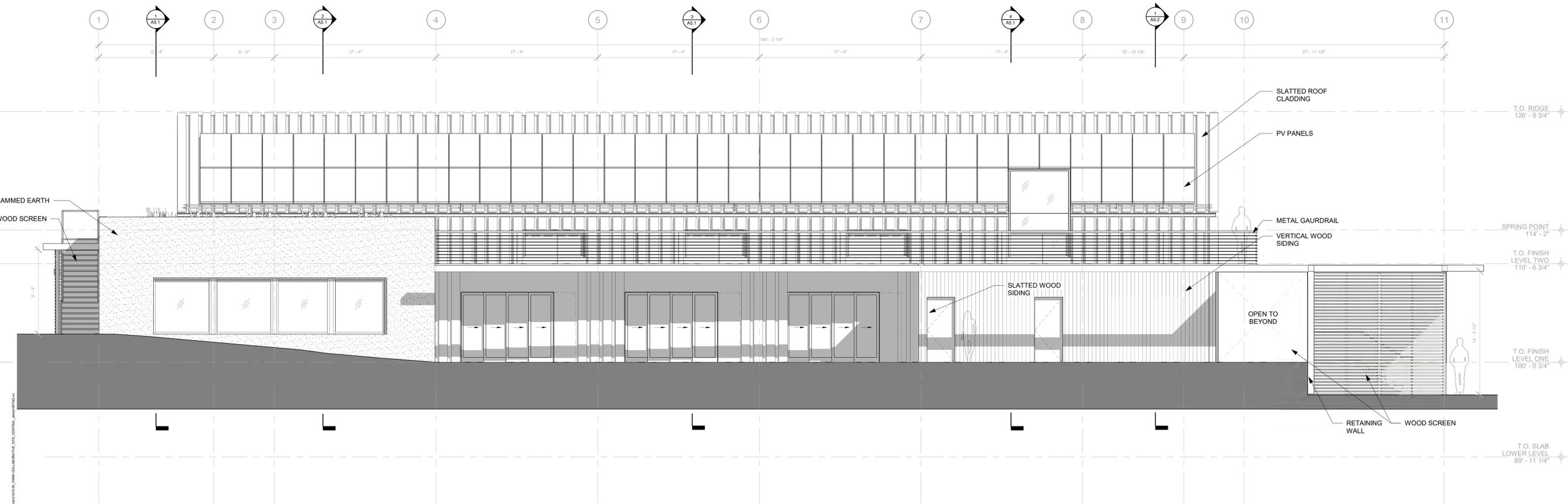
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aspen, co 81611 denver, co 80202
970.544.9006 303.308.1373

Consultants:

Issues and Revisions:
05.21.20 BRUSH CREEK METRO DISTRICT MEETING
06.08.20 OST BOARD REVIEW



1 NORTH ELEVATION
A4.1 SCALE: 3/16" = 1'-0"



2 SOUTH ELEVATION
A4.1 SCALE: 3/16" = 1'-0"

NOT FOR CONSTRUCTION

FARM COLLABORATIVE

210 JUNIPER HILL ROAD
PO BOX 8064
ASPEN, CO 81612

PROJECT NO:
21819.00

SHEET TITLE:
EXTERIOR ELEVATIONS

SCALE: 3/16" = 1'-0"

A4.1

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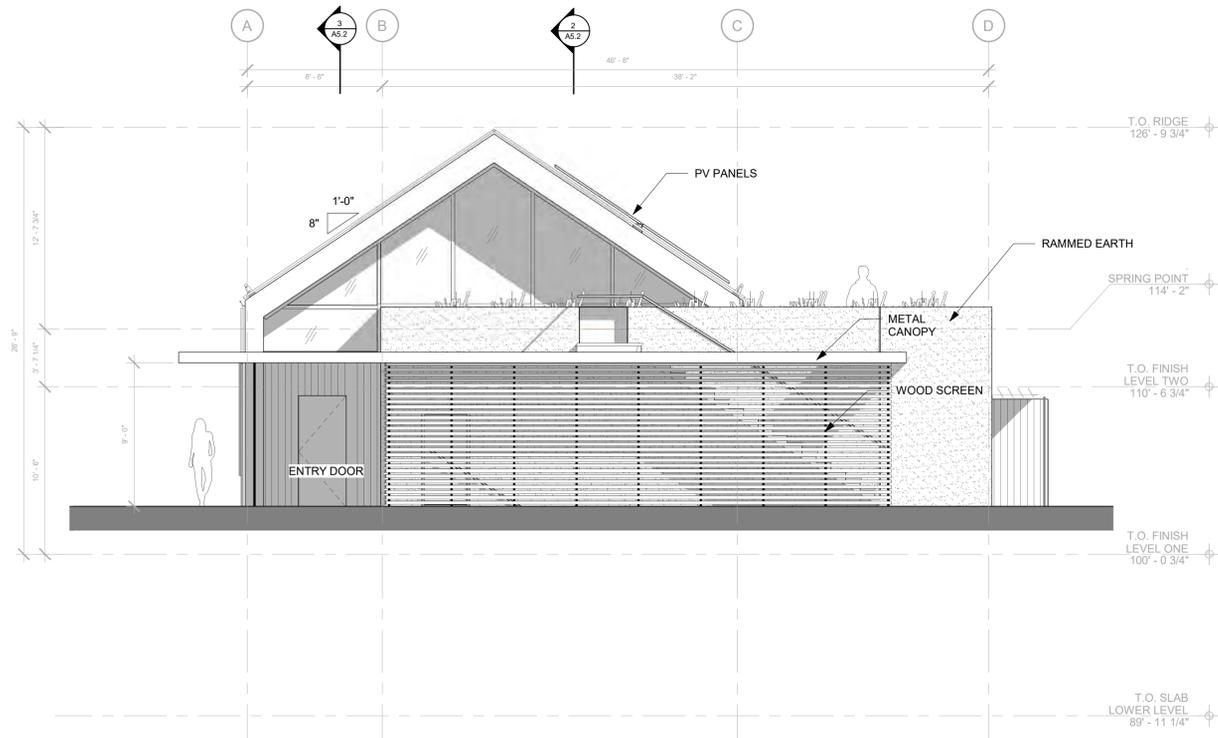


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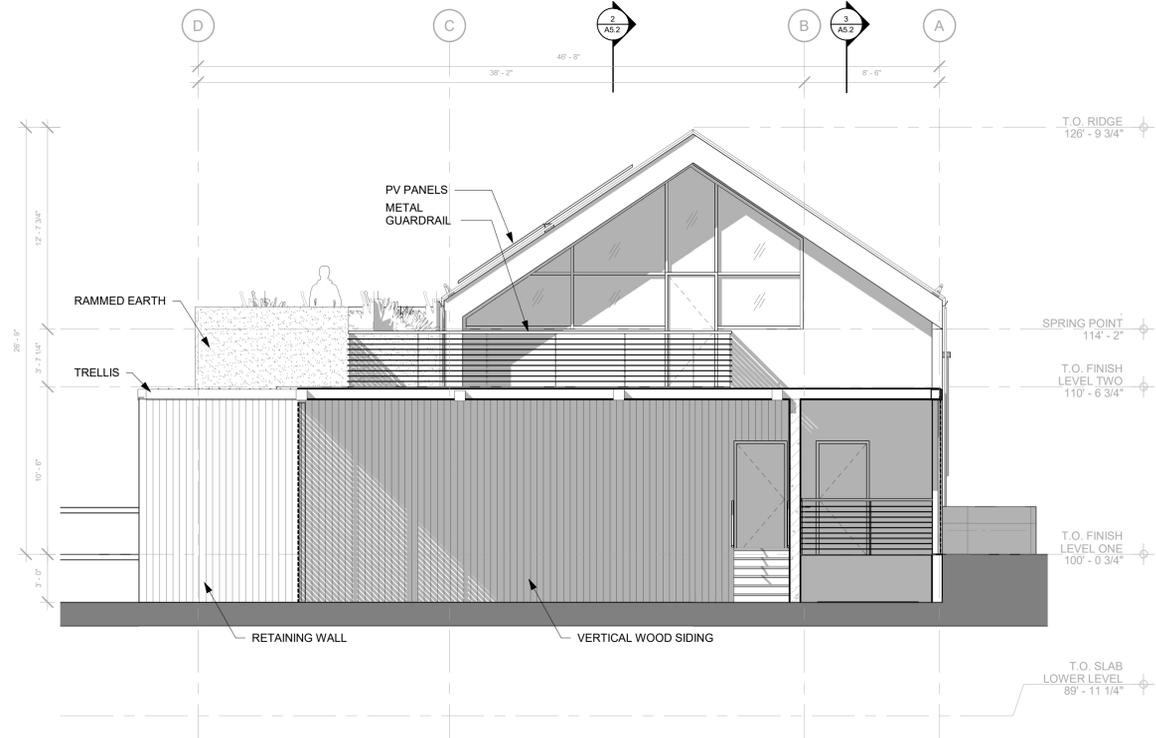
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Consultants:

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1 WEST ELEVATION
A4.2 SCALE: 3/16" = 1'-0"



2 EAST ELEVATION
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PROJECT NO:
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SHEET TITLE:
EXTERIOR
ELEVATIONS

SCALE: 3/16" = 1'-0"

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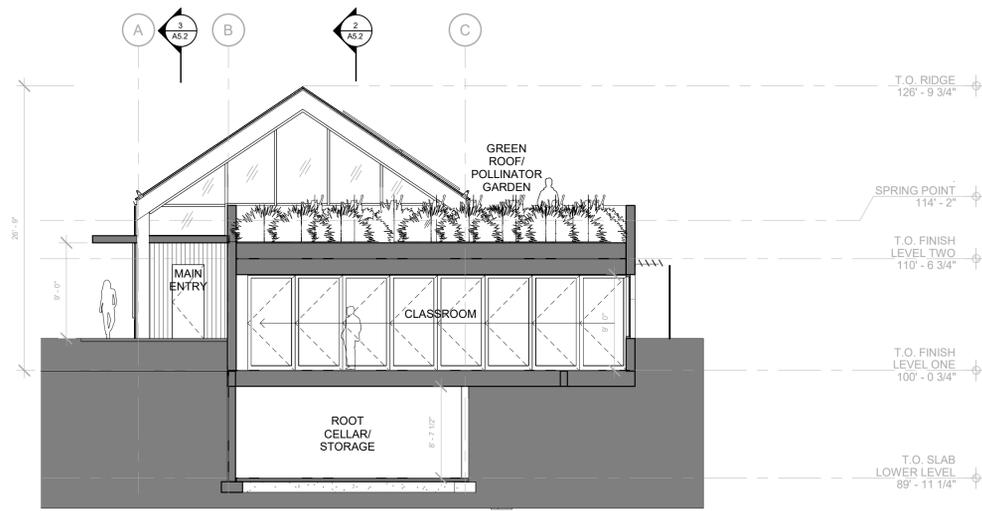
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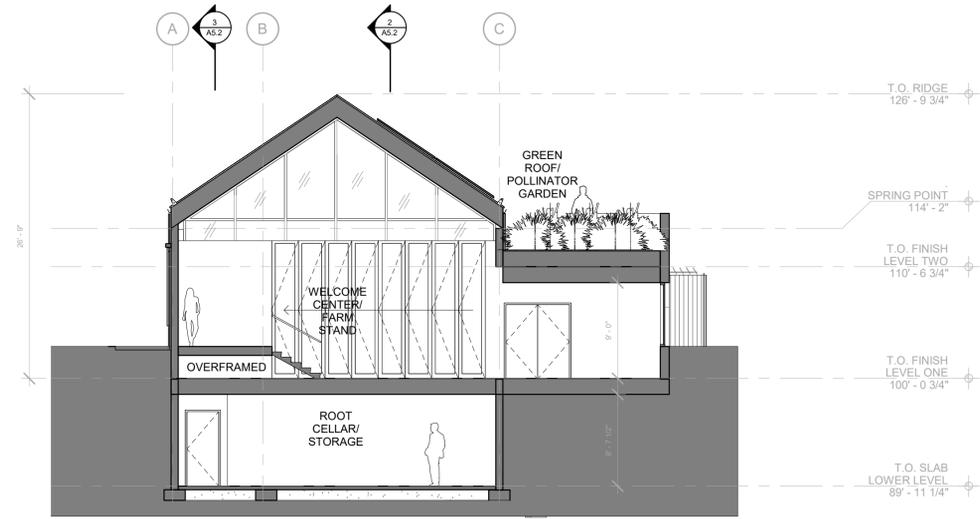
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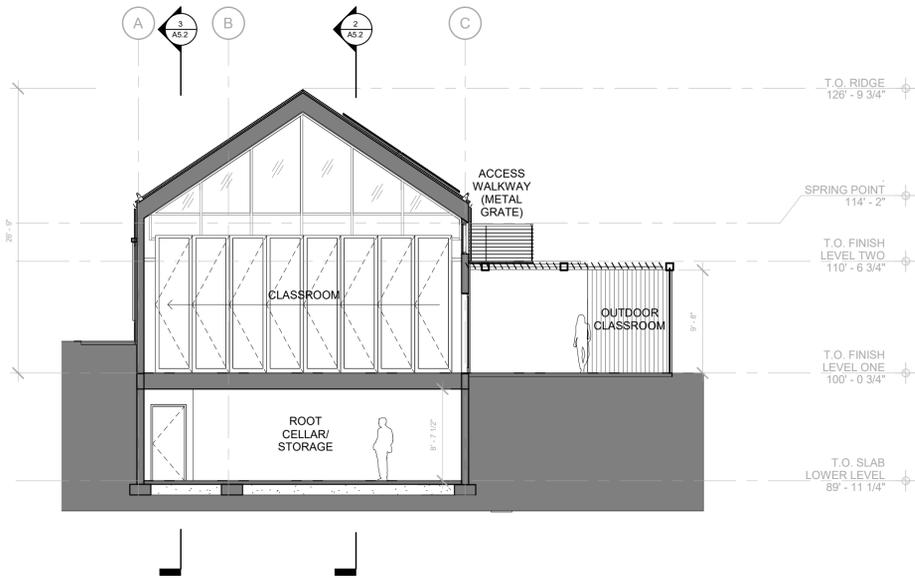
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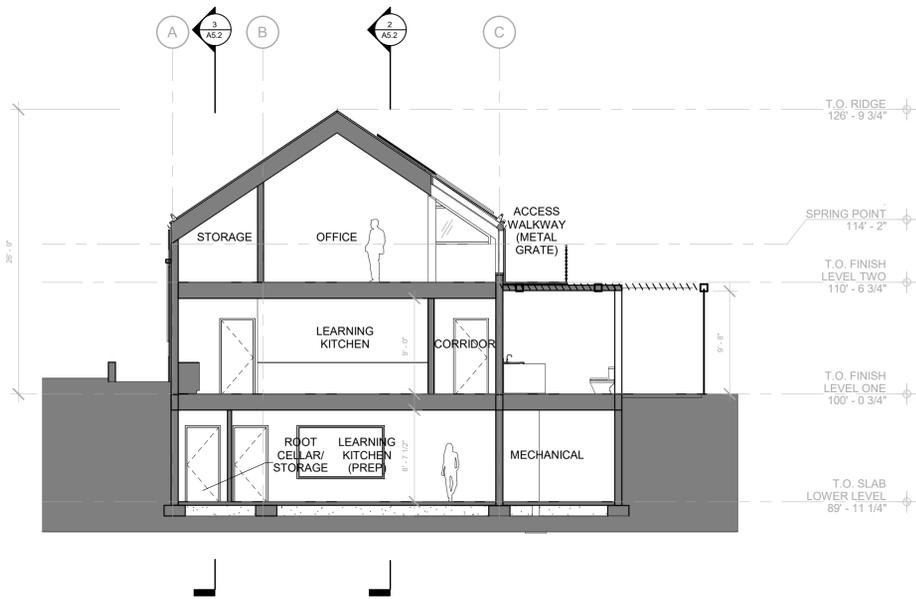
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ASPEN, CO 81612

PROJECT NO:
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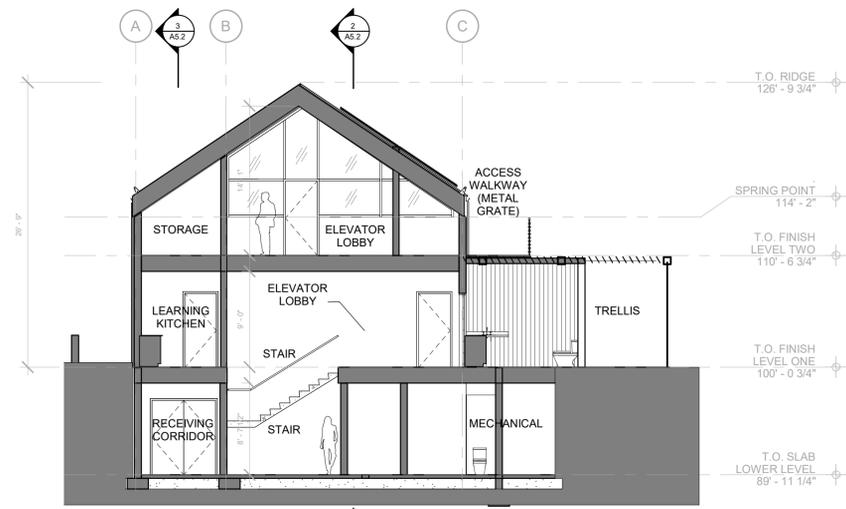
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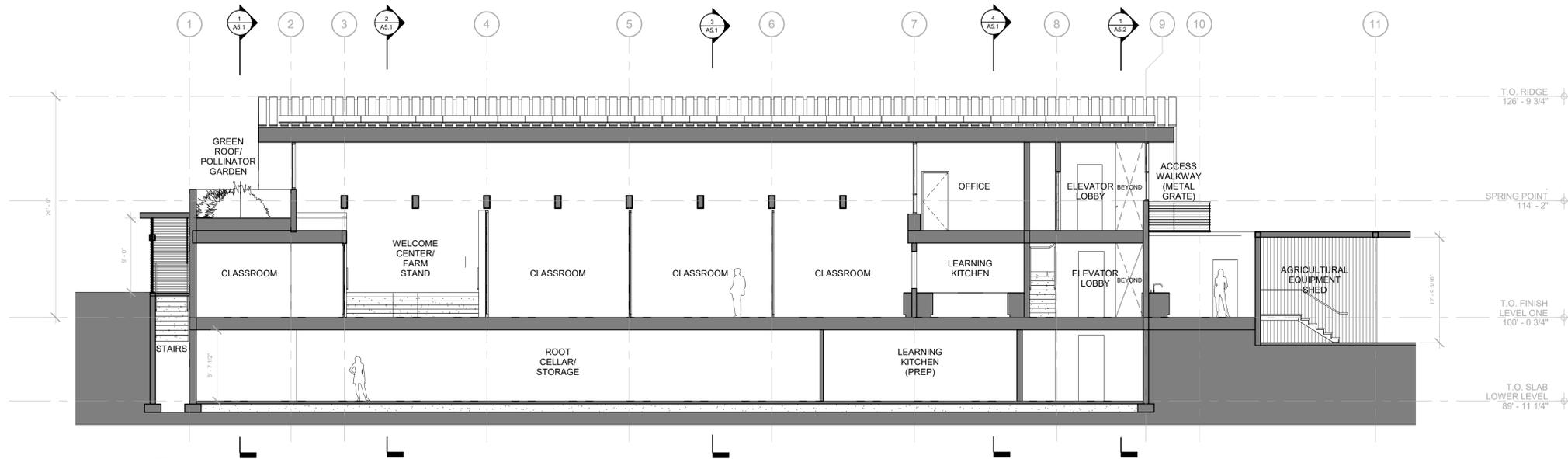
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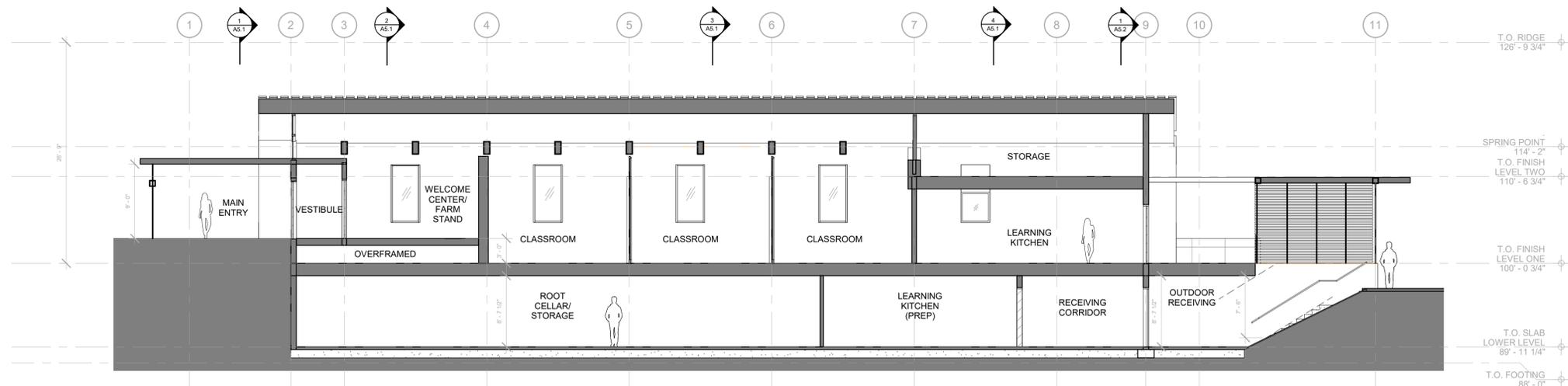
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3 BLDG. SECTION - EW2
A5.2 SCALE: 1/8" = 1'-0"

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FARM COLLABORATIVE

210 JUNIPER HILL ROAD
PO BOX 8064
ASPEN, CO 81612

PROJECT NO:
21819.00

SHEET TITLE:
BUILDING SECTION

SCALE: 1/8" = 1'-0"

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COZY POINT RANCH MANAGEMENT PLAN



COZY POINT RANCH MANAGEMENT PLAN

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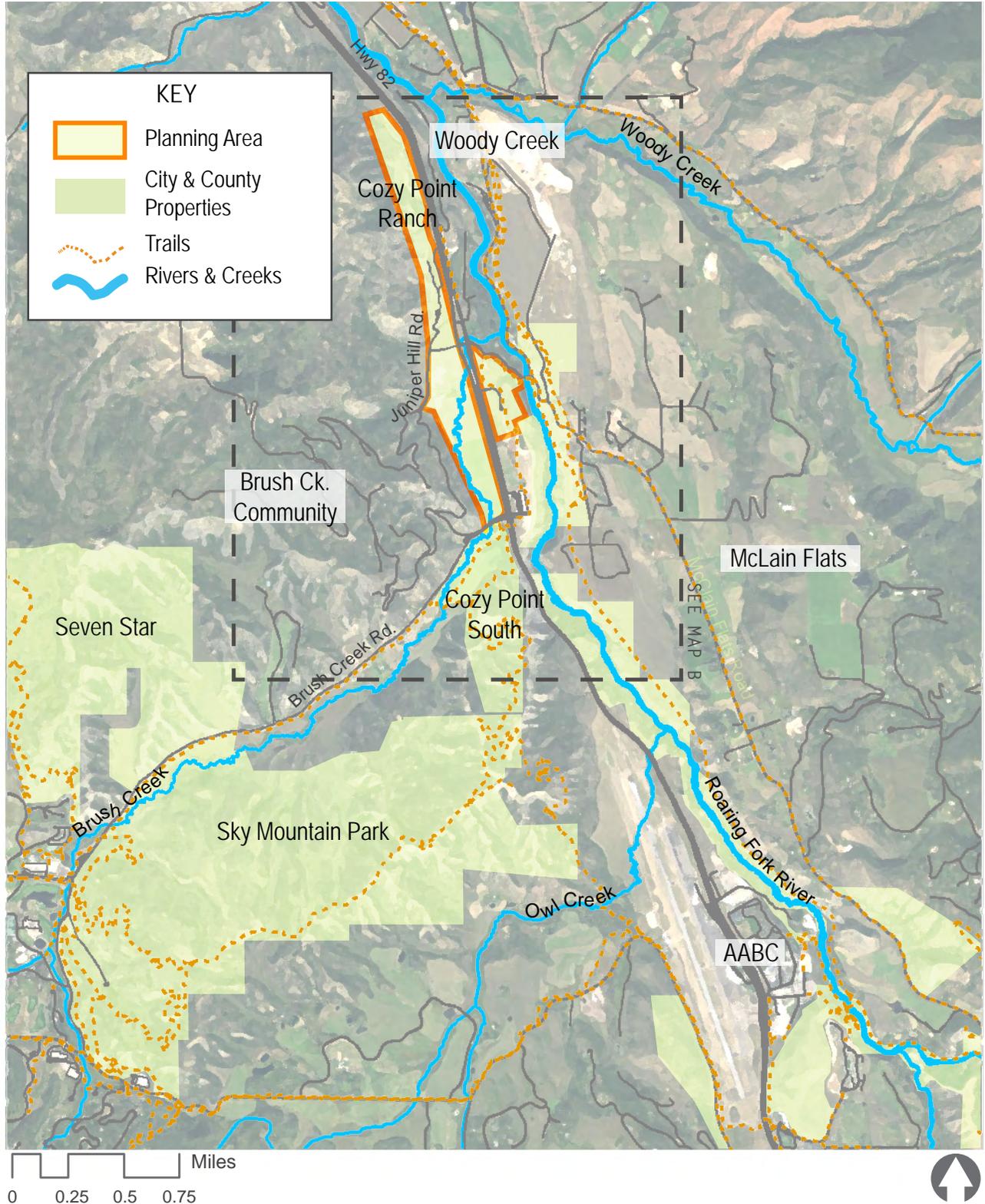
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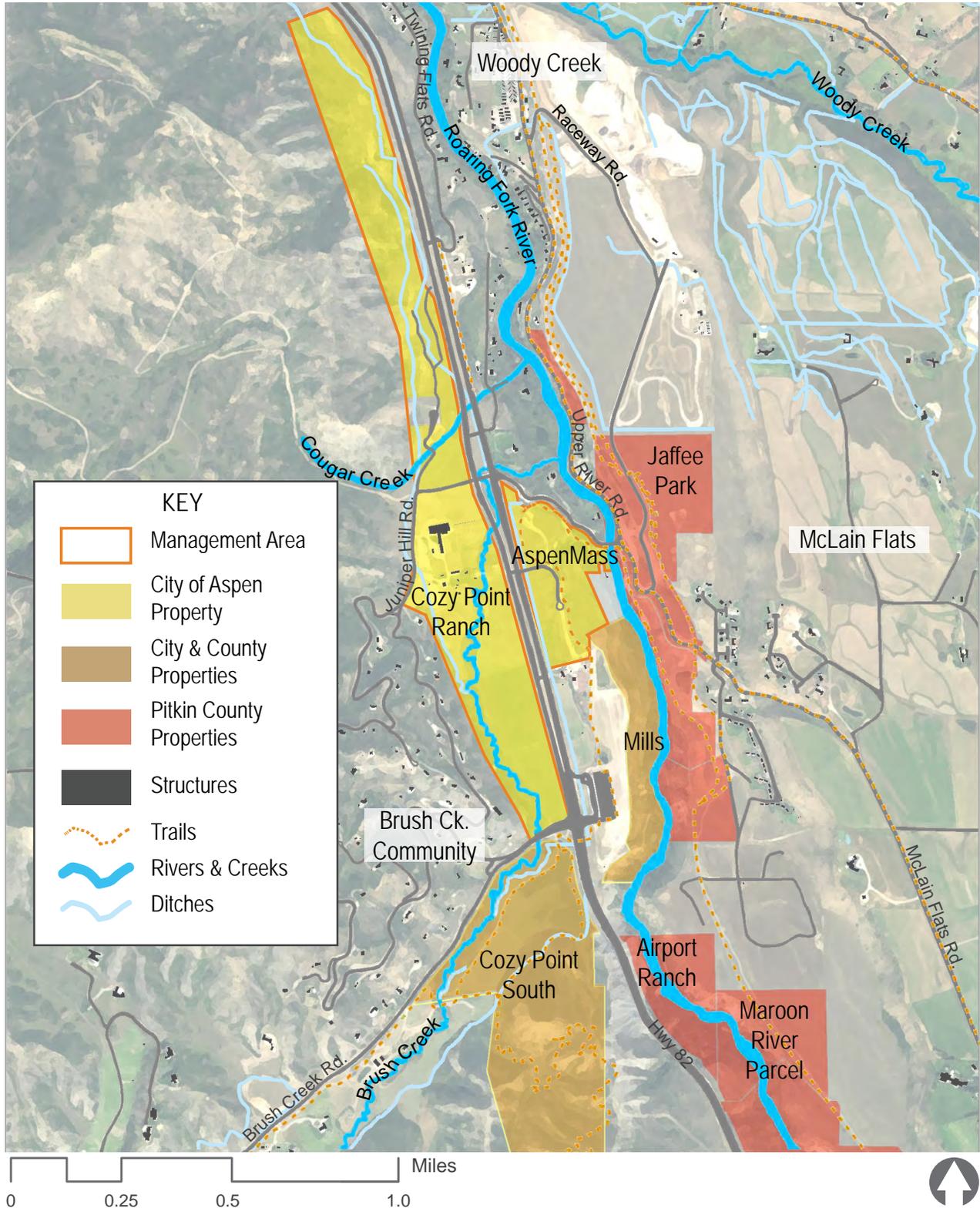
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“A community is the mental and spiritual condition of knowing that the place is shared, and that the people who share the place define and limit the possibilities of each other’s lives. It is the knowledge that people have of each other, their concern for each other, their trust in each other, the freedom with which they come and go among themselves.” ~ Wendell Berry

COZY POINT RANCH GATEWAY PROPERTY



COZY POINT RANCH & ADJACENT OPEN SPACE PROPERTIES



“All innovation starts embryonically ~ Joel Salatin

COZY POINT RANCH MANAGEMENT PLAN 1.0 INTRODUCTION



All year round Cozy Point Ranch is an important habitat for many animals. Photo courtesy of Cozy Point Ranch LLC

1.1 PURPOSE

The vision for Cozy Point Ranch has emerged out of its long and rich history, beginning with the original homestead in 1890. Today it is a 168-acre City of Aspen open space property where lessees run a public equestrian operation and a farm and garden learning center, with areas of wildlife habitat, a public archery range, and historic buildings and agricultural activities. This authentic, working landscape, located at the intersection of Highway 82 and Brush Creek Road, is the gateway to the communities of Aspen and Snowmass.

With its historic red barn and pastoral land, Cozy Point Ranch is an iconic vista that has benefited residents and visitors to the area for decades. The ranch was purchased by the City in 1994 in order to preserving its ranching heritage by utilizing historically agricultural lands and equestrian facilities, as well as protecting important natural landscapes such as native mountain shrublands, pinyon-juniper woodlands, shale badlands, and riparian ecosystems.

The vision is a broad, future-oriented concept of Cozy Point Ranch that honors the land's history and unique attributes, the community, and the goals of the City of Aspen Open Space and Trails Program:

Preserving our valley's ranching heritage and fostering ecological & community health through innovative management approaches that provide locally-grown food and enhance equestrian and agricultural operations, while connecting the community with the land.



Hands-on experiences at Aspen T.R.E.E give children priceless knowledge about their food. Photo courtesy of Aspen T.R.E.E.

A vision for the property first came into focus during a special work session conducted on the site in 2014 by ranch manager at the time, Monroe Summers, for Aspen City Council and City of Aspen Open Space and Trails Board members. Monroe inspired and captivated Council and Board members with the role the property played in the community, as well as his passionate and forward-thinking ideas about future possibilities for expanding and deepening that role, making the ranch a truly unique and valuable public amenity. When Monroe passed away only a few months later, the City stepped in to directly manage the property and lessees, and the need for developing a formal management plan came to the forefront. The plan was developed from the original vision set forth by Monroe and enhanced through research and public input.

The vision is to be carried out by operating in a manner consistent with these guiding principles:

PRESERVATION...

of natural and rural beauty, wildlife habitat, riparian ecosystems, and our ranching heritage

SUSTAINABILITY...

meeting the needs of the present while maintaining a commitment to the future through fostering healthy natural ecosystems, economic vitality, and socially responsibility

EDUCATION...

connecting people with the land through educational programming encompassing equestrian pursuits, agricultural and local food systems awareness, environmental appreciation, and our valley's ranching heritage

HEALTHY COMMUNITY...

supporting a happy, healthy community through public access to nature, local food, recreational and equestrian pursuits, and other amenities on the ranch, while providing the benefits of ecosystem services

SAFETY...

promoting the safety of all who use the site including the safety and welfare of the animals who live there

The purpose of this management plan is to provide sound rationale and directives that will guide the management of Cozy Point Ranch Open Space toward its full potential to serve the community. Moving forward with this plan, the City is in an exciting position to lead the way with precedent-setting agricultural, equestrian, natural, and recreational integrated systems operating sustainably on public open space land. This plan strives to honor the land's history and unique attributes, develop the City's leadership role in the local agriculture sector,

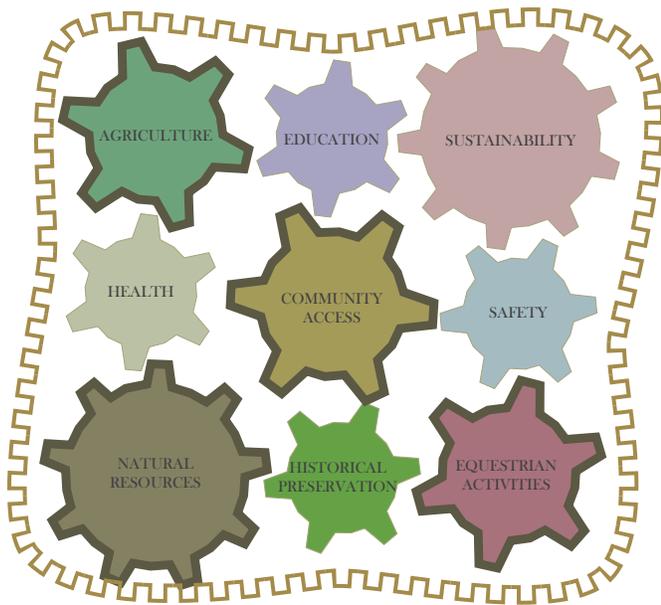


Figure b: "Key Components & Principles of CPR"

and reflect the values and passionate commitment of our community coming together around this special property.

The plan also serves as a guide to current and future potential lessees in developing proposals and business plans that will help realize the vision for Cozy Point Ranch. Equestrian and agricultural lessee(s) will be overseen by the City of Aspen's ranch manager acting as the overall land steward. Lessee(s) will bring in the expertise needed to address actions that fall within the scope of their operation(s), in collaboration with the ranch manager. Working together they, will achieve the goals laid out in this plan.

The management plan was developed through consultation with experts, a rigorous public process, and additional research, all of which is detailed within this document. Existing conditions of the property are described, including operations, facilities, easements, and an ecological analysis of the land. The plan identifies opportunities and constraints with respect to the land, its management, and surrounding properties. This is followed by a set of current recommended management actions that address many of the opportunities and constraints, in pursuit of the vision. This management plan will

be reviewed every five to ten years to reassess the evolving needs of the property in order to best care for the land and serve the community.

Built around and reflecting public comments, the key components (see Figure b) addressed in the plan are briefly described below. Complete details and background information may be found in Chapters 3 and 4, and in the Appendices.

Natural resource protection and function is a key component to the plan. Ecological health is a top priority of the management plan, in response to the fundamental needs of the land at the ranch and as a basis on which the success of all other goals and operations rest. These efforts will address needs such as stabilizing and restoring the ecological integrity of the two streams on the property, maintaining wildlife habitat where appropriate, utilizing best management practices in agricultural fields, and protecting connections for wildlife among the large tracts of adjacent open space habitat. Related actions outlined in Chapter 4 will return ecological health to the streams and land after many decades of improper and intensive use.

The City of Aspen broadly defines site sustainability as the "balancing needs and resources today with due consideration for the future". These needs are organized between three balanced pillars of economic, environmental, and social systems ("Aspen Sustainability Report", 2016). Pillars both limit and enhance each other through a series of checks and balances.

Sustainability is an overarching goal that will be infused throughout all components of the property, including agricultural and equestrian operations, wildlife habitat, and recreation and will require collaboration between operators. Developments toward this goal will include measures such as closing waste-stream loops by utilizing manure for fertilizer on site, applying high-efficiency irrigation systems, maintaining high water quality in streams, exploring energy production and efficiency within facilities, and more best management practices.

The multi-faceted agricultural component will expand to enhance our local food system. This includes significant local food production, demonstrating high-altitude farming techniques, providing professional development for young farmers, coordination with the equestrian operations at the ranch, and offering educational opportunities to the local community, all while embracing sustainability as a fundamental practice. Sustainability in agriculture is seen as an integration of land stewardship, community health, resource and energy efficiency, resilient local food systems, and business viability.

The public equestrian operation promotes self-confidence, skill development, and personal growth. Equestrian activities also pay homage to the valley's ranching heritage, especially through the self-sufficient haying operations. Equestrian facilities will be repaired, remodeled, and developed toward safer and enhanced experiences for users. Equestrian operations will collaborate with other ranch operations toward resource and energy efficiency, and sound land stewardship.

Creating opportunities for people to connect with the land, maintaining the existing character of the ranch, and preserving our local agricultural heritage, are additional goals of the plan. Educational and interpretive experiences work directly toward meeting these goals. The Aspen Historical Society may play a role in developing interpretive displays and/or programming that celebrate our area's agricultural heritage. Other possibilities exist around public engagement, such as natural history interpretation walks, harvest celebrations, and archery events.

Connectivity is another important goal for Cozy Point Ranch, stemming from the property's strategic location adjacent to the Brush Creek Intercept Lot and surrounded by other adjacent open space parcels. This presents valuable opportunities to collaborate with Pitkin County and the Town of Snowmass Village to create multi-use trail connections among trail systems around Cozy Point Ranch that will benefit trail users who are recreating, accessing the ranch, and commuting.

Cozy Point Ranch is a unique open space property where the fabric of our community can be shared and celebrated, from our agricultural heritage to concepts of the Aspen Idea. It is hoped that every child who grows up in the communities of Aspen and Snowmass will develop a special connection to Cozy Point, and that their lives will be enriched by formative experiences at the ranch.



"Threshing Time, 1930-". Photo Courtesy of The Aspen Historical Society



"Brush Creek Haystack, 1925". Photo courtesy of The Aspen Historical Society

1.2 HISTORY OF COZY POINT RANCH

Cozy Point Ranch is located on land shaped by glacial activity during the Pleistocene Epoch, between 2 million and 11,000 years ago. As glaciers grew and retreated during that time, meltwater distributed large quantities of gravelly debris throughout the valley floor, leaving terraces of 'glacial outwash' material through which the Roaring Fork River has

Cozy Point Ranch Historical Timeline

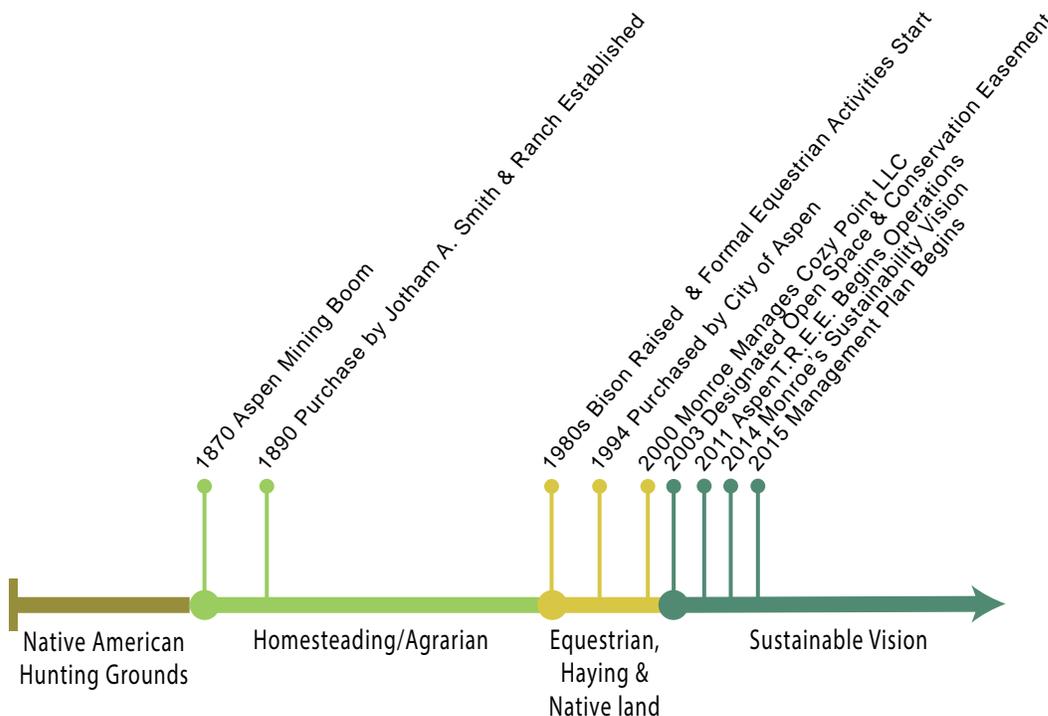


Figure c: "Cozy Point Ranch Historical Timeline"

carved its course. Cozy Point Ranch is situated on a level outwash terrace enhanced by Brush Creek, making it an ideal location for ranching.

Aspen was established in 1879 with the start of mining development that would yield one-sixth of U.S. silver production at its peak. Boom turned to bust in 1893 when the Sherman Silver Act was repealed, after which mining gradually faded out in the early 1900s and small-scale mixed farms and ranches carried the local economy. Between 1900 and 1950, these operations grazed cattle on National Forest land during the summer, and used their farmland to produce hay, potatoes, grain and vegetables. Today, Cozy Point Ranch exemplifies the farming and ranching history of the Roaring Fork Valley.

Many of the first settlers obtained land from the federal government through direct cash sales, the Homestead Act, the Stock Raising Homestead Act,

and the Desert Lands Act. The first transfer of land ownership in the area that would become Cozy Point Ranch occurred in 1882, when the northern portion of the Cozy Point Ranch parcel was granted to the state of Colorado for school revenue. Later, Jotham M. (Jote) Smith purchased the piece of land that would become Cozy Point's homestead in 1890. True A. Smith, Jote Smith's son, purchased land north of his father's land in 1892. Initial land ownership transfers on land adjacent to Cozy Point Ranch include Alexander Cruikshank's 1897 homestead on land where the Aspen Mass and Mills parcels now lie, and his 1889 purchase of a small ranch along Brush Creek on the Cozy Point South parcel.

Historic information about the various ranching families of the Cozy Point Ranch area is limited. According to findings from the Roaring Fork Horse Council historical review of Cozy Point Ranch, a news article in the Rocky Mountain Sun Newspaper,



Figure d: "Public Process Timeline"

October 3rd, 1885 wrote, "the largest ranch and perhaps the most profitable, is that of Jote Smith, at the mouth of Brush Creek... He has this year 90 acres of oats, of heavy yield, part of which will go 60 bushels to the acres... Worth \$6,000 at least". Another article in the Aspen Daily Times, April 3rd, 1906, indicates True A. Smith's use of horses in agricultural operations; "Wanted... A first class horseman to handle the Percheron stallion "Boston" for the season of 1906. None but a sober, competent man need apply". A brief history of the Smith and Cruikshank families, an anecdote about the origin of the name Cozy Point, and a table of other early land owners can be found in Appendix A: Biological and Historical Resources Surveys.

More recently, bison for commercial meat production were grazed on the ranch, and equestrian facilities were built, including the metal horse barn, under the ownership of Michael Hernstadt in the early 1980s. At that time, the ranch was much larger than it is today, consisting of about 1,600 acres. Portions of the ranch were subdivided in 1981 and subsequently sold off. Following Hernstadt's death in 1984, the remaining core property of Cozy Point Ranch was held by an inheriting party, and ultimately purchased by Thomas Daly in 1994. Daly owned it briefly before the City of Aspen purchased it from him later in 1994 with the support of City Council Members Rachel Richards, Augie Reno,

Georgeann Waggaman, Terry Paulson, and John Bennett.

Monroe Summers was contracted by the City to run the ranching operation in 2000, and his leadership carried Cozy Point into the next decade until his death in August 2014. During that time, the City and Monroe together accomplished significant improvements to the ranch property, including the installation of irrigation systems, bringing unattended agricultural fields back into productivity, planting trees, fencing off riparian areas to prevent livestock from entering these sensitive ecosystems, and numerous improvements to the equestrian buildings and facilities.

At that time, weed management practices included mechanical removal and very little herbicide use. Fertilization was accomplished by turning out cows to graze and naturally spread their manure on fields during winter months. The manure was then harrowed into the soil with a chain/mat drag. Twenty five pairs of cows (ie. cow-calf pairs) were brought in for the purpose of consuming excess and degraded hay considered unsuitable for feeding to the horses. Exposure to moisture and animals while stored under tarps at Cozy Point Ranch caused degradation of winter hay stores. Haying operations produced hay on Cory Point Ranch property, South Cozy Point, and on three McLain

Flats properties in partnership with Cozy Point Ranch LLC. The ranch's irrigation system was also limited by the pump's horsepower, leaks, and the extent of existing ditches.

Recognizing the property's value to the community as the last major agricultural operation in the upper Roaring Fork Valley, the City of Aspen designated Cozy Point Ranch as Open Space in 2003, in order to preserve the area's rich farming and ranching heritage. A Conservation Easement through Aspen Valley Land Trust was established that same year, as a further measure to ensure the property's preservation in perpetuity.

In 2011 Monroe brought in Aspen T.R.E.E. to help round out the ranch experience with its small agricultural learning center. Subsequent to Monroe Summers' passing in 2014, Patti Watson, who had been employed by Summers to run the equestrian portion of the operation, became the new owner of the equestrian operation, and certain aspects of the ranch business were taken over by the City. Together, the City of Aspen, Patti Watson, and the horse community have accomplished a long list of improvements to equestrian facilities and operations (See Figure g). Some of these improvements include the following: The 25 cow pairs currently on the ranch are owned by Cozy Point Ranch LLC employee Manuel Morales, and are kept there for the purpose of consuming low-quality hay that is unsuitable for the horses and for their manure that is rich fertilizer for the land. The cows are grazed on the property in winter only when fencing is in good repair to contain them properly. In this way, the cows and hay operations are tied together in a sustainable, symbiotic way. The yearly budget for general maintenance and upkeep has been \$25,000. Some projects utilized extra funding to accomplish large tasks.

Further, weed management has been improved in that spraying is currently accomplished using a backpack spraying unit, applying between 3 and 5 ounces per acre. The addition of a new 125-horsepower pump in conjunction with the existing 30-horsepower pump has increased total

pumping capacity to 2,500 gallons per minute. With this increased capacity, it will be possible to send water to dry agricultural areas of the ranch, and will also support the seeding of dry areas where native vegetation and/or pasture or hay grasses need to be reestablished in place of weeds. Haying operations produce 11,000 to 14,000 bales annually, with much of the higher-quality hay coming from Cozy Point Ranch. Two cuttings per year are possible on the hay meadows of the south field and Cozy Point South. Coordination to address weed issues on McLain Flats partner properties is an on-going effort toward increasing the quality produced there. Hay is currently stored in close proximity to where it is used in winter. Additionally, Soil Meter Controls that measure soil temperatures and moisture levels assist with efficient watering management. Increasing loaminess of soils is also being done, in part by using wood shavings from stall bedding, in order to bolster soil quality and moisture retention.



Mule Deer with wildlife fencing placed by CDOT, Photo courtesy of Cozy Point Ranch LLC

1.3 PROCESS & PUBLIC INVOLVEMENT

The development of a Management Plan for Cozy Point Ranch Open Space has been a long-standing goal for the City of Aspen Parks & Open Space Department. An unfortunate event that also contributed to the need for a Management Plan was the passing of independent business operator Monroe Summers in 2014, who had run the

agricultural and equestrian operations at the ranch for 14 years.

The process began in July 2014 with the first of a series of 45 meetings, site visits, and discussion forums with community members and stakeholder groups, various experts, and local organizations, in order to share ideas and obtain public input. Over 100 people attended the public meetings, and numerous additional public comments were also received by the City of Aspen Parks Department through other means.

A biological and historical survey was completed in February 2016. This survey provides updated and site-specific conditional analyses and reco in a similar 2011 survey conducted for Sky Mountain Park that addressed Cozy Point Ranch as an adjacent open space property. The City of Aspen Parks and Open Space Department collaborated with staff from Pitkin County, the Town of Snowmass Village, the public, and wildlife and botanical consultants in the making of this plan. A similar 2016 survey of the hydrological systems on site revealed a need to restore riparian areas.

Special consultation was provided by visits from renown sustainable agriculture and local food systems experts, Joel Salatin and Eliot Coleman, during the summer of 2015. The City brought them to tour Cozy Point Ranch as well as other agricultural operations in the valley in order to provide a contextual overview of the valley's local food network. Salatin's input emphasized the value of coordination between agriculture and equestrian operations, staff housing on site, and rotational grazing for pasture health. He also recommended offering professional development opportunities for young farmers and educational offerings for families and schools. Coleman recognized the property's potential for significant local food production, developing and showcasing high-altitude and extended-growing-season techniques, serving as a local food hub, and offering growing space and a tool library for small local growers. He also felt that there was rich potential for aligning all ranch operations under one sustainable umbrella.



Northwest view from red barn area. Photo courtesy of The City of Aspen Parks Dept

Other groups consulted include:

- Aspen Center for Environmental Studies
- Aspen Historical Society
- Aspen T.R.E.E.
- Aspen Valley Land Trust
- Brush Creek Metro District
- Central Rocky Mountain Permaculture Institute
- City of Aspen Council Members
- City of Aspen Open Space and Trails Board
- Cozy Point Ranch LLC
- Cure Organic Farm
- Elected Official Transportation Committee
- Friends of Cozy Point
- Pitkin County Commissioners
- Pitkin County Open Space and Trails Board
- Roaring Fork Food Policy Council
- Roaring Fork Mountain Bike Association
- Roaring Fork Valley Horse Council
- Sustainable Settings
- Town of Snowmass Village Town Council
- Woody Creek Caucus
- CSU Extensions, Ag & Livestock Professionals
- Natural Resource Conservation Service
- WindWalkers Assisted Learning & Therapy Center

In addition to the above mentioned discussion forums, 650 public comments were also taken in through letters and emails (148), a questionnaire form made available at a public open house held on March 8, 2016 and at the Parks Department front desk (153), online at the City of Aspen's website through the Open City Hall Forum (137) and during the open houses presenting the first draft (212).

In general, public comments indicate a strong desire to maintain and expand both the equestrian and agricultural components at Cozy Point Ranch (see figures b, e, and f). Public input also strongly supports the preservation of the property's natural resources in terms of open space values, wildlife conservation, and preservation of our area's ranching heritage. Comments also reflect a strong interest in local food production and involvement in the sustainability and security of our local food systems. Education is another strong theme expressed through public input, spanning a variety of activities on the ranch from horseback riding through farm and garden experience.

Public support for the equestrian component cites important benefits to participants, including gaining self-confidence, strengthening personal work ethics, recreation, and gaining riding skills. Additional input supporting the equestrian component acknowledged the importance of this program for our community's youth, especially young girls. Many equestrian program participants expressed passionate feelings about having access to safe boarding, riding, and instructional facilities. They also expressed a desire for certain enhancements to the existing program and facilities, such as a cross-country jumping course, dedicated equestrian trails, and barn and paddock improvements including drainage, footing, and safety. Equestrian input also expressed the need to keep other activities, such as biking, separate from horse activities for general safety.

A number of comments conveyed support for overall sustainability at the ranch, embracing all activities and management areas. With regard to agriculture, comments expressed the desire for local food production, model gardens and demonstration areas showcasing high-altitude growing techniques, space for local small growers to lease, educational opportunities for all ages, and more. Comments were received conveying the desire for additional ways through which the public may learn about how to access and enjoy this open space parcel.

Further comments supported the Archery Range facility and enhancements to it that would foster greater overall safety as well as experiences for youth archers and hunters. The small but passionate archery community expressed the desire to generally upgrade the Range facility to reflect the respect they have for the site.

Public comment from the first draft public involvement period re addressed admiration for the commitment to community and existing programs and their management, and further reinforcing the key values and components of the property. Most notable was a desire to concentrate on user safety.

This management plan reflects the themes and findings gathered through the public process (figure f). Opportunities and actions described in this plan were developed based on those themes. The plan will be reviewed every 5-10 years for updating. Any significant future amendments to the plan will be brought to the City of Aspen Open Space and Trails Board.



The Bonds family, photo courtesy of Cozy Point Ranch LLC

PUBLIC COMMENT THEMES

Model Landscape

There is a strong desire to maintain a landscape that exemplifies the high quality values of sustainability, environmental protection, and historical preservation synonymous with Aspen. The visual presence and cultural significance of its location as the "Gateway" to Aspen and its past make a model landscape most valued by the community.

Sustainable Agriculture

Sustainable agriculture comments were measured by mentions of food security and local food production ranging from community gardens, the Aspen T.R.E.E. agricultural learning center, to large scale innovative production. Desires for increased pasture health, and weed- and herbicide-free haying operations were also considered a component of sustainable agriculture.

Equestrian

Mentions of equestrian values were generally framed in a desire to maintain and improve the existing facilities in efforts such as improved safety, drainage, fencing and other upgrades, as well as mentions of equestrian trails, cross country jumps, and other equestrian-centered recreation. Accolades and primary care for the Cozy Point Ranch LLC were also counted in this category.

Education

Educational values ranged from passive experience in nature to programs such as Aspen T.R.E.E and Camp Cozy Point. Stories described life lessons gained from the agricultural processes included horse care, growing food, animal husbandry. Much of this was expressed in terms of childhood learning, however some adults appreciated the experiences gained from a historical perspective.

Community Access

This category marked the desire to connect the Cozy Point property with adjacent properties, and the potential to improve internal infrastructure. This included the need for better signage and designated parking, as well as multi-modal trails and other forms of passive use associated with public land. Other connections included experience and advancements for community health. The mention of safe use across all components of the site was included.

Natural Resources & Wildlife

Care for wildlife and habitat were mentioned often, including concerns about riparian areas, elk and deer migration corridors, and the quality of agricultural fields and water.

Open Space Activities

Includes activities that most associate with open space recreation, for example, hiking, biking, and wildlife viewing. Other open space values include preserving land for the future.

Ranch Heritage and History

This category general marked a value in the valley's agrarian heritage. This includes ranching, agriculture, and equestrian history. Mentions of the "Old Aspen" and maintaining its "rural character" were also considered a hat tip towards historical preservation.

Figure f: "Public Comment Themes"; Appendix G: Public Comments Analysis

“Do unto those downstream as you would have those upstream do unto you.” ~ Wendell Berry

COZY POINT RANCH 2.0 EXISTING CONDITIONS

COZY POINT RANCH DEVELOPMENT ENVELOPE



Map C: "Cozy Point Ranch Development Envelope"

2.1 OVERVIEW

Cozy Point Ranch Open Space comprises 168 acres of hay meadows, cattle and horse pastures, historic buildings, ranch outbuildings and structures, equestrian facilities, a farm and garden learning center, and areas of unattended land and natural landscape. The natural landscape of Cozy Point is a mosaic of sagebrush shrubland and pinyon/juniper woodland, with riparian plant communities occurring along Brush and Cougar Creeks.



Bank erosion on Lower Brush Creek. Photo courtesy of Western Ecology Resources Inc

2.2 NATURAL RESOURCES

2.2.1 Climate

The climate of Cozy Point Ranch Open Space is generally characterized by long, cold and moist winters, and short, cool, dry summers. Average annual precipitation is 23 inches and the mean annual temperature is 40°F, with a mean high temperature of 77°F in July and a mean low of 7°F in January. The growing season is 127 days, generally occurring between May 24 and September 28, and the average annual snowfall is 187 inches.

2.2.2 Topography

Cozy Point Ranch Open Space is a 168-acre parcel located southwest of the intersection of U.S. Highway 82 and Brush Creek Road, approximately six miles north of the City of Aspen between the communities of Snowmass Village and Woody Creek. The parcel consists of an alluvial terrace and lower portions of adjacent slopes at an elevation of approximately 7,500 feet above sea level. Cozy Point Ranch currently supports a large equestrian boarding and training facility as well as an archery range and agricultural operations. Flat irrigated hay meadow and field make up approximately 60 acres of the ranch, equestrian facilities make up approximately 27 acres, and the remaining 81 acres are unattended agricultural and natural lands. The property is bisected by Brush Creek, a perennial tributary to the Roaring Fork River.

Other open space properties adjacent to Cozy Point Ranch are Aspen Mass, Mills, and Sky Mountain Park. Sky Mountain Park Open Space is managed for wildlife habitat and non-motorized recreation. The Aspen Mass and Mills parcels are currently used for recreation. Topography is highly varied, including slopes of shale badlands, rock outcrops, and steep slopes descending to the Roaring Fork River. Additionally, the CDOT Intercept Lot, located adjacent to the Mills parcel, contains developed and undeveloped parking areas and two areas of wetlands in drainage basins.

2.2.3 Geology

The geologic bedrock of Cozy Point Ranch consists primarily of the upper member of the Mancos Shale Formation. The Mancos Shale is a dark-gray, silty shale with a few outcrops of persistent olive-gray sandstone up to 40 feet thick. The upper Mancos Shale member was laid down during the Upper Cretaceous Period 99 to 65 million years ago by mudrock that accumulated in offshore and marine environments of the Cretaceous North American Inland Sea. Holocene alluvial fan deposits and older Pleistocene alluvial fan deposits occur along many of the gently sloping sagebrush shrublands as well as along Brush Creek

2.2.4 Soils

The most common soil on Cozy Point Ranch Open Space is Kobar silty clay loam, which dominates the relatively flat terrace on which the parcel is situated. This well-drained soil is present on the property's alluvial fans and terraces, and is derived from Mancos shale. This soil type has typically been used for irrigated hay meadows.

The Dollard-Rock Outcrop-Shale is another common soil, occurring on ridges and slopes that comprise a relatively small area of the parcel. This calcareous soil is moderately deep, well-drained, and derived from Mancos Shale, the underlying bedrock beneath the project area.

Other soils covering a very minor amount of the parcel include: Rock Outcrop (Mancos shale), Torriorthents-Rock Outcrop Complex, Uracca Moist-Mergel Soil Association, and Fluvaquents (a wetland soil).

2.2.5 Hydrology

Brush Creek is the main body of surface water that runs through the planning area from south to north. A secondary, intermittent stream known as Cougar Creek flows across the planning area near the Archery Range access road. Elements comprising these stream ecosystems include the stream channels, riparian or stream-side vegetation, and wetlands associated with the streams.

Brush Creek

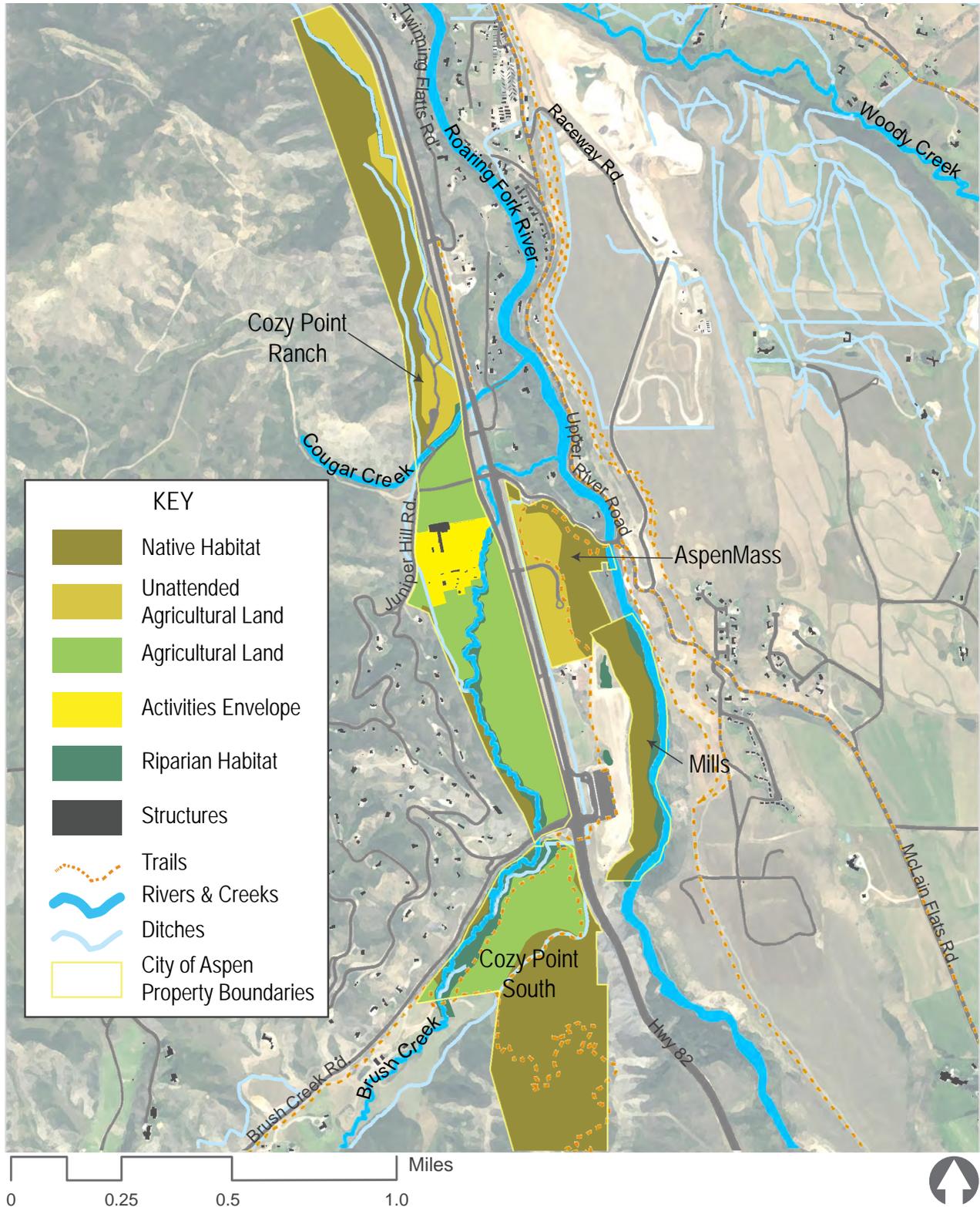
Brush Creek's 15 square mile watershed drains Snowmass Village and much of Snowmass Ski Area. Patterns of streamflow magnitude and timing of runoff in Brush Creek are influenced by ski area snow-making operations, forest canopy openings on ski trails, and impermeable surfaces such as roads and roof tops, as well as the natural structure of the land. Specifically, snow-making artificially increases the snowpack where these operations take place, which in turn increases snowmelt volume entering the watershed in spring. The extent of open areas where ski trails replace forests has

altered the timing of runoff, speeding up the melting cycle as solar energy acts directly on the snowpack, in contrast to the slower melting cycle that would occur if the snowpack in these areas was shaded by trees. Urban development in Snowmass Village and surrounding neighborhoods has led to more intense pulses of stormwater and snowmelt runoff where impermeable surfaces such as roads, parking lots, roofs, and plazas prevent water from soaking into the ground which would otherwise moderate pulses of high streamflow volume and velocity in the Brush Creek watershed. Other factors affecting Brush Creek include historic ranching activities such as irrigation ditches, straightening of reaches of the creek, and removal of riparian vegetation; water diversions for municipal and residential purposes; bridges and culverts; and beaver activity.

Currently the portion of Brush Creek in the Cozy Point South Open Space is in fairly healthy, ecologically functioning condition from a hydrological standpoint. Here, the riparian corridor is fairly wide (200-300 feet), floodplains are fairly well connected to the stream system, and bank erosion is minimal. The Cozy Point South reach is a suitable reference for evaluating the success of future restoration efforts on the reach that runs through Cozy Point Ranch.

Throughout the Cozy Point property, Brush Creek exhibits a variety of conditions ranging from fairly healthy to severely degraded. At times, unnaturally high pulses in stream flow have led to instability due to scouring of the stream bed, deepening of the stream channel, bank erosion, and impacts to the health of riparian and floodplain vegetation. The vegetation along Brush Creek within the planning area is a Mountain Willow/Mesic Forb Shrubland wetland/riparian habitat type, common in the upper montane valleys of Colorado, and comprised of native plants such as willows, hawthorn, alder, and river birch. Scattered stands of narrow-leaf cottonwood trees, sedges, and a suite of native forbs including cow parsnip, largeleaf avens, and chiming bells also occur in these areas. Non-native pasture grasses are also common here, and the presence of non-native, invasive plants including reed canarygrass, ox-eye daisy, houndstongue, Canada thistle, and plumeless thistle highly degrade

COZY POINT RANCH AREA LAND USE & VEGETATION ZONES



portions of the riparian/wetland habitat.

The reach of Brush Creek that flows through Cozy Point Ranch lacks lateral stability and connectivity to its floodplain areas. Severe bank erosion is occurring, and the riparian zone and vegetation are constricted (100 feet or less in width) or completely lacking in some sections. Bank stability in this reach is directly related to the presence or absence of woody riparian vegetation. In areas lacking such vegetation, erosion has lowered the stream channel below the rooting depth of riparian plants, allowing the banks to become undercut. This, in turn, has led to collapsed banks and lateral migration of the stream channel.

Beavers pose a special set of considerations. In completely natural ecosystems, the activities of beavers provide many ecological benefits including higher water tables, increased wetland and riparian habitat, improved water quality, and increased biodiversity. However, when beavers and human development coexist, many factors change and management of beaver populations becomes necessary. Where beavers have been removed and their old dams have breached, streams have become incised. In places, such erosion degrades the stream ecosystem and may also become a concern for nearby homes. Beavers can also impact culverts and landscape vegetation. In some upstream areas of Brush Creek, beaver dams create stepped ponds in a stable, healthy situation. In short, beavers act instinctively, and as such their activities may or may not be congruent with healthy stream systems when human activities are part of the game.

Cougar Creek

Cougar Creek is a small intermittent stream north of Brush Creek on Cozy Point Ranch Open Space. Riparian habitat along Cougar Creek consists of river hawthorn, strappleaf willow, and small amounts of chokecherry, serviceberry, gooseberry and Woods' rose, with a stand of narrowleaf cottonwoods along the western property boundary.

Upstream of the Archery Range access road, the stream channel is in good condition and is connected well to a fairly wide floodplain. An old culvert under the access road is in need of replacement. Downstream of the access road, however, the channel is incised, and further downstream it lacks riparian shrubs and is lined with large cobbles and boulders. Two small concrete weirs exist in the lower reaches of the creek, and the large manure compost pile adjacent to the creek may contribute nutrient-laden runoff to the stream during heavy precipitation events.



Cougar Creek, upstream of farm road, is relatively healthy compared to downstream of the road. Photo courtesy of Western Ecology Resources Inc

2.2.6 Vegetation

The land of Cozy Point Ranch Open Space comprises a variety of vegetation types, including Mountain Shrubland, Sagebrush Shrubland, Active Agriculture, Abandoned Agriculture, Shale Barrens, Riparian/Wetland, Aquatic Habitat, Disturbed, and fallow. A combination of Sagebrush and Mountain Shrublands, and Active Agriculture cover the greatest land area at Cozy Point Ranch.

Sagebrush and Mountain Shrublands

Within the Sagebrush and Mountain Shrublands, Gambel oaks, serviceberry, sagebrush, and juniper shrubs grow in a mosaic of large and

small patches. Other common plants within these areas are rabbitbrush, snowberry, chokecherry, and Woods' rose. Elk sedge, lanceleaf bluebells, balsamroot, Oregon grape, and ballhead waterleaf grow among the oaks and serviceberry shrubs, which form dense thickets in some areas. Other plants associated with the sagebrush include Indian paintbrush, northern bedstraw, green needlegrass, and butterweed groundsel.

Mountain Shrublands provide big game winter range and habitat for a variety of local wildlife including nesting birds and raptors. Over browsing by elk and deer, and the absence of a natural fire regime have lead to lower diversity of understory plants, high stem density, and clubbing of terminal sprouts in shrub thickets on the property, reducing the value of these areas to wildlife.

Gamble oak, for example, is a fire-adopted shrub species that is most valuable to wildlife when it is between 12 and 50 years of age.

Active Agriculture & Unattended Agriculture

The land in active use for agricultural purposes is primarily vegetated with grasses as pasture for cattle and horses or for hay production. Grasses in these areas are non-native smooth brome, orchardgrass, crested wheatgrass, timothy, Kentucky bluegrass, quackgrass, and intermediate wheatgrass. Other non-native vegetation in these areas includes alfalfa, black medic, white Dutch clover, yellow sweet clover, various thistle species, and other non-native plants.

Unattended agricultural land is vegetated with species listed above as well as some sagebrush and rabbitbrush that have begun to re-establish in these areas. Dense stands of Canada, plumeless, and musk thistles are problematic in many of these areas, and are addressed with weed control measures.

Vegetation on active and unattended agricultural lands at Cozy Point Ranch is supported by ranching, farming, and equestrian operations and activities.



Riding in the north fields of Cozy Point. Photo courtesy of Cozy Point Ranch LLC

Management of soil nutrients includes fertilizer inputs such as composted horse and cow manure as well as wood shavings from stall bedding. Management of weeds includes prudent use of Milestone herbicides at an average rate of 3 to 5 ounces per acre, as well as mechanical removal. Rotational grazing of livestock supports vegetation communities in pastures by giving these areas time to recover on regular intervals. No pesticides are used on these land areas. Primary outputs from hay fields are the 11,000 to 14,000 bales of hay produced annually for consumption primarily by horses. Lower grade hay and hay waste is consumed by cows.

Shale Barrens

Shale Barrens typify the steep slopes of Mancos Shale at Cozy Point Ranch. This relatively small portion of the property has sparse vegetation due to its exposure to wind, dry conditions, and erosion. Indian ricegrass occurs here, and is part of a vegetation community that is ranked as globally and state imperiled by the Colorado Natural Heritage Program. Shrubs found in these areas include mountain mahogany, bitterbrush, Gambel oak, serviceberry, and snowberry. Additional grasses and forbes in this community include junegrass, western wheatgrass, tapertip onion, largeflower hawksbeard, twoform pussytoes, balsamroot, evening primrose, mat penstemon, and point-tip twinpod.

Riparian/Wetland and Aquatic Habitat

Riparian/wetland and aquatic habitats occur on Cozy Point Ranch along Brush Creek and Cougar Creek. Portions of Brush Creek support native riparian and wetland vegetation such as various willow species, hawthorn, alder, river birch, chiming bells, cow parsnip, and largeleaf avens. In many areas banks of the creek are dominated by the non-native/invasive reed canarygrass. Native sedges and rushes occur in floodplain areas. Portions of the willow riparian areas are degraded by pasture grasses and non-native/invasive plants including ox-eye daisy, houndstongue, Canada thistle, and plumeless thistle.

Noxious weeds threaten the reach of Brush Creek that flows through the planning area, and should be controlled. This reach is also affected by erosion and runoff, especially through the active portion of the ranch. Past ranch-related activities and other activities upstream may be impacting the stream. Runoff containing manure from horse corrals has degraded water quality and impaired the aquatic macroinvertebrate community.

Cougar Creek is an intermittent drainage running through the northern portion of the planning area. This drainage is bordered by native willows and hawthorns. This riparian community is threatened by runoff from a stockpile of manure compost. The lower portion of this drainage has been altered by ditch and cobble work, affecting the riparian vegetation.

Brush Creek Ditch runs through the northern portion of the planning area. The headgate for this ditch is located in the Hwy 82 right-of-way between the north and south bound lanes. Narrowleaf cottonwoods have formed a narrow riparian community here as a result of the ditch water. Chokecherry, sandbar willow, smallfruit bulrush, and snowberry grow here, along with non-native plants such as burdock, houndstongue, and yellow sweet clover. This riparian community is entirely dependent on irrigation ditch water rights.



"Brewer's Sparrow singing on territory in western Colorado in June". Photo courtesy of Wild Bird Video Productions

2.2.7 Wildlife

Habitat types are determined largely by dominant vegetation communities, and these plants, in turn, largely influence the suite of wildlife that inhabits a given landscape. Wildlife species detected through field surveys conducted by Western Ecological Resource, Inc. on Cozy Point Ranch Open Space include coyote, mule deer, elk, red fox, and mountain cottontail rabbit, as well as the avian species, Brewer's sparrow (a BLM, USFS sensitive species), dusky flycatcher, and American robin. Elk was the most common species photographed by wildlife cameras used in the study, followed by deer and coyote, respectively. Townsend's big-eared bat and bluehead sucker are indicated in the report as potentially present in the planning area.

In addition to the wildlife documented by the field surveys mentioned above, other species may also be present year round or seasonally, as typical inhabitants of the habitat communities represented on the ranch. Possible additional species include mountain cottontail, least chipmunk, Wyoming ground squirrel, badger, coyote, red fox, mountain lion, and bobcat. Additional avian species include red-tailed hawk, golden eagle, common nighthawk, broad-tailed hummingbird, American kestrel, prairie falcon, plumbeous vireo, common raven, black-billed magpie, Woodhouse's scrub-jay, blue-gray gnatcatcher, mountain bluebird, Virginia's warbler, yellow warbler, green-tailed towhee, spotted towhee, sage sparrow, vesper sparrow, lark sparrow,

Brewer's sparrow, Black-headed grosbeak, western tanager, lazuli bunting, and American goldfinch. Most of these wildlife species spend much of their time within the dry habitats on the ranch, and a few primarily occupy riparian habitats, but all of them depend on riparian habitats at least part of the time.

Colorado Parks and Wildlife (CPW) denotes the planning area as overall range for mule deer and elk. The northern end of the planning area is denoted as mule deer winter range and also includes critical habitat for Brewer's sparrow. The area between Cozy Point Ranch and Cozy Point South is mapped by CPW as an elk migration corridor and highway crossing area, although it is less heavily used than areas further to the west on Brush Creek Road.

In a 2011 study by Western Ecological, Inc., a group of local wildlife professionals shared the opinion that considered as a whole, Cozy Point Ranch and its surrounding open space properties form an area of extended habitat whose value to wildlife is greater than the sum of its parts. As such, these properties should be managed in concert with each other in order to maintain the wildlife populations that they support. (See Appendix C for more information and maps)

2.3 FACILITIES & LAND USE

2.3.1 Water Rights

The City of Aspen owns water rights associated with Cozy Point Ranch Open Space for agricultural use pulls water from Brush Creek via the Jote Smith Ditch and Smith and Rex water right. The pump system, located in the pond on Cozy Point South Open Space, has been upgraded to an 125-horsepower pump integrated into the existing 30-horsepower pump, enabling the system to pump 2,500 gallons per minute from the Jote Smith water right. The increased water pressure and volume that this system delivers, now allows irrigation water to be delivered more widely across the ranch, including outlying areas that had been too far away for the original, smaller pump to serve.

The increased capacity of the new pump system will also allow for optimal use of the ranch's water rights.

In addition, there are two wells on the property serving the structures on site. The actively used ditch that crosses the northern portion of Cozy Point Ranch is owned and maintained by another party off-site. The ditch on the hill side in the north portion of the property was established in the late 1800s and is in disrepair and unusable.



Photo courtesy of Cozy Point Ranch LLC

2.3.2 Access & Traffic Flow

All public access to Cozy Point Ranch is from Juniper Hill Road, where two driveways enter the main part of the property. The first driveway provides immediate access to the indoor arena - horse barn complex and the large upper and lower associated parking lots. The second driveway provides access to the Camp Cozy Point Headquarters building, historic red barn, a large outdoor arena, Aspen T.R.E.E, and a the small parking area that serves all operations in

this vicinity. The two entrance areas are connected by a driveway running passed the maintenance garage. This driveway sees mixed use by cars, trucks, trailers, farm implements, equestrians with horses, service vehicles, and people on foot. Users can drive through to the upper parking lot from the second entrance an a small road before the Camp Cozy Point Office. Parking is largely undefined and areas have poor drainage, which limits accessibility during muddy times.

Small foot paths run from the small parking lot to Aspen T.R.E.E. and the ranch office on the other side of the staff housing. The ranch office also has its own driveway and parking lot, accessed from Highway 82. A traffic analysis recommends limiting access via the ranch office entrance off Highway 82 to employee use only due to safety issues that occurs there given the volume of public traffic to and from the ranch.

A small operational dirt road runs south from the historic red barn toward the hayfields. Another driveway on the north side of Juniper Hill Road acts as an operational drive for the north fields and composting piles, as well as providing parking for the archery range. Parking here is undefined, has poor drainage, and increasingly encroaches on the landscape. Concerns for horse and hiker safely, as

well as land quality, center around a need to design safer and more defined access to the archery range.

There is a need to address safety and access issues in the area of the historic red barn where visitors and staff intersect with each other as they access the farm and garden learning center and various equestrian facilities.

2.3.3 Facilities & Buildings

Facilities and buildings on the property at Cozy Point Ranch Open Space include structures related to general operations, equestrian and haying operations, the sustainable agriculture program, and the archery range.

The development envelope delineated in the conservation easement on the property held by Aspen Valley Land Trust requires that all facilities and building be sited only within a ten acre envelope, with the exclusion of the archery range and some structures related to agricultural activities. (See Map C: "Cozy Point Ranch Development Envelope" which features current conditions, including "sacrificed" equestrian land.)

Facilities and buildings related to general operations include: a ranch office building, various gravel driveways and parking areas, an un-restored Pan-Abode building that is not currently in use.

Facilities and buildings related to equine and haying operations include: the historic red barn, a large indoor riding arena and barn complex that includes 29 indoor horse stalls and one housing unit, an insulated semi trailer used for grain storage, the Camp Cozy Point headquarters building, a pole barn, a maintenance garage with an attached employee housing unit, and two additional single-family employee housing units. Outdoor facilities include: a large outdoor riding arena with a judge/announcer platform structure, a small outdoor riding arena, and various fenced paddock areas ranging in size, most with individual horse shelters.

Hay storage capacity within the facilities and buildings listed above consists of: 350 square bales



Kids holding bunnies at Aspen T.R.E.E. on Field Day. Photo courtesy of Aspen T.R.E.E

in the historic red barn, 1,000 square bales in the pole barn, and 9,650 square bales stored outside under tarps adjacent to the pole barn. In addition, round hay bales for cows are stored outdoors in the cattle staging area under tarps. Quantities and sizes of outdoor horse paddocks situated on a total of 21 acres are as follows: there are 19 paddocks 20' x 37' in size, 9 paddocks 40' x 150' in size, 4 paddocks that are 1 acre in size, and 5 paddocks that are 2 acres in size.

Facilities and buildings related to the cattle operation are located on the north side of Brush Creek off of the Ranch Office Road. They include a 0.5 acre staging ground with a lean-to shelter and fenced area. Large, round hay bales for cows are stored outside and covered by tarps in this staging area.

Facilities and buildings related to the Aspen T.R.E.E. farm and garden learning center include: a geodesic dome, animal pens, an animal shelter building with outdoor classroom facility on the roof, and a garden area. This half acre facility is located between the historic red barn and Brush Creek.

Facilities and buildings related to the Archery Range include: signage, parking, staging and shooting areas, targets, and footpaths. Most of these facilities are in need of upgrades.

2.3.4 Historical Buildings & Resources

The 2,202 square foot red barn of Cozy Point Ranch is the primary extant structure of historical significance on the property. It sits where it was built circa 1890 – 1930. Signage at the building indicates a construction date circa 1890; however, the Historic Building Inventory Record Form of the Colorado Historical Society, Office of Archaeology and Historic Preservation dates the construction circa 1930. This barn is one of the only historic barns in the valley that remains in use for agricultural purposes.

The barn was designated as a Pitkin County Landmark in June 2013, in recognition of its association with the settlement of Pitkin County and the agricultural heritage of the area. An Historic



Aspen T.R.E.E.'s permaculture fields & the historic red barn. Photo courtesy of Aspen T.R.E.E.

Structure Assessment grant was awarded by the State Historical Fund, and additional grant awards for funding to complete the rehabilitation of the barn are anticipated.

The two-story rectangular barn has a saltbox roof with an extension on the east slope and two small cupolas. The roof is covered with corrugated metal roofing material. The barn's wood siding is a combination of lap and clapboard siding. Large animal stalls were originally located on the ground level, and later modifications have converted some of this space for other uses including equestrian equipment storage, stalls for tacking up horses, classroom space, and cubbies for camp participants. The second story is a hayloft, currently used for limited hay storage (approximately 800 small bales). A large sliding door, originally present in the middle of the south end of the barn, has been modified. The barn rests on a stone foundation. The barn's roof and foundation were restored fall of 2016.

Two historic frame houses exist on the property. One is 700 square feet in size and has a steeply pitched gable roof, bay window, lap siding, and a metal pipe chimney. The second frame house is 960 square feet in size and has wide lap siding, skylights, a large brick chimney, and a shed for extension on the rear. Both of these houses are currently used for housing equine staff.

Three Pan-Abode buildings make up the remaining historic structures on the property. These buildings were relocated from Aspen. Two have been restored: a 500 square foot Pan-Abode currently used as the ranch office, and a 560 square foot Pan-Abode that is used for Camp Cozy Point headquarters. The third Pan-Abode, which is 560 square feet in size, is in disrepair and not currently used. ("Historic Structure Assessment and Preservation Plan," 2014)

2.3.5 Conservation Easements

On June 30, 2003, the City of Aspen granted a conservation easement to Aspen Valley Land Trust (AVLT) on Cozy Point Ranch (Reception No. 484726, recorded June 30, 2003). The purpose of the easement is to preserve and protect, in perpetuity, the conservation values of the property, and continue the land use patterns which include City open space, wildlife habitat, agricultural uses, and recreational uses. The easement also describes specific permitted and prohibited uses of the property. For example, the building of large feedlots is prohibited, and agricultural land must not be disturbed, impaired, changed, or altered in ways that would devalue the land. Further, if agricultural and equestrian operations were to be discontinued, the land on which they took place would revert back to wildlife habitat. The development envelope is limited to 10 acres, and the envelope location may be shifted to allow for optimal operations. As the Grantor of the conservation easement, the City of Aspen retains ownership of the property and management responsibilities. Other easements held on the land are identified in the Appendix A: Site Survey.



Field Day Hay Rides. Photo courtesy of Cozy Point Ranch LLC

2.3.6 Adjacent Land Use

Cozy Point South Open Space

This parcel is hayed through a joint operation between the City of Aspen Open Space and Trails Program, and Cozy Point, LLC. It is a location for trailhead access into Sky Mtn Park on Cozyline Trail, and is the location of the lower terminus of Brush Creek Trail. It also is the site of an irrigation impoundment pond. Appendix C has more information on the state of riparian ecosystems at Cozy Point South.

Colorado Department Of Transportation Intercept Lot

This parcel consists mainly of infrastructure for Roaring Fork Transit Authority and Town Of Snowmass Village bus services, a large paved parking lot, a bus stop shelter, two stormwater detention ponds, and areas of impacted and natural land. Special event and overflow parking, and construction staging take place on this parcel. The CDOT lot also serves as trailhead access to Brush Creek Trail, Cozyline Trail, and Rio Grande Trail via AspenMass Trail.

Mills Open Space

This open space parcel is mainly natural landscape. Uses on this parcel include wildlife habitat and fishing access along the Roaring Fork River.

AspenMass Open Space

Mainly unattended agricultural land and natural land, this parcel is the location of the AspenMass Trail, which is a connector trail linking the Rio Grande Trail and Jaffee Park area with the CDOT Intercept Lot, Brush Creek Trail, and Sky Mountain Park. Land use on this parcel is mainly recreational trail use and wildlife habitat. For more historical information on AspenMass see Appendix C.

2.3.7 Existing Management Plans For Adjacent Land Areas

Sky Mountain Park Management Plan (May 2012)

The management plan for Sky Mountain Park provides long-term vision and management goals for this open space parcel managed by Pitkin County Open Space and Trails. The plan acknowledges the property's importance as winter range for elk and mule deer as well as sensitive bird species such as Brewer's sparrows and Virginia's warblers. It also acknowledges Sky Mountain Park's many plant communities, including the widely threatened sagebrush shrubland community, and the need for protecting silverleaf milkvetch, a rare plant that occurs on shale barrens areas. The vision for Sky Mountain Park includes preserving wildlife habitat and migration corridors, ecological restoration, non-motorized recreation, education, and preserving the property's historical features. The plan was born out of a community collaboration between Pitkin County, City of Aspen, and other acting stakeholders. To date, a number of trail connections have been established and are widely used by hikers, mountain bikers, and equestrians. ("Sky Mountain Park Management Plan", 2012)



Bovine on the property are used to eat hay not suitable for horses. Photo courtesy of Cozy Point Ranch LLC

The West of Maroon Creek Plan (adopted October 8, 2013)

The existing West of Maroon Creek Plan addresses the community's vision for this gateway area to the Aspen Community, providing land-use guidance for future uses and decisions regarding the location and scale of development in the planning area which extends from the west bank of Maroon Creek to the northwest end of the Pitkin County Airport. This plan is a Pitkin County Sub-Area Master Plan, written and adopted by the Pitkin County Planning and Zoning Commission. ("West of Maroon Creek Plan", 2013)

The Roaring Fork Gorge Management Plan (adopted December 3, 2013)

The existing Roaring Fork Gorge Management Plan encompasses eight public properties, two fishing easements, two conservation easements, and a trail easement. The plan acknowledges the conservation value of the unique geological features and ecological communities that exist within the planning area, as well as the recreational value the gorge area holds for the community. It is a place of important wildlife habitat, a wildlife migration corridor linking significant surrounding habitat areas, and a place of historical importance to the Aspen community with regard to railroad and ranching history. Trails within this planning

area include a segment of the Rio Grande Trail, AspenMass Trail, and the Burlingame Connector Trail. The plan unifies management for the many properties and easements of the gorge, and provides a comprehensive guide for their future. (“Roaring Fork Gorge Management Plan”, 2013)

COZY POINT RANCH IMPROVEMENTS & REPAIRS
MADE BY THE CITY OF ASPEN & IN COOPERATION WITH COZY POINT RANCH LLC

2008/2009

- Public restroom construction
- Office and meeting space for staff
- Covered storage for hay, bedding and equipment
- Irrigated grass turnout pastures
- Domestic water storage and treatment
- Landscape improvements
- Septic, electric, and water systems
- Structural deficiency improvements
- Archery range improvements

2015/2016

- Safety improvements to employee housing units; led lighting, electrical improvements, new windows, caulking, flooring, new roofing for 2 houses, insulation, e-appliances, boilers/heaters and improved smoke detectors, carbon monoxide detectors and fire wall improvements
- Outdoor arena footing excavated & replaced with safer horse material
- Outdoor arena drainage improved
- Dust control irrigation system installed in outdoor arena
- Indoor riding arena new LED lighting system
- New power roll up doors installed in indoor arena area
- New road installed along shed area
- New snow fence installed over the indoor arena to keep snow from leaking through roof during winter months
- Extensive fencing repairs performed on a regular basis throughout 2015 and 2016 including welding of hinges, gates
- Extensive noxious weed management performed throughout the property in accordance with Pitkin County regulations
- Baled 15,000 small square bales of hay and 230 large round bales (to be used for horses and excess will be sold for profit)
- Repaired & reconditioned two small square balers & 499 haybine wather
- Purchased used 4430 John Deere tractor & 945 Moco wather
- Upgraded outside paddock tank heater electrical circuits
- Brand new pump irrigation system & pump installed
- Flower gardens upgraded and replanted
- Left over materials & junk removed & recycled
- New haying equipment purchased such as a new used tractor & new used stack wagon (purchased in partnership with City & Cozy Point Ranch LLC)
- Pastures drill seeded, rejuvenated & turned out
- Historic red barn repairs phase 1; restore structural & roofing components (managed through state historical fund & the City Of Aspen’s Asset Management Dept.)
- Baled 15,000 small square bales of hay (excess sold for profit)
- Continuing repairing 35-year-old haying equipment & tractors
- Installed new bearings on Parma Groomer
- Continuing work on the smallest employee housing unit structural & energy repairs
- Mucked out the Cozy Point Ditch head gate

Figure g: “Cozy Point Ranch Improvements & Repair”

2.4 CURRENT LEASE HOLDERS

Two independent business operators currently lease facilities at Cozy Point Ranch. Together they served around 34,500 site user days in 2015.

Patti Watson, owner of Cozy Point Ranch LLC (32.5 acres), directs the public equestrian operation, including horse boarding and Camp Cozy Point. The business employs 8 year-round workers, 7 trainers, 10 seasonal camp staff, 5 seasonal hay workers, 4 farriers, 8 veterinarians, and 2 acupuncturists and chiropractors. The business also works in conjunction with City of Aspen Open Space and Trails to conduct haying operations. Cozy Point Ranch LLC also partners with one of its employees, Manuel Morales, who owns a small herd of cows (25 cow-calf pairs) whose purpose is to absorb waste hay and fertilize the fields. These cows are grazed on the property only in winter depending on the fencing being in a good state of repair. The number of cows is slowly being reduced. Up to eighty (80) horses can be boarded through Cozy Point Ranch LLC on various levels, including indoor stalls, outdoor paddocks, or pasture.

Cozy Point Ranch LLC's operation has a capacity to board 29 horses indoors and about 50 horses living permanently outside, with additional outdoor horses during summer. The horse, cow, and haying operations are interconnected through various inputs such as herbicide spot spraying and hand-pulling, and outputs such as fertilizer from composted manure and horse bedding (wood shavings).

Camp Cozy Point offers various opportunities for young riders as well as instruction for adults. These opportunities include horse camp for beginners and experienced riders, as well as show camp for riders participating in shows. Membership and day-use fees are offered for riders who bring their horses to Cozy Point Ranch to use the riding facilities. Cozy Point Ranch LLC hosts valley-wide middle and high school equestrian teams for practices and events. They are also the home stable for the Aspen Equestrian Team. The operation also hosts horse show events that are open to the public.

Aspen T.R.E.E. (0.5 acres), a farm and garden learning center owned by Eden Vardy, leases part of the property for its educational program. Aspen T.R.E.E. offers internships and camp experiences for ages 1 and up, centered around sustainable agriculture, environmental citizenship, and traditional arts. The operation also offers personalized programs for private groups and schools as well as co-op memberships for eggs and vegetables. Aspen T.R.E.E. partners with valley-wide agricultural programs and farmers for its annual community Thanksgiving meal event which supports and showcases our local farmer economy. The event attracts hundreds of community members.



Inside the Dome at Aspen T.R.E.E. Photo courtesy of Aspen T.R.E.E.

“The City of Aspen hopes to preserve the agricultural and ranching heritage of the upper Roaring Fork Valley through a planning effort that is underway for the Cozy Point Ranch. Joel Salatin’s expertise and vision for sustainable agriculture, small scale community farming, and local food production is invaluable to provide us with a perspective of what is possible for our community and this unique, publicly owned ranch.” ~ Austin Weiss, City of Aspen Open Space Manager

COZY POINT RANCH MANAGEMENT PLAN 3.0 OPPORTUNITIES & PLANNING ISSUES



A series of inspirational renderings were created during site value brainstorming with stakeholders. They do not reflect current plans for development, but rather an idea of what might occur at Cozy Point. "Cozy Point Envisioning" rendering by Dunnnett Designs

The vision for Cozy Point Ranch Open Space encompasses preserving our valley's ranching heritage and fostering the ecological health of the land through innovative management approaches that provide locally-grown food and enhance equestrian and agricultural operations, while connecting the community with the land. This vision has emerged from a rigorous and inspirational process involving the local community, local and national agricultural expertise, local and national equine specialists, scientific analysis, and the guidance of the City of Aspen Open Space and Trails mission.

Initial inspiration and momentum for the vision came from a special work session at the ranch with Monroe Summers (ranch manager at the time), Aspen City Council, and City of Aspen Open Space and Trails Board members on July 28, 2014. At that session, Monroe captivated Council and Board members with the potential for expanding sustainability across ranch operations, and expanding and enhancing equestrian offerings, agricultural education, local food production, and our community's connection with the land. Inspired by Monroe's vision, the City identified an opportunity to help this equestrian center evolve into a innovative sustainable agriculture center. Working together the equestrian, recreation and agricultural operations, such as haying and food production, will continue to provide sustain recreation and open space amenities while promoting land and community health. The City sees sustainability as a concept to be integrated into all aspects of the ranch, and views the hay production and pastured land portions of the equestrian center under the same umbrella as agriculture.

During the summer of 2015 visits from renown sustainable agriculture and local food systems experts, Joel Salatin and Eliot Coleman re-inspired the vision for Cozy Point Ranch. The special consultation provided

by the City brought them to tour Cozy Point Ranch as well as other agricultural operations in the valley in order to provide a contextual overview of the valley’s local food network.

Salatin’s input emphasized the value of coordination between agriculture and equestrian operations, staff housing on site, and rotational grazing for pasture health. He also recommended offering professional development opportunities for young farmers and educational offerings for families and schools. Coleman recognized the property’s potential for significant local food production, developing and showcasing high-altitude and extended-growing-season techniques, serving as a local food hub, and offering growing space and a tool library for small local growers. He also felt there was rich potential for aligning all ranch operations under the umbrella of sustainability. ("Jessica Catto Dialogue", 2015)

Planning issues and opportunities related to specific aspects of the ranch, such as natural resources, agriculture, equestrian operations, archery range, community connection, and overarching general site improvements, are fully addressed in the ensuing subsections of this chapter.

Arising out of the broad opportunities described above, the City envisions a landscape that is a sustainable system, connected to the community through trails, natural landscapes, locally-grown food, and access to recreational and educational programs. The ranch holds a great deal of significance within our community as a cherished ranching heritage landmark, with its expanses of native habitat and recreational amenities. Cozy Point Ranch will be a place where wildlife and human activities thrive, the land and streams are healthy, and our local ranching heritage is celebrated.

3.1 GENERAL SITE OPPORTUNITIES & PLANNING ISSUES

The general site vision is to **manage for a sustainable, functioning open space with coexistent relationships among operations.** Primary opportunities for the ranch center around



Figure h: "Site Sustainability Pillars"

developing a coexistence of site operations so that resources are efficiently used, ecosystems are preserved and functional, and the site’s agricultural heritage is preserved for future generations to experience and learn from. These goals can be organized in terms of sustainability and best land management practices.

Sustainability is defined by meeting the needs of present users without compromising the ability of future generations to meet their needs. This is achieved by supporting economic, societal, and ecological health and vitality (see Figure h). In the context of Cozy Point Ranch, sustainability centers on economic viability of lessees, accomplished in part by providing agricultural land for lease at below market value and the initiative to build and improve employee housing for operations; catering to the community’s social values by providing historic preservation, education and empowerment; and responsible land stewardship, such as maintaining land quality and efficient use of resources. These three pillars of sustainability, ecology, society, and economy, form a self-regulating system of checks and balances, in which any one pillar that becomes out of balance is brought back into equilibrium by the others.

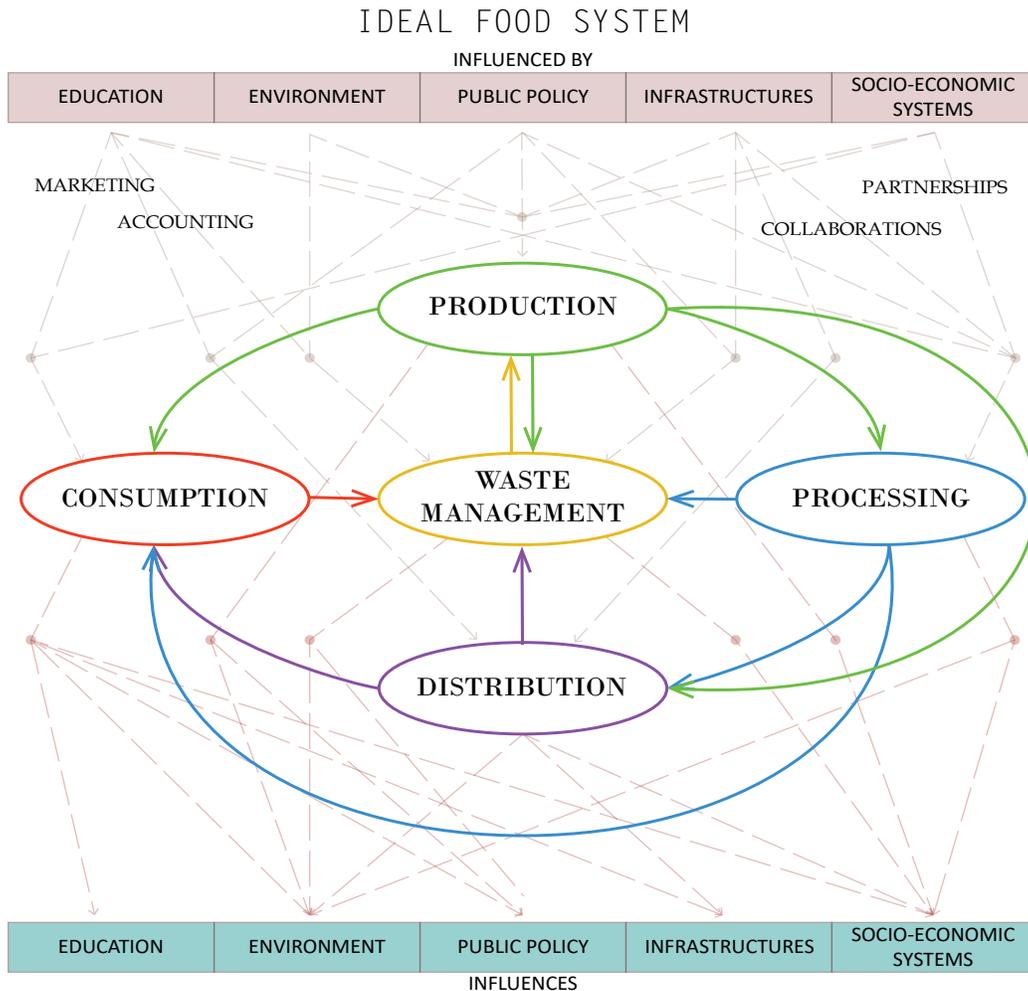


Figure i: "The Food System Network" shows the intricate web of relationships that influence a community's access to a strong local food system from environmental to economic health

Under the direction of the City-employed ranch manager, equestrian and agricultural operations will work together to build mutual stewardship goals, a code of conduct helpful in reaching these goals, and measure toward a sustainable operation. Achieved through best management practices for agricultural, equestrian and natural resource management, the collective sustainability goals will provide recreation and open space amenities, promote land and community health, and maintain the vitality of their businesses. The ranch manager will be guided by this management plan in order to prioritize the health of the land, proper use and maintenance of ranch facilities, and lessee operations that meet sustainability and overall coordinated goals. The ranch manager will also

work together with Aspen Valley Land Trust in order to optimize the development envelope toward best use of the land, as well as to designate wild land areas and agricultural land areas.

Opportunities to improve sustainability on the ranch include collaboration between lessees for wildlife-friendly ranching and farming practices, and the preservation of the rural and historical character. Some of these opportunities will have positive implications on other sustainability goals. For example, the preservation of historical agricultural land by allowing farming practices to continue will not only protect social values for history, but will also provide space for agricultural businesses to thrive.

Facility upgrades that enhance the health and safety of visitors and employees at the ranch are a priority. Several opportunities exist for providing such upgrades and improvements with regard to energy efficiency. One area in which this can be done is in generating solar electricity on site. The energy efficiency studies by the Sunsense and C.O.R.E partnership, and the Energy Efficiency Solutions, Confluence Architects and Aspen Thermal Consulting partnership reveal areas of potential improvement. The "City of Aspen Solar Feasibility Study" indicates opportunities to install a 136 kW solar system on the barn roof (2016). This infrastructure could help replace conventional energy use on the property and even sell back to the grid. Efforts to improve efficiency on all the buildings on site as specified by the "Energy Audit for Cozy Point Ranch" report are already underway (see Figure g), however, more can be done to upgrade facilities in this regard (2011). Together these efforts can help to reach the goal of net zero energy use on the property.

The existing historic frame houses offer another opportunity for energy efficiency upgrades on the property. C.O.R.E and Confluence Architects recommend gutting the frame houses in order to conduct a complete renovation inside and out, because so many aspects of these buildings are inadequate from an energy efficiency standpoint. The renovation would include re-insulating and sealing the houses, installing new, efficient appliances and lighting, and then putting them back together with their original exterior siding to preserve the homes' rustic charm. These renovations could initiate possible changes to the development envelope.

There are several upgrades and improvements to facilities to be done at Cozy Point Ranch, with regard to energy efficiency. The energy efficiency studies by the Sunsense and C.O.R.E partnership, and the Energy Efficiency Solutions, Confluence Architects and Aspen Thermal Consulting partnership reveal areas of improvement. The "City of Aspen Solar Feasibility Study" indicates opportunities to install a 136 kW solar system on the barn roof (2016).

This infrastructure could help replace conventional energy use on the property and even sell back to the grid. Efforts to improve efficiency on all the buildings on site as specified by the "Energy Audit for Cozy Point Ranch" report are already under way (see Figure g), however more can be done to upgrade facilities in this direction (2011). Together these efforts can help to reach the goal of net zero energy use on the property.

Possibilities exist for exploring waste management alternatives in order to address current impacts and to optimize facilities for efficient use. An anaerobic manure digester (also known as a methane digester) may be explored as a system that would process manure and yield methane to be converted into electricity for use on or off the property. The digester would process manure containing residue of herbicides and/or antibiotics. In a separate waste-stream system, manure free of such residues would be composted and used in agricultural applications. Additionally, a bio-filtration system may be explored to process runoff from paddocks and barn drains in order to clean this runoff water which presently flows untreated directly into Brush Creek.

The ranch's rural and historical character is a valuable and important aspect of the property, and must be preserved through the processes of implementing any changes to restore and/or upgrade the property and its facilities. Opportunities that directly meet this mandate include restoring the Pan Abode buildings, renovating unattended agricultural fields, and the continuation of the red barn's restoration work.

The following sections provide detailed information about how natural resources may be restored and how equestrian and agricultural operations may be upgraded into the fold of sustainability in coexistent, if not symbiotic, ways.



A section of Cougar creek. Mature cottonwood galleries exist in some areas of Brush and Cougar creek. Photo courtesy of the Western Ecology Resource Inc.

Brush and Cougar Creeks are direct tributaries to the Roaring Fork River, and as such, they present opportunities to manage water quality for both the benefit of systems on the ranch and to meet responsibilities to the Roaring Fork Watershed. Riparian zones associated with the creeks create habitat, maintain channel health and connect migration paths across several County and City properties. Their overall existence contributes to the larger network of properties and toward the goals of the municipalities for preserved, healthy wildlands and recreation. Information on options for restoring the riparian areas can be found in Section 4.2 actions. There are opportunities to collaborate with the County and the Town of Snowmass Village to help mitigate the effects of urban development upstream.

3.2 NATURAL RESOURCE OPPORTUNITIES & PLANNING ISSUES

The diverse habitats and land use patterns at Cozy Point Ranch present a number of opportunities regarding natural resources. The natural resource planning vision centers around **ecosystem health, promoting wildlife diversity, and community education**, and ties in directly to the overall sustainability goals for the property. These goals align with the overall site goals and principles of ecological health and the fostering of community health through ecosystem services.

Ecosystem health is key to the perpetual use and existence of the agrarian landscape, and as such, restoration of natural resources in areas of specific importance to wildlife on the property is an important step. Foremost, is the restoration of Brush and Cougar Creeks and their associated riparian zones, as well as efforts to maintain native plant communities and sustainable agrarian land management in the areas outside the riparian zones. Restoration of these areas will provide many benefits to other systems on the ranch, including increased wildlife habitat value throughout all natural land areas on and adjacent to the property, improved water quality and supply for both natural ecosystems and agricultural operations, erosion control, and aesthetic values.

Given the existing, documented use of Cozy Point Ranch land for wildlife migration, year-round habitat, and winter range, opportunities exist for preserving and protecting important corridors and habitat areas, particularly in the northern reaches of the property, including the lower slopes of the adjacent Wildcat Ranch area. These areas of the property have been identified as important to mule deer and elk. Additionally, ways to maintain and enhance wildlife connections to Cozy Point South and adjacent open space parcels will be explored.

Efforts for natural resource health and sustainable land management extend beyond wildlife habitats and riparian areas. According to Julian Dumanski, an environmental scientist and soil scientist for the World Bank and government of Canada, "Sustainable land management (SLM) requires the integration of technologies, policies and activities in the rural sector, particularly agriculture, in such a way as to enhance economic performance while maintaining the quality and environmental functions of the natural resource base" (1997). Thus, the economic health of the equestrian and agricultural operations and the vitality of the natural areas is dependent in part on the sustainability of the site as a whole. Land operations must focus on water quality, soil health, and nutrient management in order to achieve functioning natural resources and,

in turn, ensure long lasting economic benefit.

Sustainable land management can be achieved through the implementation of best pasture/field management practices. For instance, managing for soil health in pastures and agricultural fields creates dynamic ecosystem functions that aid in healthy crop production, reduce erosion, increase stream health, and create overall land resilience. The use of horse manure in the sustainable agriculture program both in order to cycle this material back into the land as fertilizer and as a way of managing nutrient-rich runoff that presently affects water quality and aquatic ecosystems on the ranch, is yet another way agricultural activities can improve ecosystem functions and overall site sustainability. More information on sustainable agricultural practices is envisioned in the following Sections 3.3 and 3.4. The ranch manager and lessees will decide which best practices will be used depending on their activities, needs, and capabilities.

There is a great opportunity to extend the knowledge gained from healthy land stewardship at Cozy Point Ranch to the community. Educational programming and /or events focusing on the natural environment and land stewardship best practices are additional opportunities related to the property's natural resources. Site tours or courses addressing native flora, wildlife, ecological restoration, beaver ecology and management, and birding are just a few possibilities of many. Information on education and community involvement visions and action items is explained in Sections 3.6 and 4.6, respectively.

3.3 EQUESTRIAN OPPORTUNITIES & PLANNING ISSUES

The current equestrian operation run by Cozy Point Ranch LLC serves our community by providing affordable, public horse-boarding facilities and services, public riding facilities, riding instruction for all ages, and a youth equestrian camp. The City understands the value of this public equestrian center as the only affordable, public facility in the valley, and will continue to host and enhance this important facet of the ranch. The vision for the



Mare pastures in the winter, photo courtesy of Cozy Point Ranch LLC

equestrian operation at Cozy Point Ranch is to become a **sustainable equestrian center, which continues to provide affordable public services and maintains the historical integrity and rustic character of the ranch.** As a major facet of the ranch, the equestrian center will operate under the overall goal of sustainability (generations of healthy and vital social, ecological and economical operations), and integrate with agricultural operations as part of that broad goal. These goals align with other property's vision and principles for safety, environmental and community health and recreation.

Tremendous support for the equestrian component at the ranch was expressed through meetings and input from the horse community during the stakeholder inputs and public comment period. Community members have expressed the many values of the program that extend beyond recreational riding and skill-development, to include fostering self-esteem, self-confidence, a sense of community, and a strong work ethic among equestrian participants, notably among young women participants. The operation also coordinates equestrian teams for middle school and high school equestrians. These teams are open to riders from Glenwood Springs to Aspen, and are the only school equestrian teams represented on Colorado's Western Slope.

As a major facet of the ranch, the equestrian center will operate under the overarching goal

of sustainability that unites all activities on the property. Sustainable equine operations are similar to agricultural operations. They take into account the ecological, social and economic vitality of the site. Ecological impacts can be mitigated through "manure management impacting soil and water quality, indirect facility impacts on resource use through electricity, water, fossil fuel, and construction materials, as well as the disruption of the local natural habitat" (Shere, 2012). For example, exploring the implementation of a bio-

*"We have never seen our daughter so happy as she is when she is at Cozy Point. It is her "thing", her sport" ~
Ashley Allison*

filtration system could be an effective way to manage runoff in outdoor paddocks where runoff currently impairs footing in these areas and flows raw nutrients directly into Brush Creek. A bio-filtration system would cleanse runoff from paddocks and barn floor drains, reducing pollution flowing into the creek. Such a system would also reduce mud and other footing and drainage problems in paddocks (drainage needs addressed in Chapter 3.1).

Economic viability is accomplished in part by collaborating with the ranch manager and agricultural operations to provide agricultural land for haying operations, and the initiative to build and improve employee housing; social responsibility caters to the community recreation and historical preservation values.

Opportunities exist for integrating equestrian operations with the agricultural component at the ranch toward the ultimate goals of sustainability and safety. The managers of equestrian and agricultural operations will work closely in cooperation with each other and the ranch manager to use resources efficiently by closing input and output cycles. For example, the cattle are currently used to consume hay unsuitable for horses in exchange for fertilizer and income in the beef industry. Collaboration and consultation among these individuals will facilitate practical cooperative activities such as optimizing land through collaborated design, utilizing the horse manure supply toward organic fertilizer and soil amendment applications, or organizing rotational

grazing of livestock or horses in the fields.

Public comment and research revealed a need to develop smart maintenance and upgrades to existing equestrian infrastructure to address safety and repair needs. The barn as well as paddocks are in need of improvements which will ensure the safety of the animals and people.

Exterior improvements include redesigning paddock areas to better handle water runoff. The current orientation of paddock fencing stacks paddocks

against the flow of runoff, and too distant from the barn entrance. Re-orienting paddock fencing to minimize impacts of runoff and to streamline use will help optimize land-use and possibly increase horse-boarding capacity. A more optimal quarantine area will be tied into paddock redesign. Drainage can be further improved by re-grading, addressing footing, and enhancing soil quality in the paddocks. Current conditions become super-saturated during thaw and heavy rain. This poses health risks to the animals and increases soil erosion. Lastly, other hazards in paddock and pasture areas need to be addressed, such as exposed electrical outlets and the intrusive leach field in the center of the paddock area.

Interior improvements in the barn and arena building will aid in increasing air quality and user experience overall. Ventilation and insulation in both the barn and indoor arena must be addressed in order to provide air flow and optimal living conditions and temperatures. The footing in the arena and stalls will provide safer longterm use for horses and riders. Providing more appropriate user facilities such as a veterinarian and/or farrier stall, as well as optimized and improved tack rooms, will increase safety by removing these sometimes-hazardous activities from the hallways. Additional upgrades for facility efficiency are discussed in Sections 3.1.

Additionally, opportunities have been identified to create safer and easier access to equestrian facilities, increased equestrian recreation activities and events, and updated infrastructures to adhere to sustainability and safety standards.

Horse trailer parking and clear signage to increase awareness and safety as visitors make use of facilities and trails and will enhance public access for equestrian activities. Such signs can be placed at trailheads and parking lots, and can educate the public about safety etiquette around horses and their activities. Enhancements toward improving safety in the developed areas include designing traffic patterns that protect people using the property’s varied amenities, and that protect horses and equestrians. Additional important safety enhancements include measures that protect horses from injury around all ranch facilities.

Increasing recreational opportunities on the ranch includes dedicated equestrian trails, a cross-country jumping course, and equestrian access to neighboring areas. This expansion and enhancement includes a cross-country jumping course to the north of Juniper Hill Road, or wherever the least impact to the environment and greatest safety of riders exists, and other trails such as bridle trails through the south end of the property. Trails that connect riders to adjacent lands are discussed in Section 3.6. Any trail development will be planned with equestrian safety in mind. This may require equestrian design experts for such things as road crossings and trail design. As advised by the horse community, appropriate and safe multi-use trails for horses are limited to hikers and wildlife viewers. Facilitation of additional horse show events, and equine-assisted therapy programming will further diversify the equestrian experience and encourage community interaction.

3.4 AGRICULTURE OPPORTUNITIES & PLANNING ISSUES

There is strong support from the community and from experts consulted, for an expanded agriculture component at Cozy Point Ranch. The vision for this component is a **model sustainable agricultural center with an emphasis on food production and ecosystem health, as well as educating and connecting the community with regard to its food system.** The City views 'agriculture' as an umbrella under which specific activities fall, including ranching, farming, equestrian operations,



Eliot Coleman's Farm demonstrates the beauty of a modern greenhouse. Photo courtesy of Heritage Prairie Farm

haying, and gardening. These goals align with the overall site goals and principles of ecological health, preservation of ranching heritage, and the fostering of community health.

Food systems in the Roaring Fork Valley, particularly in the upper valley, are heavily dependent upon the large, centralized, national food industry. Developing local food systems will improve our area's food security, reduce our community's carbon footprint, revitalize our economy, and reconnect the community to our food supply. Ranching and agriculture were once the basis of Aspen's economy, and our area was once known for the McClure Red Potatoes that were grown here.

Further, a reduction in available agricultural land and increased population creates a demand to bolster local food system. With a year-round population of about 9,500 people in the communities of Aspen and Snowmass, a multi-faceted center for sustainable agriculture is a much-needed amenity. Through the unique open space property of Cozy Point Ranch, the City of Aspen is poised to seize an important opportunity to move our community's food systems forward in a positive direction. (Garcelon, 2015)

“Sustainable agriculture involves the successful management of resources for agriculture to satisfy changing human needs, while maintaining or enhancing the quality of the environment and conserving natural resources”. Sustainable



Mr. Summers haying the fields. Photo courtesy of Cozy Point Ranch LLC

agricultural practices center around five pillars: productivity enhancement, risk reduction, protection of natural resources, prevention of degradation of the environment, economic viability, and social acceptability. The practice optimizes rather than maximizes external inputs. This is achieved by integrating socio-economic aspects with land quality. Land quality is measured in nutrient balance, soil and water quality, land use diversity, etc. Economic viability can be achieved through a viable work force, affordable and desirable products, and more. Social considerations include, but are not limited to, culturally appropriate products and practices, empowerment through education and experience, and more. (Dumanski, 1998)

“Ultimately, our kitchens determine how food is produced and what food is produced on the land” ~ Joel Salatin

Sustainability in agricultural operations is by no means a new idea; however, new advancements in technology make operations on smaller pieces of land like Cozy Point Ranch more viable. Progressive farmers such as Eliot Coleman, Joel Salatin, and those at the Central Rocky Mountain Permaculture Institute begin to demonstrate the power of agricultural practices mixed with new technologies to produce food sustainably. Exploration of certification programs, such as USDA organic certification, Demeter Biodynamic certification, LEED certification of buildings through

the US Green Building Council, and others, can offer much to the pursuit of the vision for Cozy Point Ranch, in terms of resources, support, and idea-generation, in addition to actual certification.

A great deal of expertise and infrastructure exists around us that may be drawn upon to support our efforts in the Aspen area. Progressive agriculture institutions currently exist within the valley, such as Aspen T.R.E.E., ACES’ Rock Bottom Ranch, Sustainable Settings, and the Central Rocky Mountain Permaculture Institute. Such operations that offer agricultural education and locally-produced food are most effective in their near vicinities; however, most of these operations are located in the mid- and lower valley. While the upper valley currently benefits from Aspen T.R.E.E., a modest program operating within the constraints of its limited space at Cozy Point Ranch, many possibilities exist for expanding sustainable agriculture services.

Opportunities to expand sustainable agriculture at Cozy Point Ranch start with the restoration of native habitats that exist on the property. Greater ground-water recharge, improved water quality, a higher water table, and rejuvenated, robust natural communities, together offer great benefits to agriculture, including pollination services and natural pest control (i.e. insectivorous birds and beneficial insects that prey on pest insects).

About 25 acres of unattended agricultural fields in the northern portion of the property and at AspenMass present further opportunities for land restoration. Bringing some of these areas back into agricultural production, as well as restoration and improved management of actively used agricultural land, can contribute to land quality and economic viability.

High-efficiency irrigation, extended growing aids, and rotational grazing and crop production are examples of progressive agricultural methods

that foster restoration of the property’s existing and potential agricultural land. The City has already begun to increase water efficiency with the installation of new irrigation systems in the field north of Brush Creek and at Cozy Point South. Further improvements will be done in collaboration with lease holders to assure optimal use.

Opportunities centering around local food production at Cozy Point Ranch are diverse, and hold great potential to enrich and empower our community. In addition to providing commercial growing space for small, local growers as independent business operators, programs offered at Cozy Point Ranch could empower the local farming community by addressing research and development of high-altitude and extended-growing season farming and ranching methods; operating a farm stand; providing land and training for the development of young agriculture professionals entering the field; demonstrating and educating about wildlife-friendly farming and ranching approaches; and exploring potential for further involvement in local food systems.

Additional possibilities include education and outreach classes or workshops for the general public addressing home gardening, canning and food preservation, composting, bee-keeping, animal husbandry, cheese-making, raising egg and meat chickens, and more. Opportunities exist for special community events such as farm-to-table dinners and harvest celebration events. Our area’s farming and ranching heritage could be preserved and shared through educational and interpretive exhibits and/or events. Examples of such activities may include professional development opportunities for local farmers, a community garden, family events, and more.

Integrating the equestrian operation into this process is an additional important opportunity in terms of restoring the land, as well as applying sustainable techniques to overall operations and showcasing those techniques. Techniques such as rotational grazing and bio-dynamic hay production could help reduce erosion and increase soil health

(see next chapter for more information).

In order to ensure the success of these opportunities, the manager of sustainable agriculture operations will need to work closely with the ranch manager and manager of equestrian operations. They will need to support the overarching goals of this plan by maintaining and being guided by a holistic view of the ranch. Collaboration and consultation among these individuals will facilitate such practical cooperative activities as utilizing the horse manure supply toward organic fertilizer and soil amendment applications on pastures, hayfields, and sustainable agriculture land.



Archery Range north of Juniper Hill road, photo courtesy of Bill Fontana

3.5 ARCHERY RANGE OPPORTUNITIES & PLANNING ISSUES

The existing Archery Range consists of a facility with parking space and a range with five targets at various distances. In recent years, the range has seen an increase in use as archery has gained popularity in the community, especially among youth. The archery community is focused on safety and hunting education.

There is a need to **improve and enhance the Archery Range in order to accommodate the recent increase in use and to provide a better, more diversified user experience.** Such potential improvements include formalizing parking and footpath access for range users, creating a youth-specific target, closing and restoring an informal road between the parking and staging areas, and improving safety by demarcating the range perimeter with a subtle cedar fence or other suitable material. The archery community has expressed interest in exploring opportunities for archery-specific events at the range.



Agricultural education classes at Aspen T.R.E.E. Photo courtesy of Aspen T.R.E.E

3.6 COMMUNITY CONNECTION OPPORTUNITIES & PLANNING ISSUES

This section addresses opportunities to enhance public access and passive activities on the ranch, trail connectivity within the ranch and between adjacent parcels, and educational opportunities toward engaging the public with the property’s ranching heritage and natural resources. These opportunities contribute to **enhancing public awareness of the property and engaging the public with the property’s resources and ranching heritage.**

Opportunities toward enhancing public access and passive activities on the ranch include exploring trail development in the north end of the property,

and creating more effective signage and parking for greater overall ease of access to the property and its amenities. There is a need to formalize public access through the Juniper Hill Road entrance, to restrict access through the Ranch Office Road to ranch staff only, and to designate a public horse trailer parking area. Additional infrastructure capable of easing access to Cozy Point Ranch is a soft-surface trail connecting the up-valley bus stop on Highway 82 to the main activity center at Cozy Point Ranch.

There are several important opportunities to create trail connections within the ranch and between adjacent parcels. One such opportunity is the need for a formalized trail connection across the Brush Creek Intercept Lot between the AspenMass Trail to the north and Brush Creek Trail to the south. Currently it is unclear to trail users how they should cross the lot, and they must negotiate lot traffic as they search for the trail to which they are connecting. (See adjacent properties on Map A)

Further, a trail connecting the Aspen Airport Business Center to the Brush Creek Intercept Lot would provide families and other trail users with an important trail link. Specifically, this would provide commuters with an alternative transportation option between the Intercept Lot and the existing trail network in Aspen. It would also provide families with a car-free alternative to visit Cozy Point Ranch.

A third trail connection need is a crossing of Brush Creek Road between the Brush Creek Trail on Cozy Point South and Cozy Point Ranch, as well as a trail within Cozy Point Ranch from that crossing to the main ranch compound. The primary vision for these trail connections is to enable families coming from Aspen to efficiently access Cozy Point Ranch and the trails of Sky Mountain Park without needing to use a car.

An additional potential need at the Brush Creek Intercept Lot is dedicated trailhead parking. Currently, trail users are parking in the Intercept Lot and accessing Sky Mountain Park trails from there. The lot is designated for commuter parking only. If

a need is determined, then recreational trailhead parking may need to be formalized as part of this lot.

If it is determined that a trail connection is desired to link Cozy Point Ranch with trail systems to the north, this trail alignment would need to be located proximal to Highway 82 in order to avoid impacting wildlife habitat in the northern reaches of the property. At this time, private land constraints to the north prevent such a trail from being created.

Public input has indicated a very strong desire to continue to educate and inform citizens, not only about the how-to's and benefits of sustainability and agriculture, but also about our natural environment, the history of agriculture and ranching in our valley. This property's rich history and natural resources lend themselves to a perfect outdoor classroom. These opportunities toward connecting people to the land include providing passive and active historical interpretation and education programming, as well as providing environmental education for all ages, such as natural history walks, invasive weed clinics, and bird and wildflower identification outings. These programs have potential to be done in partnerships with existing organizations in the valley, or through the operations of a lease holder.



Ski joring in the winter months. Photos courtesy of Cozy Point Ranch LLC

“Teaching young people to garden is a priceless investment on Aspen’s doorstep” ~ Michael Thompson

“It was the best camp I’ve ever attended. We got to go find wild cucumbers and goose berries and Paul taught me to eat cabbage burritos - all out of their garden” ~ Soren Tudge 8-years-old

COZY POINT RANCH MANAGEMENT PLAN

4.0 RECOMMENDED MANAGEMENT ACTIONS



Manuel Morales works for Cozy Point Ranch LLC and is an integral part of operations. Photo courtesy of Cozy Point Ranch LLC

4.1 GENERAL SITE MANAGEMENT ACTIONS

In the short-term, in order to effectively manage the land and goals set forth by this management plan, the current City-employed part-time ranch manager position will be reclassified as a full-time position. A request for proposal (RFP) process to determine lease holders will begin following the adaptation of this plan. Lessees will provide expertise that will help carry out the City's vision and goals for the property and operations as it pertains to their respective businesses.

The ranch manager and lessees will work together to identify land use areas and create sustainability measures. Land use areas specified will be wildlife habitat, agricultural operations and equestrian land. Specific sustainability actions are detailed

in various subsections of Chapter 4, and others, such as waste management, are integrated into agricultural practices.

In the mid-term, sustainability measures and actions decided during the collaborative planning term shall be implemented. To ensure the adaptive management of the open space and operations, this plan will be reviewed by city staff for compliance in the 5 - 10 year time period. This will ensure that goals and needs are met and adapted to available resources.

Also in mid-term, researching various certification programs for possible certification and practices can be utilized to strengthen efforts. Such certification programs may include USDA organic certification, Sustainable Sites Initiatives (sustainable landscape design), Sustainable Grown Certification (SCS Global Services), and others.

The following subsections describe ways in which the general site can improve toward a more sustainable functioning open space with coexistent relationships among operations.

4.1.1 Infrastructure & Resource Efficiency

Parking Lots and Driveways

The following are short-term actions: Re-grade parking and driveway areas specifically to improve drainage. Re-pave the parking lot at the Ranch Office building and restrict access to facility personnel only. Close and restore the social road at the Archery Range.

Buildings

As a Short-term action, assess capacity for developing additional ranch staff housing in the planning area. Research this through the Pitkin County Planning & Zoning Department, Aspen Valley Land Trust, Aspen Pitkin County Housing

Authority, and other entities and/or factors that may hold regulatory control over such development. It is the Parks Department's hope to have additional housing built within the mid-term range.

Short-term improvements to buildings on site requires the City to continue to upgrade the energy use to meet the recommendations of the 2011 survey done by Confluence Architects in partnership with Energy Efficiency Solutions and Aspen Thermo. For example, the two historic frame houses that currently serve as employee housing must be gutted and fully renovated with new insulation, sealing measures, and new, efficient appliances, in order to address the many energy efficiency problems these structures have. This renovation work must be done in a way that retains and preserves the homes' rustic, historical character. ("Energy Audit for Cozy Point Ranch", 2011)

The mid-term goal involves exploring the recommended upgrades to energy production and strategies to reduce energy waste on site as stated by the 2016 study by the Energy Efficiency Solutions, Confluence Architects and Aspen Thermal Consulting partnership. On example of such upgrades is the possible application of roof-top solar panels to generate electricity. The combined vision of previously mentioned efficiency solutions has potential to realize a goal of net zero energy use on site. Decisions and implementation of these plans must be implemented in the long-term ("City of Aspen Solar Feasibility Study", 2016)

Waste Management

In the short-term, begin researching ways to best manage manure waste, and identify a suitable location. An efficient manure-composting system and an energy-producing manure digester can provide resources and energy to other site components. Composting systems must address runoff pollution issues and speed up the composting process. The composted end-product is to be integrated into the agricultural activities. Implement compost design by the mid-term.

Recycling system improvements throughout the site, including bins and signs, will help organize and streamline recyclable and reusable material. This is to be accomplished in the short term.

4.1.2 Historical Preservation

Restore historical buildings and landscapes. A series of unattended agricultural fields on the north side of Juniper Hill road needs to be assessed for either restoring back to productive land or re-establishing wildlife habitat in the short-term. Restoration of these fields will be done by the mid-term as agricultural needs are better understood.

There are three existing Pan-Abode buildings on the property, two of which have been previously restored and are currently used as the ranch manager's office and the headquarters for Camp Cozy Point. The third Pan-Abode building is not restored and not in use. Identify a proposed use for the third Pan-Abode building, such as ranch staff housing, and restore this building accordingly.

As a mid-term action, continue renovation of the historic red barn, as recommended by the historical assessment. This barn is currently undergoing roof replacement work and stabilization work to address the failing foundation. Additional restoration work will be necessary in order to preserve this historic structure. ("Historical Structure Assessment and Preservation Plan", 2014)



Cozy Point Ranch red barn underwent renovation to structural components, roof, and flooring fall of 2016. Photo courtesy of Cozy Point Ranch LLC



Upper Cougar Creek. Photo courtesy of Aspen T.R.E.E

4.2 NATURAL RESOURCE MANAGEMENT ACTIONS

An initial short-term action under natural resource management, is to create a plan using information from the biological and historical survey, as well as the concept stream restoration, that identifies and delineates exactly where land areas will be restored and/or preserve. Examples of such areas include severely impacted locations where concentrated efforts will be required to bring them back to functional ecological health: areas along Brush Creek that will be converted into riparian habitat as that riparian corridor is widened as part of the Brush Creek restoration work, areas impacted by CDOT staging activities during the expansion of Highway 82, the informal parking area at the Archery Range, and other areas. This plan will guide natural resource restoration efforts and will help track where and why certain land areas will be altered by restoration efforts.

4.2.1 Brush Creek Restoration

Select and implement a restoration plan for Brush Creek. This action is to be initiated in the short-term and efforts are expected to be on-going. Restoration work on Brush Creek will focus on the reach of the creek that runs through Cozy Point Ranch, with the goals of stabilizing the stream channel and restoring the resiliency and ecological integrity of riparian and aquatic habitats. Presently, this reach of Brush Creek lacks lateral stability and functional connectivity to its floodplain, suffers severe bank erosion, and lacks healthy riparian vegetation.

Addressing these problems will restore the native riparian plant community, renew connectivity between the floodplain and the stream, improve groundwater recharge, reduce streamflow velocity, protect banks from erosion, and ease peak flood events. The restoration work will result in improved wildlife habitat conditions and higher water quality.

Additional short-term actions: The following are three alternative restoration plans from which to choose. These plans offer different levels of cost and treatment options.

Level 1 The “Do Nothing” Approach

This plan would rely on natural geomorphic and biologic processes, beaver activity, and vegetation growth to heal the system over time. While costing little in terms of monetary expense, this approach may require many decades or longer to become stabilized, and these processes may progress in ways that are contrary to the intended land use. Beaver, as non-controlled partners in stream design work may fluctuate in population, and their modifications to the stream may or may not be acceptable. Additionally, geotechnical engineering should be consulted to evaluate possible risks to homes upslope to the west of the stream channel where bank erosion is occurring.

Level 2 The Limited Approach

This approach would include measures to create and protect a wider riparian corridor, address only the most severely eroding banks, treat deeply incised stream bed sections to limit further scouring, and manage beaver populations.

Installing wildlife-friendly fencing around a 200- to 250-foot wide riparian corridor would exclude grazing horses and cattle and allow willows and other riparian vegetation to help stabilize banks with their root masses. Bio-engineered bank treatments would stabilize banks and reduce sediment loads and land loss. Such treatments involve installing locally available large woody materials (such as root wads with extended tree trunks), and live willow

wattles or brush mattresses.

Stream bed treatments such as constructing cobble riffles would help resist erosion of the stream channel. Other stream treatments may include boulder cross vane structures or log structures in order to provide fish cover and macroinvertebrate habitat. Riparian plantings and seedings would be used only on banks with the most severely eroded slopes. Plantings and seedings would follow species and methods guidelines as outlined in the hydrology report cited below.

Encouraging and managing beaver activity where woody vegetation is lacking in many places, could be difficult until such vegetation fully establishes. Using Beaver Dam Analogues (BDAs), which are human-created beaver dams, is an adaptive approach that allows for longer restoration timeframes and also the possibility of failure (given the unpredictable nature of beavers as players in stream restoration work). The best way to include beavers into a management plan, is to view them as a closely managed component but not necessarily a player to be counted on.

Level 3 The “Do Everything” Approach

This approach would incorporate the restoration measures of Level 2, and apply them to the entire 5,000-foot project reach. Other areas, in addition to high priority areas, would be stabilized. No BDAs would be created, and beavers would be highly managed to increase success of woody riparian plantings. Significant bank and bed stabilization measures would provide a greater assurance of stabilizing existing erosion problem areas and prevent new erosion problems from developing. A greater amount of riparian plantings and seedings would further improve bank stabilization and habitat value.

4.2.2 Cougar Creek Restoration

Select and implement a restoration plan for Cougar Creek. This action is to be initiated in the short term, and efforts are expected to be on-going.

Upstream of the Archery Range access road, riparian vegetation and floodplain conditions are fairly functional. Downstream of the access road, however, the channel is incised and lined with large cobbles and boulders. Two small concrete weirs are located there as well. Additionally, a large manure compost pile may shed nutrient-laden water into the stream during heavy precipitation events. Overall goals of restoration work on Cougar Creek include enhancing and restoring the limited function of the northern reach of this stream. Addressing the incised streambed, limited habitat function, and sediment/nutrient issues is advised in order to improve value to wildlife, improve water quality, and protect the Roaring Fork River which Cougar Creek flows into as a direct tributary.

The following two alternative plans are offered as choices for restoring Cougar Creek:

Level 1 Alternative

This plan includes plantings of native trees and shrubs to improve wildlife habitat quality. This plan would not enhance water quality or floodwater functions, as the channel would remain narrow and deep.

Level 2 Alternative

This plan would involve reshaping the high left bank of Cougar Creek, removing the existing cobble and boulders, and planting native wetland and riparian plants. The creek bed would be reshaped or drop pools would be created in order to better control intermittent stream flows and maintain high water quality.

4.2.3 Dry Land Habitat Conservation

The following are short-term actions: Preserve the high-quality elk and deer habitat in the northern portion of Cozy Point Ranch, on the lower slopes of the Wildcat area. These habitat areas serve as migration corridors and winter range. The unattended agricultural field areas on the flat ground below these slopes are to be explored for developing

a cross-country jumping course. Consider returning portions of the unattended field areas to active agricultural use and consider installing irrigation systems in these areas. Continue to implement a comprehensive, integrated weed monitoring and management plan. Restore and enhance the wetland, riparian, and aquatic habitats of Brush and Cougar Creeks (see these detailed action items in Sections 4.2.1 and 4.2.2).



Photo courtesy of Cozy Point Ranch LLC

4.3 EQUESTRIAN MANAGEMENT ACTIONS

4.3.1 Equestrian Infrastructure Updates

Sustainability

Short-term actions: The major site goal of sustainable practices is achieved through handling inputs and outputs of barn and paddock areas, as well as wise hay production. Much of the infrastructure in the barn and paddock areas can achieve this through resource efficiency actions such as net zero energy use described in Section 4.1.1. Additional actions include improving runoff water quality using practices such as bio-filtration systems which clean runoff coming from barn floor drains and paddock areas before it flows into Brush

Creek. For the mid-term, integrating horse manure into the general site composting system for more efficient and wise use of manure greatly helps close the nutrient cycle loop.

Sustainability actions for areas outside sacrificed lands include expanding economic capacity and healthy land stewardship by using some of the unattended fields and adjacent land for hay productions, and using best agricultural practices to yield said hay. More on this is found in Chapter 4.4 Agricultural Actions.

These sustainability actions and measures will be further developed during the collaborated sustainability plan created by the lease holders and ranch manager following the adoption of this plan. The following sub-sections are a series of updates necessary for the health and safety of the existing infrastructure.

Replace Fences

Short-term actions: Replace and/or repair existing no-climb horse fencing, and add an electric wire and wood board at the top edge. New fencing material is to be buried 6 inches or more below grade to protect horses from getting tangled in fencing at ground-level. The electric wire will discourage curious horses from investigating the no-climb fencing and will further prevent entanglement or other mishaps involving the no-climb fence. Repair existing metal bison fencing as needed and install no-climb horse fence just inside bison fencing as a secondary fence for the safety of horses. Wildlife-friendly fencing materials will be used for any fencing outside the paddock areas.

Paddock Drainage

Short-term actions: Re-grade and re-orient paddock areas as needed to improve drainage, ease of access, and land optimization. This work is to be done concurrently with re-grading associated with fence repair, and replacement work. Orient heavily used and rotated paddocks closer to barn, rotate them parallel to runoff and orient less intensely

used land closer to riparian area to reduce impacts. Research moving leach field in paddock area to a more optimal space. Explore improvements to the soil substrate within paddocks as a further measure toward better drainage and durability. Additionally, improvements to the quarantine area to ensure animals are kept from others, and the removal hazards to horses from the paddock area, such as exposed electrical equipment and leach fields, must be made.

Barn/Arena Improvement

Short term actions pertaining to the barn and indoor arena involve both indoor and outdoor items. Indoor actions include: improve ventilation, replacing insulation material, exploring options for dust control in the arena, tack room repairs and improvements, and optimizing tack storage in other spaces currently used for this purpose. The dust control system may be water-based or may utilize a dust-control substance that is both human- and horse-safe. Outdoor actions include: painting the exterior of the barn and arena buildings, re-grading the ground outside to close gaps at the bases of building walls, and researching a bio-filtration system to clean runoff water that flows from barn floor drains and paddocks into Brush Creek.

Inspect Horse Shelters

Inspect and explore options for replacing horse shelters in individual outdoor horse paddocks with safer structures. Current structures are metal and less safe for horses when they bump or kick the walls. This is to be implemented as a short-term action.

Horse Servicing Entrance/Facilities

As a mid-term action, convert an existing stall in the southwest corner of the metal equestrian barn into a horse clinic. Build a separate entrance door for this facility to be used as a dedicated personnel entrance for veterinarians, farriers, and associated personnel. This will serve to separate veterinarian

and farrier activities from general equestrian activities for greater safety and convenience.

Increase Hay and Grain Storage

Explore opportunities to build an additional stand-alone pole barn to expand current hay storage capacity by two or three times. The structure should be both weather- and elk-proof. This is a mid-term action.

An additional mid-term action is to replace the semi trailer used for grain storage with an appropriate facility.

4.3.2 Equestrian Recreation & Public Access

Equestrian Trails and Permanent Cross-country/ Recreation Elements

Short-term actions are: Re-explore opportunities for developing a cross-country jumping course in the north portion of the planning area. Design and construct a dedicated equestrian loop trail in the portion of the planning area to the north of Juniper Hill Road. The proposed trail will utilize existing unofficial trails where appropriate and will be accessible to hikers. Formalizing public horse trailer parking in the north parking lot and in the main parking area will help create easier public access to the new equestrian recreational facilities.

Safe Road Crossings

Establish a safe equestrian crossing of Juniper Hill Road at a location to be determined somewhere between the driveway entrance at the metal equestrian barn and the mare pasture to the north of the indoor arena building. If this crossing is located adjacent to the mare pasture, an additional fence will be required to protect turned-out horses from riders.

In the mid-term, revisit a design for crossing Brush Creek road that will help connect the Cozy Point property and its equine users to the adjacent Sky Mountain Park (see Chapter 4.6)



Cozy Point Ranch LLC grows much of their hay on private land, making them self-sufficient. Photo courtesy of Cozy Point Ranch LLC

4.4 AGRICULTURE MANAGEMENT ACTIONS

4.4.1 Model Agricultural Land

Ecosystem Health

The short-term general site action to collectively organize land use will help define ecosystems not to be used in agricultural operations. After the areas are determined, best agricultural practices that promote and protect the function of both agricultural and wild lands will be collaborated and designed in the collective sustainability measures. These measures will care for and enhance land quality, nutrient cycles, ecosystem services, and economic balance of agricultural activities. Agricultural management specific short-term actions may include, but are not limited to, continued implementation of a comprehensive, integrated weed management plan, rotational grazing techniques, seeding, and natural soil amendments. This action is expected to be initiated in the short-term and carried out continuously (see Section 4.1).

In addition, the general site action geared towards reducing inputs and outputs that apply to agricultural uses include a waste management system. This action will include researching potential issues related to leach fields for risk to animals and the creek due to its close proximity to both livestock areas and Brush Creek.

Land Use Optimization

Short-term actions: The collaboration with lease holders and the ranch manager to designate land use and implement sustainable practices will also help to optimize land. These actions may include, but are not limited to, restoring and/or maintaining the health of existing agricultural land for production. Additionally, exploring additional opportunities to enhance food production through innovative technologies, such as extended growing infrastructures and efficient water usage will optimize use of land.

In the mid-term, integrate into the efficient composting system in order to handle manure volume and contribute to food production, and expanding food production in the unattended north fields will be explored, as mentioned in Section 4.1.2, to optimize agricultural food production where appropriate.

In the long-term, if necessary, food production on the adjacent AspenMass property will be explored.

Expansion of food production will be done while consulting with other lease holders to ensure the sustainability of all operations.

Water Use Efficiency

As short-term actions, fully utilize water rights associated with the property and upgrade existing irrigation infrastructure to promote efficiency. This includes installing high efficiency water broadcasting equipment and fixing leaks. As a mid-term action, expand irrigation systems to areas in the northern portion of the planning area that will be returned to agricultural use. Explore opportunities to expand irrigation systems to portions of the AspenMass Open Space, as a long-term action.

An additional short-term action is to address the management of the entire ditch running from Cougar Creek through the north end of the property. This action includes working with the ditch owner to encourage more environmentally sensitive ditch maintenance approaches in order to avoid such

impacts to vegetation and habitat as excavated soil piles and other damage caused by operating machinery for ditch work.

4.4.2 Education & Community Connection

Expand Facilities

Short-term actions: Work closely with all lessees to identify areas for expansion of the farm and garden learning center into adjacent land on the property. Identify suitable access points to Brush Creek for educational program use. Explore options for creating additional ranch staff housing on site. Also, as mentioned in the above section on environmental health, research potential issues related to a leach field located near the sustainable agriculture education center.

As a mid-term action, work with the Aspen Historical Society to identify opportunities to showcase agricultural history as a mid-term action, and conduct a feasibility study for the concept and design of a community garden at the ranch.

Access

As short-term actions, provide an exclusive, dedicated operational access route for the farm and garden learning center in order to enhance safety and general ease of operations. Provide better visual identification of the visitor entrance and formalize visitor access to the farm and garden learning center by creating improved signage and a defined crusher fines footpath.

Safety

In the short-term, improve pedestrian and horse traffic flows to address user conflict issues. Dedicated separate operational entrances for agricultural equipment will aid in reducing exposure to horses. Increase safe user behavior messaging through signage.



Current archery targets located north of Juniper Hill Road. Photo courtesy of City of Aspen Parks Dept.

4.5 ARCHERY RANGE MANAGEMENT ACTIONS

4.5.1 Facilities

Parking and Access

As short-term actions, improve and define parking for Archery Range users and create an access trail between parking and the range. The preferable parking area location is close to the existing compost pile.

Shade Structures and Picnic Tables

Provide shade structures and picnic tables for Archery Range users. These facilities will be located directly adjacent to the shooting area to provide range users with staging space. This is to be implemented in the short-term.

Target Grounds Improvements

As short-term actions, improve approach paths within the range between the shooting area and targets, by defining the paths (possibly with crusher fines) and providing for drainage off the paths. Move existing targets farther apart to improve range safety. Provide opportunities for children to practice archery skills by replacing the shortest-range target with a softer target designed for young archers shooting with lower velocity.

4.5.2 Events

As a mid-term action, evaluate the site for opportunities for public archery events.



Cozy Point Management Plan review with Joel Salatin, Spring 2016. Photo courtesy of the Aspen Parks Dept.

4.6 COMMUNITY ACCESS MANAGEMENT ACTIONS

4.6.1 Access & Activity

As a short-term action, formalize all public access through Juniper Hill Road, as recommended by the Traffic Analysis. Limit access at the secondary driveway off Highway 82 (to Ranch Office and staff housing) to ranch staff, due to safety constraints at this driveway and the existence of sufficient intersection infrastructure at Highway 82 and Juniper Hill Road. Also, create a soft-surface pedestrian trail connecting the bus stop at Juniper Hill Road to the agricultural and equestrian center. Currently, bus users must walk along Highway 82 and Juniper Hill Road in order to access Cozy Point Ranch; the addition of the soft-surface trail will provide safer and more direct access for visitors arriving by RFTA bus.

Additional short-term actions are: Formalize vehicular access to the Archery Range on the present access road by delineating a parking area adjacent to the existing manure compost pile.

Design, fabricate, and install comprehensive signage for outdoor areas and trails as well as indoor

spaces to clearly mark entrances/exits, area uses, and traffic flow for people on foot, equestrians, and vehicles. Formalize public horse trailer parking to create easier public access to the new equestrian recreational facilities. These actions are to be implemented in the short-term.

4.6.2 Adjacent Property Access

As a mid-term action, explore opportunities to increase access to surrounding properties, including assessing potential for a multi-use trail to serve as a safe pedestrian/bike/equestrian crossing on Brush Creek Road as a connection among the open space parcels of Cozy Point Ranch and Cozy Point South, and Brush Creek Intercept Lot (a large public parking and transit facility). Further, as a long-term action, develop multi-use trails connecting the property to the regional trails.

Additional mid-term trail access actions include researching the feasibility of a multi-use trail alignment in conjunction with a possible above-grade crossing of Brush Creek Road, connecting to the main ranch center. This trail planning would take into consideration safety of all trail users, and would be separate from equestrian trails. Building of these possible trails would be long-term actions, and would be done in cooperation with Pitkin County, CDOT, and the EOTC.

4.6.3 Environmental & Ranching History

Connect people to the land through hands-on experience with ranching and the environment. This can be accomplished both passively and through programs developed by lessees in the short-term.

An additional opportunity for connecting people to the land could be to provide a community garden where people interact directly with growing their food. This could be accomplished in the mid-term.

In the long-term, further enhance historical ranching resources for educational purposes and restore existing resources mentioned in Section 4.1.2 to expand the historical and environmental educational aspects of the site.

IMPROVEMENT SURVEY PLAT

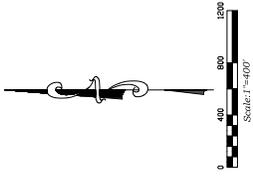
Cozy Point Ranch, City of Aspen


BOOKCLIFF Survey Services, Inc.
 120 West Main Street
 Aspen, Colorado 81611
 Phone: 970.925.2773
 Fax: 970.925.2773

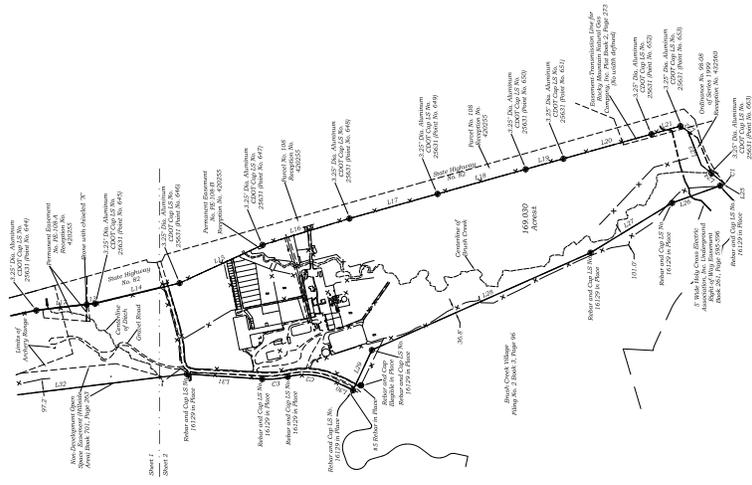
IMPROVEMENT SURVEY PLAT

COZY POINT RANCH
 CITY OF ASPEN
 220 JUNIPER HILL ROAD
 ASPEN, CO 81611

FILE:	1603A-C1
DWT:	508
DATE:	9/2/16
PROJECT NO.:	1603A-01
SHEET	2
OF	7



Legend	
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[Symbol]	Water Supply
[Symbol]	Electric Potential
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[Symbol]	Telephone Pedestal
[Symbol]	Manhole
[Symbol]	Public Pedestal
[Symbol]	Public Pole



LINE	ASSUMED	EXISTING
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2	10.00	10.00
3	10.00	10.00
4	10.00	10.00
5	10.00	10.00
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REVIEW

**DEED OF CONSERVATION EASEMENT IN GROSS
Cozy Point Ranch, Aspen**

THIS DEED OF CONSERVATION EASEMENT is granted this ^{30th} day of ~~May~~ ^{June}, 2003, by the CITY OF ASPEN ("Grantor"), to and for the benefit of **ASPEN VALLEY LAND TRUST**, a Colorado nonprofit corporation, 320 Main Street, Suite 204, Carbondale, Colorado 81623, (the "Trust")(collectively, the "Parties").

RECITALS

WHEREAS, Grantor is the sole owner in fee simple of certain real property in Pitkin County, State of Colorado, more particularly described in Exhibit A (the "Property"). The Property is comprised of approximately 168 acres of land commonly known Cozy Point Ranch, and

WHEREAS, the Property possesses natural, scenic, open space, and recreational values (collectively, "Conservation Values") of importance to the Trust, the people of Pitkin County, and the people of the State of Colorado that are worthy of preservation; and

WHEREAS, in particular, the Property is a historic ranch established in 1890 and is currently a working equestrian center and ranch with open space, highly visible from Highway 82, and which also provides habitat for deer, elk, birds and other wildlife, and is bisected by Brush Creek through the northern portion of the property; and

WHEREAS, the City of Aspen has managed the property as a working equestrian ranch and has undertaken efforts to restore the creek-side habitat and elk and deer habitat in portions of the ranch; and

WHEREAS, the specific Conservation Values of the Property are documented in an inventory of relevant features of the Property, on file at the office of the Trust, (which consists of reports, maps, photographs, and other documentation that the Parties agree provides, collectively, an accurate representation of the Property at the time of this grant and which is intended to serve as an objective information baseline for monitoring compliance with the terms of this grant; and

WHEREAS, Grantor intends that the Conservation Values of the Property be preserved and maintained by the continuation of land use patterns, including, without limitation, those relating to open space, wildlife habitat and recreational uses existing at the time of this grant, including the equestrian center and related employee housing, agricultural structures and equestrian facilities, which the Trust acknowledges and agrees do not significantly impair or interfere with those values; and

WHEREAS, Grantor intends, as owner of the Property, to convey to the Trust the right to preserve and protect the Conservation Values of the Property in perpetuity; and

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WHEREAS, the Trust agrees by accepting this grant to honor the intentions of Grantor stated herein and to preserve and protect in perpetuity the Conservation Values of the Property for the benefit of this generation and the generations to come; and

WHEREAS, the Trust is a charitable organization as described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (the "Code") and is a publicly supported organization as described in Section 170(b)(1)(A) of the Code whose primary purpose is to preserve and protect the natural, scenic, agricultural, historical, and open space resources of the Pitkin County and Roaring Fork Valley area, including the area in which the Property is located, by assisting landowners who wish to protect their land in perpetuity, and is a "qualified organization" to do so within the meaning of Section 170(h)(3) of the Code; and

WHEREAS, the State of Colorado has recognized the importance of private efforts toward the preservation of natural systems in the State by the enactment of C.R.S. 38-30.5-101 *et seq.*; and

WHEREAS, the Board of Directors of the Trust has duly adopted a resolution approving the Trust's execution and acceptance of Grantor's gift of this Conservation Easement.

NOW, THEREFORE, in consideration of the above and the mutual covenants, terms, conditions, and restrictions contained herein, and pursuant to the laws of the State of Colorado, and in particular C.R.S. 38-30.5-101 *et seq.*, Grantor hereby voluntarily grants and conveys to the Trust, its successors and assigns, a Conservation Easement in Gross in perpetuity, consisting of the rights and restrictions enumerated herein, over and across the Property (the "Easement").

1. Purposes. The purposes of this Easement are to assure that the Property will remain forever predominantly in its open space, natural habitat and agricultural condition subject to the uses of the Property permitted hereunder, and to prevent any use of the Property that will significantly impair or interfere with the Conservation Values of the Property and, in the event of their degradation or destruction, to restore such Conservation Values of the Property. Grantor intends that this Easement will confine the use of the Property to such activities, including, without limitation, those involving agriculture, conservation education, and general conservation purposes, as are consistent with the purposes of this Easement. Pursuant to the terms of C.R.S. 38-30.5-101 *et seq.*, the Property preserved hereby may not be converted or directed to any uses other than those provided herein.

2. Baseline Documentation. The Parties acknowledge that Baseline Documentation of the Property will be prepared by September 1, 2003, by a person familiar with Conservation Easements and the property familiar with the environs. The Baseline Documentation has been reviewed and approved by the Trust and the Grantor as an accurate representation of the biological and physical condition of the Property at the time of this grant. Grantor has retained a copy of the Baseline Documentation for its records and a copy of the Baseline Documentation is on file with the Trust.

3. Rights of Trust. To accomplish the purposes of this Easement, Grantor conveys the following rights to the Trust:

3.1. The right to preserve and protect the Conservation Values of the Property in perpetuity; and

3.2. The right to enter upon the Property at reasonable times, to inspect the Property thoroughly, to monitor Grantor's compliance with and otherwise enforce the terms of this Easement; provided that such entry shall be upon twenty-four hour prior notice to Grantor, and except that no such notice shall be required in the event the Trust reasonably believes that immediate entry upon the Property is essential to prevent or mitigate a violation of this Easement. The Trust shall not unreasonably interfere with Grantor's use and quiet enjoyment of the Property; and

3.3. The right to prevent any activity on or use of the Property that is inconsistent with the purposes of this Easement, or which may have an adverse impact on the Conservation Values of the Property, and to require the restoration of such areas or features of the Property that are damaged by any inconsistent activity or use; and

3.4. Any other rights that the Parties may approve consistent with the purposes of this Easement and the Conservation Values.

4. Prohibited Uses. Any activity on or use of the Property inconsistent with the purposes of this Easement is prohibited. Without limiting the generality of the foregoing, the following activities and uses are expressly prohibited:

A. The change, disturbance, alteration, or impairment of the agricultural values within and upon the Property, except as provided herein.

B. The construction, placement, reconstruction or replacement of any buildings, structures, camping accommodations, mobile homes, boat ramps, or billboards, except as expressly provided herein.

C. The conveyance of easements, rights-of-ways, the paving or grading of roadways or the construction of any roadways without the consent of the Trust, which consent shall be in the Trust's sole discretion.

D. The removal, destruction, or cutting of native vegetation;

E. The introduction of non-native plant or animal species except for commonly acceptable agricultural species;

F. The use of pesticides or fertilizers other than for the control of noxious weeds and/or pests in a manner consistent with sound environmental conservation practices;

G. The exploration for or extraction of minerals, oil, gas, or other hydrocarbons, soils, sands, gravel, rock, or other materials on or below the surface of the Property. Grantor shall not transfer, lease or otherwise separate the soil, sand, gravel, rock, oil, natural gas, fuel or any other mineral substance from the Property;

- H. The division, subdivision, or de facto subdivision of the Property into two or more parcels of land;
- I. The use of any motorized vehicles off roadways now existing or new roadways permitted herein, except for agricultural uses;
- J. The establishment or maintenance of any commercial feed lot, which shall be defined for purposes of this Conservation Easement as a permanently constructed confined area or facility within which the land is not grazed or cropped annually, for purposes of engaging in the business of the reception and extended feeding and finishing of large numbers of livestock for hire;
- K. The accumulation, dumping or other disposal of trash, ashes, garbage, or other offensive or unsightly refuse on the Property;
- L. The manipulation, diversion, or other alteration of streams that degrades or destabilizes their natural banks or shorelines;
- M. The degradation, pollution, or drainage of any surface or sub-surface water;
- N. Any change in the topography of the Property through the placement therein of soil, land fill, dredging spoils, or other material, except as incidental and necessary to the activities permitted herein;
- O. Any commercial or industrial non-agricultural uses;
- P. To transfer, encumber, lease, sell, or otherwise separate the Water Rights necessary or appropriate for use in present or future ranching, agricultural production, or the maintenance of wildlife habitat on the Property;
- Q. The erection, construction, installation, relocation or use of a communication facility, a telecommunication facility, a network element or any other telecommunication facilities, equipment or material that may be used for telecommunications or to provide such services;
- R. Utility lines or substations not necessary and directly related to uses of the Property permitted by this Easement;
- S. Wind-powered electric generators to produce electricity for off-site use;
- T. Hunting on the Property is expressly prohibited.
- U. External Lighting; to install any lighting which interferes with wildlife's use of the property or with landowners whose property is within sight of the subject property, or from vehicles driving along Highway 82.

5. Consistent Uses of the Property. The following uses and practices by Grantor, though not an exhaustive recital, are consistent with this Easement. Certain of these consistent uses and practices are identified as being subject to specified conditions, to the notice provision as described in paragraph 7, and/or to the requirement of and procedures for prior approval by the Trust as described in paragraph 8:

A. Fences: Grantor may repair or replace existing fences and build new fences for purposes incidental and necessary to the management of livestock and wildlife in compliance with the Colorado Division of Wildlife specifications for fencing in wildlife migration areas;

B. Leasing of lands for agricultural purposes is permitted;

C. Water rights: Grantor shall retain, reserve and preserve the right to use the Water Rights and such new water rights as may be developed as incidental and necessary to the maintenance and protection of the Agricultural character, wildlife and riparian habitat, and open space and scenic qualities of the Property and to irrigate the Property. Grantor shall have the right to construct, maintain, and improve irrigation fixtures, water wells and other water systems on the Property consistent with the uses permitted hereunder;

D. Underground utilities as needed for employee housing and agricultural facilities;

E. Cutting and removal of dead, dying and diseased timber as may be reasonably necessary for fire protection or disease prevention purposes;

F. The taking of such reasonable steps as are necessary to control erosion on the Property;

G. Subject to the prior notice and approval provisions of Paragraphs 7 and 8, below, tree nurseries, row crops or cattle operations or other agricultural uses and related operations consistent with the uses permitted herein;

H. If the Grantor no longer desires to engage in equestrian and other agricultural uses or use the Property for agricultural purposes, the Property may revert to wildlife habitat.

I. Revegetation and habitat restoration and enhancement projects as are consistent with the City of Aspen Resource Management Plan.

J. Construction and maintenance of public trails consistent with the City of Aspen Resource Management Plan.

6. Reserved Rights. Grantor reserves to himself and to his personal representatives, heirs, successors, and assigns, all rights accruing from their ownership of the Property, including the right to engage in all uses of the Property that are consistent with the purposes of this Easement. Grantor shall notify the Trust in writing, as described in paragraph 7, before exercising reserved rights that might have an adverse impact on the Conservation Values. Grantor has the burden to prove that the Grantor's uses are consistent with this easement.

A. To erect, maintain or replace one single-family home of up to 4,000 square feet, to erect, maintain or replace five Employee Dwelling Units of up to 1,000 square feet each and to maintain and redevelop an equestrian center, barns and other accessory buildings for the operation of a horse ranch and equestrian facility, with all enclosed buildings (excluding horse pasture shelters) limited to a building envelope not to exceed ten acres, as shown in Exhibit A.

B. To use the southern pasture for parking at no more than three (3) special events per year through 2008, provided the Grantor develops and implements a plan for restoring the pasture between uses.

C. To preserve and restore the historic barn and cabins/homes on the homestead site.

D. Use of up to 12 acres of the south pasture for a polo and/or soccer playing field, along with standard field amenities such as parking, spectator facilities and restrooms, but no lighting as are consistent with the City of Aspen Resource Management Plan, provided any permanent facilities are located along the western side of the pasture to preserve a greenbelt area along Highway 82.

E. Use of approximately 2 acres for the operation of an archery range.

7. Notice of Intention to Undertake Certain Permitted Actions. The purpose of requiring Grantor to notify the Trust before undertaking certain permitted activities is to afford the Trust an opportunity to ensure that the activities in question are designed and carried out in a manner consistent with the purposes of this Easement. Whenever notice is required, Grantor shall notify the Trust in writing not less than 60 days prior to the date Grantor intends to undertake the activity in question, unless a different time period for the giving of notice is provided as to the activity in question. The notice shall describe the nature, scope, design, location, timetable, and any other material aspect of the proposed activity in sufficient detail to permit the Trust to make an informed judgment as to its consistency with the purposes of this Easement and the Conservation Values.

8. The Trust's Approval. Whenever this Easement requires that Grantor obtain the Trust's approval of any activity on or use of the Property, such approval shall not be unreasonably withheld or delayed. Where the Trust's approval is required, the Trust shall grant or withhold its approval in writing within 30 days of receipt of Grantor's written request therefore. The Trust's approval may be withheld only upon a reasonable determination by the Trust that the action as proposed would be inconsistent with the Conservation Values or the purposes or terms of this Easement; the reason(s) for such a determination shall be set forth with specificity by the Trust in a written notice to Grantor. Where a reasonable modification of the proposed use or activity by Grantor would render the same consistent with the purposes of this Easement and the Conservation Values, the Trust shall specify, in such written notice to Grantor, such required modifications.

9. Trust's Remedies: Enforcement.

9.1. Arbitration. If a dispute arises between the parties concerning the consistency of any proposed use or activity with the purposes of this Easement, Grantor agrees not to proceed

with the disputed use or activity pending resolution of the dispute. Either party may refer the dispute to arbitration by request made in writing upon the other. Within thirty (30) days of the receipt of such a request, the parties shall select a single arbitrator to hear the matter. If the parties are unable to agree on the selection of a single arbitrator, then each party shall name one arbitrator and the two arbitrators thus selected shall select a third arbitrator who shall alone arbitrate the dispute; provided, however, if either party fails to select an arbitrator, or if the two arbitrators selected by the parties fail to select the third arbitrator then the arbitrator first selected by a party shall serve as arbitrator. A judgment on the arbitration award may be entered in any court having jurisdiction thereof. The prevailing party shall be entitled, in addition to such other relief as may be granted, to a reasonable sum for all its costs and expenses related to such arbitration, including, without limitation, the fees and expenses of the arbitrator(s) and attorneys' fees, which shall be determined by the arbitrator(s) and any court of competent jurisdiction that may be called upon to enforce or review the award. The arbitrator has the authority to issue an injunction to prevent the Grantor from undertaking a prohibited action on the property, and to require specific performance of the Grantor to remedy a prohibited action. If the Grantor is required by this agreement to seek approval for a proposed activity, the Grantor shall refrain from performing the activity for which approval is being sought until the Trust has decided to grant approval or until an arbitrator has been selected and has ruled on the proposed activity. Within 30 days after one party invokes arbitration, each party shall provide the other with a good faith estimate of the cost of reasonable attorney fees, expenses and costs resulting from the arbitration.

9.2. Notice of Violation: Corrective Action. If the Trust determines that a violation of the terms of this Easement has occurred or is threatened, the Trust shall give written notice to Grantor of such violation and demand corrective action sufficient to cure the violation and, where the violation involves injury to the Property resulting from any use or activity inconsistent with the purposes of this Easement or the Conservation Values, to restore the portion of the Property so injured to its prior condition in accordance with a plan approved by The Trust. Grantor intends that if any prohibited activity is undertaken on the Property, the Trust shall have the right to cause restoration of that portion of the Property affected by the prohibited activity to the condition that existed before the prohibited activity commenced. Grantor shall bear the costs of any such restoration.

9.3. Injunctive Relief. If Grantor fails to cure the violation within ten (10) days after receipt of notice of the violation from the Trust, or under circumstances where the violation cannot reasonably be cured within a ten (10) day period, fails to begin curing such violation within the ten (10) day period or fails to continue diligently to cure such violation until finally cured, the Trust may appoint an arbitrator to enforce the terms of this Easement, utilizing the procedures set forth in Paragraph 9.1 above, to enjoin the violation, ex parte as necessary, by temporary or permanent injunction, and to require or cause the restoration of the Property to the condition that existed prior to any such injury.

9.4. Damages. The Trust shall be entitled to recover damages for violation of the terms of this Easement or injury to the Conservation Values, including, without limitation, damages for the loss of scenic, aesthetic, or environmental values, plus reasonable attorney's fees, expenses and costs. Without limiting Grantor's liability therefore, the Trust, in its sole

discretion, may apply any damages recovered to the cost of undertaking any corrective action on the Property.

9.5. Emergency Enforcement. If the Trust, reasonably believes an ongoing or threatened imminent activity violates the Easement, the Trust may, in its sole discretion, take immediate corrective action, including, without limitation, the control of noxious weeds, as set forth in this paragraph 9 without prior notice to Grantor and without waiting for the period provided for cure to expire.

9.6. Costs of Enforcement. All reasonable costs incurred by the Trust in enforcing the terms of this Easement against Grantor including, without limitation, costs and expenses of suit and reasonable attorney's fees, and any costs of restoration necessitated by Grantor's violation of the terms of this Easement shall be borne by Grantor; provided, however, that if Grantor ultimately prevails in a judicial enforcement action each party shall bear its own costs. (Note: These costs are not associated with on-going compliance monitoring performed by Grantee pursuant to paragraph 3, above.)

9.7. The Trust's Discretion. Enforcement of the terms of this Easement shall be at the sole discretion of the Trust, and any forbearance by the Trust to exercise its rights under this Easement in the event of any breach of any term of this Easement by Grantor shall not be deemed or construed to be a waiver by the Trust of such term or any subsequent breach of the same or any other term of this Easement or of any of the Trust's rights under this Easement. No delay or omission by the Trust in the exercise of any right or remedy upon any breach by Grantor shall impair such right or remedy or be construed as a waiver.

9.8. Waiver of Certain Defenses. No action shall be commenced or maintained to enforce the terms of any building restriction described in this Easement, or to compel the removal of any building or improvement, unless said action is commenced within four (4) years from the date of the violation for which the action is sought to be brought or maintained. C.R.S. Section 38-41-119, which provides a one-year statute of limitations, is specifically overridden by this paragraph. Grantor waives the defenses of laches, estoppel and prescription with regard to the enforcement of all other terms of this Easement.

9.9. Acts Beyond Grantor's Control. Nothing contained in this Easement shall be construed to entitle the Trust to bring any action against Grantor for any injury to or change in the Property resulting from causes beyond Grantor's control including, without limitation, fire, flood, storm, and earth movement, or from any prudent action taken by Grantor under emergency conditions to prevent, abate, or mitigate significant injury to the Property resulting from such causes.

10. Access. Nothing contained herein shall be construed as affording the public access to any portion of the Property, although the Grantor may permit public access to the Property on such terms and conditions as it deems appropriate, provided that such access is consistent with the terms of this Easement.

11. Costs, Liabilities, Taxes and Environmental Compliance.

11.1. Costs, Legal Requirements and Liabilities. Grantor retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep, and maintenance of the Property, including the maintenance of adequate liability insurance coverage, which names the Trust as an additional insured. Grantor remains solely responsible for obtaining any applicable governmental permits and approvals for any construction or other activity or use permitted by this Easement, and all such construction or other activity or use shall be undertaken in accordance with all applicable federal, state, and local laws, regulations and requirements. Grantor shall keep the Property free of any liens arising out of any work performed for, materials furnished to, or obligations incurred by Grantor.

11.2. Taxes. Grantor shall pay before delinquency all taxes, assessments, fees, and charges of whatever description levied on or assessed against the Property by competent authority (collectively "Taxes"), including any Taxes imposed upon, or incurred as a result of, this Easement, and shall furnish the Trust with satisfactory evidence of payment upon request. The Trust is authorized, but in no event obligated, to make or advance any payment of Taxes, upon ten (10) days prior written notice to Grantor, in accordance with any bill, statement, or estimate procured from the appropriate authority, without inquiry into the validity of the Taxes or the accuracy of the bill, statement, or estimate, and the obligation created by such payment shall bear interest until paid by Grantor to the Trust at the lesser of fifteen percent (15%) per annum, or the maximum rate allowed by law.

11.3. Representations and Warranties. Grantor represents and warrants that, after reasonable investigation and to the best of its knowledge:

A. No substance defined, listed, or otherwise classified pursuant to any federal, state, or local law, regulation, or requirement as hazardous, toxic, polluting, or otherwise contaminating to the air, water, or soil, or in any way harmful or threatening to human health or the environment exists or has been released, generated, treated, stored, used, disposed of, deposited, abandoned, or transported in, on, from, or across the Property, except for fuels, chemicals and pesticides customarily used or transported in connection with camping, wrangling, agricultural and construction activities on the Property;

B. There are not now any underground storage tanks located on the Property, whether presently in service or closed, abandoned, or decommissioned, and no underground storage tanks have been removed from the Property in a manner not in compliance with applicable federal, state, and local laws, regulations, and requirements;

C. Grantor and the Property are in compliance with all federal, state, and local laws, regulations, and requirements applicable to the Property and its use;

D. But for potential eminent domain proceedings for the establishment of a public roadway across the Property, there is no pending or threatened litigation in any way affecting, involving, or relating to the Property;

E. No civil or criminal proceedings or investigations have been instigated at any time or are now pending, and no notices, claims, demands, or orders have been received, arising

out of any violation or alleged violation of, or failure to comply with, any federal, state, or local law, regulation, or requirement applicable to the Property or its use, nor do there exist any facts or circumstances that Grantor might reasonably expect to form the basis for any such proceedings, investigations, notices, claims, demands, or orders; and

F. Grantor warrants that Grantor has good and sufficient title to the Property, that Grantors has good right, full power and lawful authority to grant and convey this Easement, that any mortgages or liens on the Property are and shall remain subordinate to the terms of this Easement, and Grantor hereby promises to warrant and forever defend the title to the Easement against all and every person or persons lawfully claiming by, through or under Grantor, the whole or any part thereof, except for rights-of-way, easements, restrictions, covenants and mineral reservations of record, which are acceptable to the Trust at the time of execution of the Easement.

11.4. Remediation. If, at any time, there occurs, or has occurred, a release in, on, or about the Property of any substance now or hereafter defined, listed, or otherwise classified pursuant to any federal, state, or local law, regulation, or requirement as hazardous, toxic, polluting, or otherwise contaminating to the air, water, or soil, or in any way harmful or threatening to human health or the environment, Grantor agrees to take all steps necessary to assure its containment and remediation, including any cleanup that may be required, unless the release was caused by the Trust, in which case the Trust shall be responsible therefor.

11.5. Control. Nothing in this Grant shall be construed as giving rise, in the absence of a judicial decree, to any right or ability in The Trust to exercise physical or managerial control over the day-to-day operations of the Property, or any of Grantor's activities on the Property, or otherwise to become an operator with respect to the Property within the meaning of The Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (ACERCLA@), and any Colorado state law counterpart.

11.6. Hold Harmless. Grantor shall hold harmless, indemnify, and defend the Trust and its members, directors, officers, employees, agents, and contractors and the heirs, personal representatives, successors, and assigns of each of them (collectively "Indemnified Parties@) from and against all liabilities, penalties, costs, losses, damages, expenses, cause of action, claims, demands, or judgments, including, without limitation, reasonable attorneys' fees, arising from or in any way connected with: (1) injury to or the death of any person, or physical damage to any property, resulting from any act, omission, condition, or other matter related to or occurring on or about the Property, regardless of cause, unless due solely to the negligence of any of the Indemnified Parties; (2) the violation or alleged violation of, or other failure to comply with, any state, federal, or local law, regulation, or requirement, including, without limitation, CERCLA, by any person other than any of the Indemnified Parties, in any way affecting, involving, or relating to the Property; (3) the presence or release of hazardous or toxic substances in, on, from, under or about the Property at any time, of any substance now or hereafter defined, listed, or otherwise classified pursuant to any federal, state, or local law, regulation, or requirement as hazardous, toxic, polluting, or otherwise contaminating to the air, water, or soil, or in any way harmful or threatening to human health or the environment, unless caused solely by any of the Indemnified Parties; and (4) the obligations, covenants, representations, and warranties of paragraphs 11.1 through 11.5.

12. Extinguishment and Condemnation.

12.1. Extinguishment. In granting this Easement, Grantor has considered the possibility that uses prohibited by the terms of this Easement may become more economically valuable than permitted uses and that neighboring properties may be used entirely for such prohibited uses in the future. It is the intent of the Grantor and the Trust that any such changes shall not be deemed circumstances justifying the termination or extinguishment of this Easement. In addition, the inability of Grantor, or the Grantor's heirs, successors or assigns, to conduct or implement any or all of the uses permitted under this Easement, or the unprofitability of doing so, shall not impair the validity of this Easement or be considered grounds for its termination or extinguishment.

If circumstances arise in the future that render the purposes of this Easement impossible to accomplish, this Easement can only be terminated or extinguished, whether in whole or in part, by judicial proceedings in a court of competent jurisdiction. Each party shall promptly notify the other when it first learns of such circumstances. The amount of the proceeds to which the Trust shall be entitled, after the satisfaction of prior claims, from any sale, exchange, or involuntary conversion of all or any portion of the Property subsequent to such termination or extinguishment, shall be determined, unless otherwise provided by Colorado law at the time, in accordance with the Proceeds paragraph, below. The Trust shall use all such proceeds in a manner consistent with the conservation purposes of this Easement.

12.2. Proceeds. This Easement constitutes a real property interest immediately vested in the Trust, which the parties stipulate to have a fair market value determined by multiplying the fair market value of the Property unencumbered by this Easement (minus any increase in value after the date of this grant attributable solely to improvements which are allowed by this Easement) by the ratio of the value of this Easement at the time of this grant to the value of the Property, without deduction for the value of this Easement, at the time of this grant. The values at the time of this grant shall be those values used to calculate the deduction for federal income tax purposes allowable by reason of this grant, pursuant to Section 170(h) of the Internal Revenue Code of 1986, as amended. For the purposes of this paragraph, the ratio of the value of this Easement to the value of the Property unencumbered by this Easement shall remain constant.

12.3. Condemnation. If all or any part of the Property is taken by exercise of the power of eminent domain or acquired by purchase in lieu of condemnation, whether by public, corporate, or other authority, so as to terminate this Easement, in whole or in part, Grantor and the Trust shall act jointly to recover the full value of the interests in the Property subject to the taking or in lieu purchase and all direct or incidental damages resulting therefrom. All expenses reasonably incurred by Grantor and the Trust in connection with the taking or in lieu purchase shall be paid out of the amount recovered. The Trust's share of the balance of the amount recovered shall be determined by multiplying that balance by the ratio set forth in section 12.2.

12.4. Application of Proceeds. The Trust shall use any proceeds received under the circumstances described in this section 12 in a manner consistent with its conservation purposes, which are exemplified by this grant.

13. Assignment. This Easement is transferable, but the Trust may assign its rights and obligations under this Easement only to an organization that is (a) a qualified organization at

the time of transfer under Section 170(h) of the Internal Revenue Code of 1986, as amended (or any successor provision then applicable), and the applicable regulations promulgated thereunder;(b) authorized to acquire and hold conservation easements under Colorado law As a condition of such transfer, the Trust shall require the transferee to expressly agree, in writing, to carry out and uphold the purposes of this Easement and the Conservation Values and otherwise assume all of the obligations and liabilities of the Trust set forth herein or created hereby. After such transfer, the Trust shall have no further obligation or liability under this Easement. The Trust agrees to give written notice to Grantor of an assignment at least 60 days prior to the date of such assignment. The failure of the Trust to give such notice shall not affect the validity of such assignment nor shall it impair the validity of this Easement or limit its enforceability in any way.

14. Subsequent Transfers. Grantor agrees to incorporate the terms of this Easement in any deed or other legal instrument by which it divests itself of any interest in the Property, including, without limitation, a leasehold interest. Grantor further agrees to give written notice to the Trust of the transfer of any such interest at least 30 days prior to the date of such transfer. The failure of Grantor to perform any act required by this paragraph shall not impair the validity of this Easement or limit its enforceability in any way.

15. Estoppel Certificates. Upon request by Grantor, The Trust shall within 30 days execute and deliver to Grantor, or to any party designated by Grantor, any document, including an estoppel certificate, which certifies, to the best of the Trust's knowledge, Grantor's compliance with any obligation of Grantor contained in this Easement or otherwise evidences the status of this Easement. Such certification shall be limited to the condition of the Property as of the Trust's most recent inspection. If Grantor requests more current documentation, the Trust shall conduct an inspection, at Grantor's expense, within 60 days of receipt of Grantor's written request therefor. However, in the event that weather, or other circumstances outside of the Trust's control, prevent the Trust from conducting an inspection within 60 days of receipt of Grantor's written request, the Trust shall conduct such inspection within a timely manner once such weather or circumstances which prevent the inspection no longer exist.

16. Notices. Any notice, demand, request, consent, approval, or communication that either party desires or is required to give to the other shall be in writing and either served personally or sent by first class mail, postage prepaid, addressed as follows or to such other address as either party from time to time shall designate by written notice to the other:

To Grantor: The City of Aspen
130 South Galena
Aspen, CO 81610

To the Trust: Aspen Valley Land Trust
320 Main Street, Suite 204
Carbondale, CO 81623

17. Recordation. The Trust shall record this instrument in timely fashion in the official records of Pitkin County, Colorado, and may re-record it at any time as may be required to preserve its rights in this Easement.

18. Amendment. If circumstances arise under which an amendment to or modification of this Easement would be appropriate to promote the purposes of this Easement and the protection of the Conservation Values of the Property, Grantor and the Trust may jointly amend this Easement (in accordance with the Policies of the Trust.) However, the Trust is under no obligation to amend this Easement, and may decline to amend this Easement in its sole and exclusive judgment. No amendment shall be allowed that will affect the qualifications of this Easement under any applicable law. Any amendment must be consistent with the purposes of this Easement and the Conservation Values and may not affect the Easement's perpetual duration. Any amendment must be in writing, signed by both parties, and recorded in the records of the Clerk and Recorder of Pitkin County, Colorado.

19. Subordination. At the time of conveyance of this Easement, the Property is subject to a deed of trust, the holder of which has agreed to subordinate its rights in the Property to the extent necessary to permit the Trust to enforce the purposes of this Easement in perpetuity and to prevent any modification or extinguishment of this Easement by the exercise of any rights of the deed of trust holder.

20. General Provisions.

20.1. The following Exhibits are attached to and incorporated by reference into this conservation easement deed, Exhibit A: Baseline Documentation, Exhibit B: a document attesting that the legal description of the property will be defined and recorded within thirty (30) days of the final approval of the Burlingame Housing Project by the City of Aspen.

20.2. Definitions. The terms "Grantor" and the "Trust", wherever used herein, and any pronouns used in place of those terms, shall be deemed to include, respectively, Grantor and its heirs, personal representatives, executors, administrators, successors and assigns, and the Trust, its successors and assigns.

20.3. Controlling Law. The interpretation and performance of this Easement shall be governed by the laws of the State of Colorado.

20.4. Liberal Construction. Any general rule of construction to the contrary notwithstanding, this Easement shall be liberally construed in favor of the grant to effect the purposes of this Easement and the policy and purpose of C.R.S. 38-30.5-101 et seq. If any provision in this instrument is found to be ambiguous, an interpretation consistent with the purposes of this Easement that would render the provision valid shall be favored over any interpretation that would render it invalid. The common law rules of disfavoring restrictions on the use of real property and construing restrictions in favor of the free and unrestricted use of real property shall not apply to interpretations of this Easement or to disputes between the Parties concerning the meaning of particular provisions of this Easement.

20.5. Severability. If any provision of this Easement, or the application thereof to any person or circumstance, is found to be invalid, the remainder of the provisions of this Easement,

or the application of such provision to persons or circumstances other than those as to which it is found to be invalid, as the case may be, shall be deemed severable and remain in full force and effect.

20.6. Entire Agreement. This instrument sets forth the entire agreement between the Parties with respect to this Easement and supersedes all prior discussions, negotiations, understandings, or agreements relating to this Easement, all of which are merged herein.

20.7. No Forfeiture. Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

20.8. Joint Obligation. The obligations imposed by this Easement upon Grantor shall be joint and several (in the event that there is more than one Grantor).

20.9. Successors. The covenants, terms, conditions, and restrictions of this Easement shall be binding upon, and inure to the benefit of, the Parties hereto and their respective personal representatives, heirs, successors, and assigns and shall continue as a servitude running in perpetuity with the Property.

20.10. Termination of Rights and Obligations. A party's rights and obligations under this Easement terminate upon transfer of the party's interest in this Easement or the Property, except that liability for acts or omissions occurring prior to transfer shall survive transfer.

20.11. Captions. The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.

20.12. Counterparts. The Parties may execute this instrument in two or more counterparts, which shall, in the aggregate, be signed by both parties; each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart shall be controlling.

IN WITNESS WHEREOF, Grantor and the Trust have executed this Deed of Conservation Easement as of the date first written above.

GRANTOR



CITY OF ASPEN

a Colorado municipality

By: [Signature]

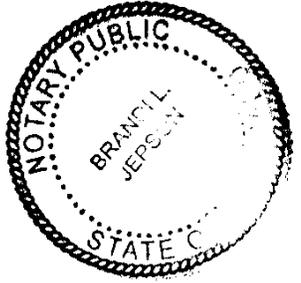
Title: Mayor

STATE OF Colorado
COUNTY OF Pitkin) ss.

The foregoing instrument was acknowledged before me this 30th day of June, 2003, by Helen Klanderud as Mayor of City of Aspen a Colorado municipality Grantor.

WITNESS my hand and official seal.

[SEAL]



Brandi L. Jepson
Notary Public

My commission expires: _____

Brandi L. Jepson / Notary Public
My Commission Expires 1/22/2005
601 E. Hopkins
Aspen, CO 81611

ACCEPTED:

TRUST



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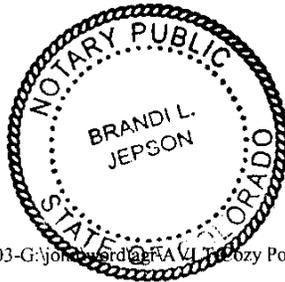
ASPEN VALLEY LAND TRUST,
a Colorado nonprofit corporation,

By: Martha Cochran
Martha Cochran
Its: Executive Director

STATE OF Colorado
COUNTY OF Pitkin) ss.

The foregoing instrument was acknowledged before me this 30th day of June, 2003, by Martha Cochran as Executive Director of ASPEN VALLEY LAND TRUST, a Colorado nonprofit corporation.

WITNESS my hand and official seal.
[SEAL]



Brandi L. Jepson
Notary Public
My commission expires: _____

Brandi L. Jepson / Notary Public
My Commission Expires 1/22/2005
601 E. Hopkins
Aspen, CO 81611

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Kinder Morgan Rate Increase
Before Public Utilities Commission Docket No. 02A-524G, No. 02A-522G
Binder 2
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- 17. Staff of CPUC's Unopposed Motion for Extension of Time and Request for Waiver of Response Time – 5/12/03
- 18. Unopposed Motion of Kinder Morgan & Rocky Mtn. Natural Gas for Extension of Time to File Stipulation to Reset Hearing Date and to Request Waiver of Response Time – 5/29/03
- 19. Interim ORDER Granting Unopposed Motion for Extension of Time
- 20. Interim ORDER - Hearing set 7/14/03



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EXHIBIT A

A parcel of land situated in Sections 16 and 21, Township 9 South, Range 85 West of the 6th P.M. being a portion of the Cozy Point Ranch as described in Book 690 at Page 5 of the Pitkin County records described as follows:

Beginning at a point on the Westerly boundary of the Dedicated Open Space Parcel of the Cozy Point Ridge Subdivision recorded in Plat Book 22 at Page 26 of the Pitkin County records whence the Northwest corner of Section 16 (1913 Brass Cap) bears N 20°21'49" W 502.66 feet; thence N 69°23'59" E 674.16 feet to the Northwesterly right of way of Colorado State Highway No. 82; thence Southerly along the Westerly right of way of Colorado State Highway No. 82 as described in Book 157 at Pages 538, 539 & 540 and Book 575 at Page 976 as follows:
 S 41°33'37" E 395.21 feet;
 591.57 feet along the arc of a curve to the right whose radius is 1,382.50 feet (chord bears S 29°18'07" E 587.07 feet);
 S 17°02'37" E 1,360.80 feet;
 130.20 feet along the arc of a curve to the right whose radius is 2,815.00 feet (chord bears S 15°43'07" E 130.19 feet);
 S 14°23'37" E 2,435.30 feet;
 131.14 feet along an arc of a curve to the left whose radius is 5,780.00 feet (chord bears S 15°02'37" E 131.14 feet);
 S 15°40'45" E 912.95 feet;
 S 74°21' W 20.0 feet;
 S 02°47' W 63.2 feet;
 S 15°39' E 50.0 feet;
 S 64°28'14" E 53.22 feet;
 S 15°40'45" E 2,039.41 feet;
 S 15°41'37" E 2,084.63 feet to the Northerly right of way of Brush Creek County Road;
 thence Westerly along the Northerly right of way of Brush Creek County Road as follows:
 S 43°43'17" W 116.15 feet;
 S 73°32'00" W 145.71 feet;
 404.44 feet along an arc of a curve to the left whose radius is 1,005.70 feet (chord bears S 62°00'46" W 401.72 feet);
 thence N 19°44' W 38.62 feet to the Southeast corner of Brush Creek Village Subdivision Filing 2 as Platted;
 thence Northerly along the Easterly line of Brush Creek Village Subdivision Filing 2 as Platted as follows:
 N 19°44' W 390.00 feet;
 N 31°25' W 732.00 feet;
 N 24°00' W 1,831.29 feet;
 N 64°55' W 340.50 feet to the Easterly line of the Elay Parcel described in Book 228 at Page 599 of the Pitkin County Records;
 thence Northerly along the Easterly line of said Elay Parcel as follows: N 25°48'20" E 153.17 feet;
 370.63 feet along an arc of a curve to the left whose radius is 531.95 feet (chord bears N 05°50'56" E 363.18 feet);
 197.92 feet along an arc of a curve to the right whose radius is 630.00 feet (chord bears N 05°06'40" W 197.11 feet);
 N 03°53'20" E 576.86 feet;
 thence N 07°01'32" W 1,942.73 feet to the Westerly line of the

EXHIBIT A (Continued)

Dedicated Open Space Easement of the Cozy Point Ridge Subdivision;
thence N 20°21'49" W 3,989.84 feet along the Easterly line of said
Open Space Easement to the point of beginning.

COUNTY OF PITKIN, STATE OF COLORADO.



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SILVIA DAVIS PITKIN COUNTY CO



Biological & Historical Resource Surveys

Aspen Parks and Open Space

Cozy Point, Cozy Point South, Aspen Mass, Mills
and CDOT Intercept Lot
Pitkin County, Colorado

prepared for:

City of Aspen Parks and Open Space
530 E. Main St. Suite 300, Aspen, CO 81611

prepared by:

Western Ecological Resource, Inc.
711 Walnut Street, Boulder, CO 80302

&

Wildlife Specialties, LLC
PO Box 1231, Lyons, CO 80540

February 2016

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1.0 Introduction

The City of Aspen is currently developing a Master Plan for Cozy Point Ranch, which is considered to be the gateway of the Aspen community. A total of four open space parcels would be potentially affected by proposed project activities, including Cozy Point Ranch, Cozy Point South, Aspen Mass, and Mills. While the City of Aspen owns the Cozy Point Ranch and Aspen Mass parcels, Pitkin County is a joint owner, with the City of Aspen, of both the Cozy Point South and Mills parcels. In addition, the Colorado Department of Transportation (CDOT) owns and manages the Intercept Lot, which is used for public parking for the Roaring Fork Transportation Agency as well as for event parking. Collectively, these five parcels are referred to as the Cozy Point Ranch parcels. In 2011, Western Ecological Resource, Inc., in conjunction with Wildlife Specialties, LLC, performed a detailed Biological and Historical Resource Survey of the four open space parcels as well as nine additional parcels (Western Ecological Resource and Wildlife Specialties, 2011). This report summarizes the biological and historical resource surveys conducted on the four parcels during 2011, integrates new information based on 2015 field visits, and concludes with recommendations for future management.

In total, the five Cozy Point Ranch parcels comprise approximately 400 acres and include a variety of mountain shrublands, small stands of conifer forests, shale badlands, agricultural grasslands, and wetland and riparian habitats. The properties provide important habitat for mule deer and a variety of songbirds and small mammals, and support diverse wetland and riparian plant communities. These properties also have a rich historical tradition which exemplifies the ranching and farming activities of the late 19th and early 20th centuries.

2.0 Environmental Setting

The Cozy Point Ranch, Cozy Point South, Aspen Mass, and Mills properties occur at the intersection of U.S. Highway 82 and Brush Creek Road, approximately six miles north of the City of Aspen (Figure 1). These parcels consist of alluvial terraces and adjacent mountain slopes. The project area is bordered by the Roaring Fork River on the east and is bisected by Brush Creek, a perennial tributary to the Roaring Fork River. The Sky Mountain Park Open Space (formally Droste parcel) is located to the south and adjacent to the Cozy Point South parcel. The elevations of these parcels range from a high of 8,200 feet on Cozy Point South to a low of 7,340 feet along the Roaring Fork River in the Mills Open Space. The Cozy Point Ranch parcel currently supports a large equestrian boarding and training facility as well as an archery range and a greenhouse. In addition, both Cozy Point Ranch and the meadow on Cozy Point South are actively irrigated and hayed. The Aspen Mass and Mills parcels are currently used for recreation, and one of the pedestrian trails has been recently rerouted on the Aspen Mass parcel. All four of these parcels are receiving increased recreational pressure due to the recent trail openings on Sky Mountain Park. Finally, the CDOT Intercept Lot located adjacent to the Mills parcel is also being included in the planning process. The CDOT parcel contains developed and undeveloped parking areas and two areas of wetlands in drainage basins; however, no detailed on-the-ground environmental studies have been conducted on the CDOT Intercept Lot to date.

The climate of the project area is generally characterized by long, cold and moist winters, and short, cool, dry summers. Based on climate data from the Aspen 1 SW Weather Station (elev. 8,163 ft.), the average annual precipitation is 23.26 inches and the mean annual temperature is 40.8°F, with a mean high temperature of 77.2°F in July and a mean low of 7.4°F in January (NCDC, 2002). The growing season length based on a 28°F air temperature is 127 days, generally occurring between May 24 and September 28, and the average annual snowfall is 187.3 inches (NRCS 2002).

3.0 Wildlife Resources

In 2011, a variety of wildlife baseline surveys of all the parcels included at that time were conducted for two reasons. The first was to establish a baseline index of species currently using the parcels; the second was to identify species which could potentially use the parcels. Survey techniques included Terrestrial Vertebrate Encounter Surveys to identify rare, elusive, or hard to detect species; avian point-count surveys incorporating distance sampling to develop a species list and a baseline population estimate for more common species; owl surveys using tape play-back call techniques to document species presence; nocturnal and diurnal amphibian surveys using calls and visual identification; scent stations with infrared cameras to detect nocturnal rare carnivores and other species; and pedestrian surveys of the parcels to specifically look for wildlife and sign which may not have been detected using other survey techniques. A complete description of the methodology, locations of where the surveys were conducted, etc. are included in the 2011 report (Western Ecological Resource and Wildlife Specialties, 2011).

3.1 Federally Listed Species

The U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Consultation System (USFWS, 2015) was used to generate the current list of federally protected, candidate, and proposed wildlife species for the project area (Appendix A). There are eight wildlife species protected under the Endangered Species Act (ESA) that could potentially occur in the project area, however none of these federally protected species are expected to occur as appropriate habitat is lacking. No designated critical habitat exists for any listed species within the project area.

3.2 BLM and USFS Sensitive and MIS Species

Sensitive species considered in this report are based on the June 2015 Bureau of Land Management (BLM) Colorado State Director's Sensitive Species List (BLM, 2015) and the August 2015 U.S. Forest Service (USFS) Region 2 Sensitive Species List (USFS, 2015). These species lists are contained in Appendices B and C.

The project area potentially provides suitable habitat for the following four species: Townsend's big-eared bat (*Plecotus townsendii*), Brewer's sparrow (*Spizella breweri*), northern leopard frog (*Rana pipiens*), and the bluehead sucker (*Catostomus discobolus*) (Table 1). However, the 2011 surveys only resulted in the detection of one of these species: the Brewer's sparrow, which was detected on the northern end of the Cozy Point Ranch parcel.

Although not a BLM or USFS Sensitive Species, the Virginia's warbler (*Vermivora virginiae*) is annually monitored across its range as a Management Indicator Species (MIS) representing the oak-shrub community. MIS are animals with special management needs which must be met through coordination with other open space uses (i.e. recreation and trails). Additionally, population estimates for MIS are annually updated. Virginia's warbler population trends and the species' distributional range are tracked within Colorado through monitoring programs (e.g. Monitoring Colorado's Birds Partnership Program and Partners In Flight). By monitoring population trends for MIS, the impact and effectiveness of management actions can be assessed and modified as needed.

A brief discussion of each of the four BLM and/or USFS Sensitive Species, as well as the one MIS are described below. For further information, please see Appendix D, which provides a more detailed overview of the natural history of these species.

Townsend's big-eared bat is widely distributed in Colorado except on the eastern plains (Armstrong et al. 1994). Habitat includes open montane forests, semidesert shrublands, and pinyon/juniper shrublands. These bats are generally solitary or gather in small groups; during summer females may form larger maternity colonies located in mines, caves, abandoned structures, and crevices in rock cliffs, in woodlands and forests to elevations above 9,500 feet (Armstrong et al., 1994, Fitzgerald et al., 1994). They are relatively sedentary and do not move

long distances from hibernacula to summer roosts (Fitzgerald et al., 1994). There are about 350 historical records of individuals in Colorado, 250 of which are from 1990 or later (Pierson et al., 1999). About 170 mine roosts and 15 cave roosts have been documented since 1990. All but one of these roosts has populations believed to be less than 30 individuals. Because of the wide range of habitats used, Townsend's big-eared bats could forage over the Cozy Point Ranch parcels, but no hibernacula or maternity colony habitat occurs within the project area. No individuals were located on the subject parcels during the 2011 surveys.

Critical Brewer's sparrow habitat was mapped on the northern end of Cozy Point and the southeast corner of Aspen Mass during the 2011 surveys (Figure 2). These areas were mapped as critical habitat because they are the only large intact stands of sagebrush habitat remaining in these parcels. In 2011, the recommendation was to restore the inactive agricultural lands within these parcels to native sagebrush shrubland habitat, if possible. The idea was to increase the amount of potential breeding habitat within these parcels and have sagebrush habitat at different seral stages. However, any restoration of the inactive agricultural lands adjacent to Brewer's sparrow mapped habitat would not significantly increase the local and regional Brewer's sparrow population. Brewer's sparrow was detected on the far northern end of the Cozy Point Ranch parcel in 2011.

The northern leopard frog is distributed throughout Colorado from an elevation of below 3,500 feet on the plains of the northeastern corner of the state to over 11,000 feet in the San Juan Mountains in the southwestern corner (Hammerson, 1999). Although formerly abundant throughout its range, the northern leopard frog has become rare or been extirpated from many areas, especially high elevation populations, due to changes in habitat conditions (Hammerson 1999, CPW 2011). Northern leopard frogs have diverse habitat requirements including wet meadows, the banks and shallows of marshes, ponds (glacial kettles or beaver [*Castor canadensis*] ponds), lakes, streams, or irrigation ditches. According to Hammerson (1999), northern leopard frogs occurred throughout western Colorado where suitable habitat was available including locations within the vicinity of the project area. Most of the riparian habitat along Brush Creek within the Cozy Point Ranch area is degraded, but potential habitat associated with beaver ponds may be present. Restoration of Brush Creek and the riparian corridor would increase the quality of the habitat. No individuals were located on the subject parcels during the 2011 surveys.

The bluehead sucker is a fish found throughout a variety of habitats from headwaters to large rivers (Woodling, 1985). Water must be moderate to fast in velocity and streams must have a rock substrate. The species feeds on algae and invertebrates. Breeding occurs in late April to early May before high flows associated with spring runoff occur. Population declines have occurred where white (*Catostomus commersonii*) and longnose (*Catostomus catostomus*) suckers from the Front Range have entered waters historically occupied by bluehead suckers. Threats associated with the project area include alteration of water quality within Brush Creek resultant of environmental contaminants or an increase in sedimentation. Restoration of Brush Creek would result in more suitable habitat. No individuals were located on the subject parcels during the 2011 surveys.

The Virginia's warbler breeds west of the continental divide in Colorado and into north central New Mexico. Within Colorado, the species breeds in dense shrub-dominated oak forest habitats between approximately 5,000 and 9,000 feet above mean sea level, with pinyon-juniper woodlands and dense shrubby cover along riparian systems also frequently used. General habitat requirements include a dense shrub component. The majority of the statewide population in Colorado occurs in the western portion of the state within an approximately equal distribution from north to south. Critical Virginia's warbler habitat is located on Cozy Point South within the large oak-shrub stands (Figure 3). In 2011, this species was detected in the oak shrubland on the Mills parcel. However, the habitat is very small and would not support minimum viable population, and therefore it is not considered critical habitat. The Virginia warbler sighting in this area occurred in early spring and likely represented a recent migrant arrival.

Table 1. BLM, Forest Service and MIS Wildlife Species with Potential Habitat				
Common Name/ Agency	Scientific Name	Habitat	Species Detected?*	Parcel(s)
Mammals				
Townsend's big-eared bat (BLM, USFS)	<i>Plecotus townsendii</i>	Semidesert shrublands, piñon-juniper woodlands and open montane forests below 2,900 m (9,500 ft.). Requires caves or abandoned mines for roost sites during all seasons and stages of its life cycle, and its distribution is strongly correlated with the availability of these features.	No	All
Birds				
Brewer's sparrow (BLM, USFS)	<i>Spizella breweri</i>	Sagebrush and other shrubs species with similar stand characteristics including greasewood, hopsage, and saltbush.	Yes (Cozy Point Ranch)	Aspen Mass and Cozy Point Ranch
Virginia's warbler (USFS MIS)	<i>Vermivora virginiae</i>	Dense shrub-dominated oak forest.	Yes (Mills)	Cozy Point South and Mills
Amphibians/Reptiles				
Northern leopard frog (BLM, USFS)	<i>Lithobates pipiens</i>	Wet meadows and the banks and shallows of marshes, ponds, glacial kettle ponds, beaver ponds, lakes, reservoirs, streams, and irrigation ditches. Egg laying can only occur in areas with very slow to no current.	No	Cozy Point Ranch and Cozy Point South.
Fish				
Bluehead sucker (BLM, USFS)	<i>Catostamus discobolus</i>	Variety of aquatic habitats from headwater streams to large rivers.	No	Cozy Point Ranch and Cozy Point South
*Based on surveys conducted in 2011				

3.3 Avian Species

In 2011, avian species richness and abundance were quantified using point counts and distance sampling methods as described by Farnsworth et al. (2005) and Seavy et al. (2005). A complete description of the methodology is contained in the 2011 Biological and Historical Resource Survey report. The 2011 point count surveys resulted in a total of 923 detections from all point count locations and encompassed 64 avian species. Sensitive species (i.e. Brewer's sparrow) were not detected on the Cozy Point Ranch parcels.

By repeating point count surveys (three survey efforts per point within one sampling season) on an annual or semiannual basis, population trends can be identified. These trends would indicate how management activities are influencing the local avian community. Data collected in 2011 forms the basis for comparison for future analysis. Surveys would need to occur at all of the survey points established in 2011 in order to generate enough detections of each species to estimate the local population sizes for those species with a high enough detection rate. Surveys could be completed on the currently analyzed parcels for the sole purpose of recording presence at these parcels.

3.4 Nocturnal Birds and Bats

No surveys for bats were conducted per the direction of the City of Aspen, Pitkin County, and Town of Snowmass Village. Based on species distribution and elevational limits (Fitzgerald et al., 1994), little brown myotis (*Myotis lucifugus*), long-legged myotis (*Myotis volans*), hoary bat (*Lasiurus cinereus*), silver-haired bat (*Lasioncycteris noctivagans*), big brown bat (*Eptesicus fuscus*), and Townsend's big-eared bat (*Plecotus townsendii*) all have the potential to occur on or use the

project area. However, use of the project area likely would be sporadic and would occur mainly during migration. No habitats such as old mines, which are suitable for use as a nursery colony or hibernacula, are known to exist within the project area.

In 2011, owl surveys were conducted only in areas where potentially suitable nesting habitat was present from locations designed to provide the best coverage. No owls were detected at any of the call locations.

3.5 Rare and Nocturnal Mammals

Infrared cameras and associated scent stations were used to detect rare and nocturnal mammals during the 2011 surveys, and techniques are provided in the 2011 report. However, no cameras were installed on the current subject parcels. Over 10,000 photos were recorded by all cameras and wildlife species were recorded at all locations. A total of 569 photographs of five mammal species (coyote, deer, elk, red fox, and mountain cottontail rabbit [*Sylvilagus nuttallii*]) and two avian species (dusky flycatcher [*Empidonax oberholseri*] and American robin [*Turdus migratorius*]) were recorded. Of these, elk was the most common species photographed (72%), followed by deer (16%) and coyote (7%); the remaining species comprised the remaining 5%.

3.6 Wildlife Habitat Mapping

The Cozy Point Ranch parcels are mapped by Colorado Parks and Wildlife (CPW) as overall range for mule deer and elk. Mule deer winter range habitat is mapped at the northern end of Cozy Point (this area includes the mapped Brewer's sparrow critical habitat) (Figure 4) and elk winter range and severe winter range habitat is mapped on the hillsides of Cozy Point South (Figure 5). These winter habitat types are considered essential to elk and mule deer population sustainability. In addition to the mapped mule deer and Brewer's sparrow habitat on the north end of Cozy Point, a small amount (< 0.001 acre) of a much larger mapped resident elk population area is also present. Critical habitat type definitions are provided in the 2011 Biological and Historical Inventory report.

The area between Cozy Point and Cozy Point South is mapped as an elk migration corridor and an elk highway crossing area. In 2011, elk migration corridors were mapped along Brush Creek Road. At that time, the migration corridor that crosses Brush Creek Road at Highway 82 was reported to be used occasionally by elk, but not as heavily or as often as locations further to the west up Brush Creek. Regardless of the amount of use, the current situation does not provide a safe alternative for wildlife to cross Brush Creek Road near Hwy 82. No data on the number of annual elk-vehicle collisions on Brush Creek Road is available; in 2011, elk-vehicle collisions were not considered to be a problem on Brush Creek Road.

The CPW data also shows an elk highway crossing along Highway 82 near its intersection with Brush Creek Road for approximately 0.5 miles. A review of the CDOT Wildlife Program data (CDOT 2016) for the section of Highway 82 between mile markers 30 and 40 (mile marker 35 is within the referenced mapped highway crossing) shows a few elk-vehicle collisions do occur in this area. For the period of 2011-2015, a total of five elk-vehicle collisions occurred near mile marker 35. Though any elk-vehicle collision is not good, the data shows that elk-vehicle collisions are not a significant problem in this area.

3.7 Agency Coordination

In 2011, six local wildlife professionals were coordinated with to determine what the local consensus is for managing the parcels. These professionals were not contacted again and no new contacts occurred as part of the current analysis. The general consensus among these professional, experienced biologists in 2011 was that the core properties of Cozy Point, Cozy Point South, Droste, Hidden Valley, Seven Star Ranch (I & II), and Upper North Mesa were the critical pieces necessary to maintain viable wildlife populations within the general area, and these parcels should be managed in concert with each other. The biologists all also stated that 'the bare

minimum of trails' (generally recommending few trails only in locations where trails currently exist), as well as the continuation of the seasonal closures which existed for some of these properties and the ban on dogs, would be very beneficial to wildlife.

4.0 Vegetation Resources

4.1 Rare Plants

4.1.1 Methods

A detailed literature review for the subject parcels was conducted for the 2011 Biological and Historical Resources Survey. Since that time, however, the federal, USFS and BLM lists have been updated and were re-analyzed for the current study. More specifically, the following literature sources were reviewed in 2015 in reference to the subject parcels. No additional field work was conducted in 2015.

- The 2015 U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Consultation System (IPAC System, 2015) for a current list of federally protected, candidate, and proposed plant species for the project area. (Appendix A)
- The 2015 U.S. Forest Service (USFS) Region 2 Sensitive Species List (Appendix B).
- The 2015 Bureau of Land Management State Director's Sensitive Species List (Appendix C).
- The 2015 Colorado Natural Heritage Program (CNHP) information for rare plants and plant communities species occurrences and Potential Conservation Areas (PCA).

4.1.2 Federally Listed Plant Species

Only one federally listed plant species, the Ute ladies' tresses orchid (*Spiranthes diluvialis*) is known to occur or has the potential to occur on lands within Pitkin County, Colorado (USFWS 2015). The nearest location of this federally threatened plant is approximately 10 miles north of the project area in open subirrigated meadows adjacent to the Roaring Fork River at an elevation of 6,300 feet. The project area does not contain any suitable habitat for this orchid along the Roaring Fork River, and although some subirrigated open meadows do occur on the Brush Creek floodplain, these areas are at least 1,500 feet higher in elevation than the orchid is known to occur. Therefore, it is concluded that the project area does not contain suitable habitat for this orchid and it will not be discussed further.

4.1.3 BLM and USFS Sensitive Plant Species

Three BLM and/or USFS sensitive species have habitat within the project area, however none were detected during the field surveys conducted in 2011 (Table 2). The first, Harrington penstemon (*Penstemon harringtonii*), typically occurs in open sagebrush or sagebrush with encroaching pinyon/juniper at elevations ranging from 6,500 to 9,200 feet. However, it also has been found in the area by the author within open rocky Gambel oak - serviceberry woodlands on ridgetops. The closest known populations of Harrington penstemon occur approximately four miles north of the project area in the Williams Hill PCA. Within the project area, the most suitable habitat for this plant occurs on rocky sagebrush-hillsides. However, no individuals or populations of Harrington penstemon were identified during the field surveys for this plant in 2011, and the habitat on the subject parcels appears to be marginal at best.

The second species, Park milkvetch (*Astragalus leptaleus*) is an inconspicuous perennial herb in the pea family. Suitable habitat for Park milkvetch includes sedge-grass meadows, swales and hummocks, wetlands, aspen glades, and streamside willow communities between 7,675 and 9,500 feet in elevation. The best habitat for this species occurs along Brush Creek on the Cozy Point South parcel, however none of these plants were found during onsite field reconnaissance.

Finally, yellow lady's slipper (*Cypripedium calceolus ssp. parviflorum*) is a perennial forb that grows as a single plant or in a colony. It is 10 to 80 cm in height with three to six alternate green leaves and topped with one or rarely two conspicuous flowers which are colored yellowish-green to purplish-brown (Mergen, 2006). In Colorado, the plant occurs at elevations between 5,800 and 12,683 feet in aspen, lodgepole pine, ponderosa pine, narrowleaf cottonwood, and spruce-fir-aspen forests. The most suitable habitat for this species occurs on the low terrace of the Mills open space adjacent to the Roaring Fork River. However, no plants were discovered during extensive field reconnaissance in 2011. Appendix E provides additional life history details of these three species.

Table 2. BLM and USFS Sensitive Plant Species Potentially Present					
Scientific Name	Common Name	Status*	Habitat	Habitat Present?	Species Detected?
<i>Penstemon harringtonii</i>	Harrington penstemon	BLM, USFS Sensitive	Open sagebrush or sagebrush sites with encroaching pinyon/juniper. Soils are typically rocky loams and rocky clay loams derived from coarse calcareous parent materials (basalt); 6,500 to 9,200 ft.	Yes	No
<i>Astragalus leptaleus</i>	Park milkvetch	USFS Sensitive	Sedge-grass meadows, swales and hummocks, wet aspen, streamside willows, sagebrush transition to wet. 6,000 – 9,000 ft.	Yes	No
<i>Cypripedium parviflorum</i>	Yellow lady's slipper	USFS Sensitive	Riparian and riparian transition to cottonwood, aspen, ponderosa, Douglas fir, spruce-fir and lodgepole pine. 7,400 – 12,500 ft.	Yes	No
*Species Status					
Source: 2015 State BLM Sensitive Species List and 2015 USFS R2 Sensitive Species List.					

4.1.4 State Rare Plants and Plant Communities

No state rare plants tracked by the Colorado Natural Heritage Program (CNHP) were documented within the Cozy Point, Cozy Point South, Aspen Mass, or Mills parcels (Western Ecological Resource and Wildlife Specialties, 2011). However, one tracked plant community was documented on the Aspen Mass and Mills parcels: the globally vulnerable Montane Riparian Forest comprised of narrowleaf cottonwood (*Populus angustifolia*), blue spruce (*Picea pungens*) and alder (*Alnus incana ssp. tenuifolia*) (G3/S3). This plant community is part of the Roaring Fork at Brush Creek PCA. PCA's are preliminary conservation planning boundaries which represent the best estimate of the primary area needed to support the long-term survival of the targeted species or plant community. They are not legally binding boundaries and merely delineate ecologically sensitive areas where land-use practices should be carefully managed for compatibility with protection of natural heritage resources and sensitive species. See Appendix F for further details.

4.2 Vegetation Mapping & Descriptions

Vegetation types were originally mapped and described in the 2011 Biological and Historical Resources Survey Report. Vegetation types were remapped based upon new six-inch resolution aerial photography from 2014 and the field reconnaissance conducted in 2011. The aerial photography was obtained from the Pitkin County website. Each vegetation type was classified based on the International Vegetation Classification/U.S. National Vegetation Classification System

(IVC/NVC), a system used by NatureServe and the CNHP. Descriptions of each vegetation type are listed below and include dominant and associated plant species, structure, relative plant vigor, insect damage, and disease (if present). Wetland and riparian habitats were additionally described as to their functional status using the Proper Functioning Condition (PFC) Assessment Method (USDOI BLM, 1998 & 2003). Finally, all resources were digitized into ArcView 10.0 Geographic Information System (GIS). No significant changes have occurred since mapping was conducted in 2011 except for a pedestrian trail re-route on the Aspen Mass parcel. The vegetation types for the subject parcels are listed and described below. See Table 3 and Figure 6.

Table 3. Vegetation Types		
Vegetation Type	Acres	% of Area
Douglas-Fir Forest	1.3	0.3%
Mountain Shrubland	133.2	33.5%
Sagebrush Shrubland	35.8	9.0%
Active Agriculture	95.7	24.1%
Abandoned Agricultural Grassland	40.6	10.2%
Shale Barren	18.2	4.6%
Riparian/Wetland	34.8	8.8%
Aquatic Habitat	7.4	1.9%
Disturbed	24.1	6.1%
Unvegetated	5.8	1.5%
TOTAL	396.9	100.0%

4.2.1 Douglas-Fir Forests

Douglas-fir (*Pseudotsuga menziesii*) forests occur in a few small isolated gullies on the Cozy Point South parcel and comprise approximately 0.3% of the project area. These small stands of trees are surrounded by the mountain shrubland vegetation type. The herbaceous cover is generally low in deep shade but may include mountain lover (*Paxistima myrsinites*), heartleaf arnica (*Arnica cordifolia*) and Oregon grape (*Mahonia repens*). This plant community best fits the Douglas Fir – Gambel Oak Community which is globally secure and state apparently secure (G5/S4).

Douglas-fir is one of the most widespread and economically important trees in western North America. In Colorado, Douglas-fir forests at elevations between 6,000 and 8,500 feet and are generally confined to sheltered, north-facing slopes and cool ravines at lower elevations, but can occur on all slope aspects at higher elevations (Benedict, 1991). Douglas-fir is not a true fir, but belongs to an entirely different genus found only in western North America and in the mountains of China, Japan, and Taiwan. Douglas-fir is most easily distinguished by its cones that hang down and have a 3-pointed bract that protrudes between the cone scales. Douglas-fir first-year seedlings survive and grow best under light shade, especially on southerly exposures, but older seedlings require full sunlight. Competing shrub vegetation may create intolerable levels of shade, while grasses may compete strongly for available moisture. Douglas-fir is susceptible to several insect pests, the most significant being the western spruce budworm (*Choristoneura occidentalis*). The spruce budworm most often results in reduced growth rates, although repeated defoliation sometimes results in top-killing. In addition, trees infected with western spruce budworm are more susceptible to bark beetles, such as the Douglas-fir beetle (*Dendroctonus pseudotsugae*). No evidence of spruce budworm or Douglas-fir beetle activity was detected within the project area during the 2011 surveys.

4.2.2 Mountain Shrublands

Mountain shrublands cover approximately 33.5% of the project area. These shrublands are comprised of two vegetation communities as defined by NatureServe: the Gambel Oak - Serviceberry Shrubland and the Gambel Oak - Sagebrush Shrubland. Each of these communities is described below.

Gambel Oak - Serviceberry Shrubland. For this community, both Gambel oak (*Quercus gambelii*) and serviceberry (*Amelanchier alnifolia*) appear to be co-dominant with an understory of elk sedge (*Carex geyeri*), tuber starwort (*Pseudostellaria jamesiana*), lanceleaf bluebells (*Mertensia brevistyla*), balsamroot (*Balsamorhiza sagittata*), ballhead waterleaf (*Hydrophyllum capitatum*), and violet (*Viola vallicola*). Other shrubs/subshrubs present include chokecherry (*Prunus virginiana* var. *melanocarpa*), Oregon grape (*Mahonia repens*) and snowberry (*Symphoricarpos rotundifolius*). Non-natives include agricultural species such as Kentucky bluegrass and houndstongue (*Cynoglossum officinale*), a noxious weed. The structure of this plant community is variable, with some thickets that are relatively impenetrable and other areas which are more navigable.

Gambel Oak - Sagebrush Shrubland. The Gambel Oak - Sagebrush Shrubland occurs near the transition to sagebrush shrublands. Here moderately dense stands of Gambel oak form a mosaic with sagebrush shrubs. Other commonly occurring shrubs include green rabbitbrush (*Chrysothamnus viscidiflorus*), snowberry and Woods' rose (*Rosa woodsia*). As with other oak shrublands, elk sedge, tuber starwort and northern bedstraw (*Galium septentrionale*) are common, along with a variety of sagebrush associates such as Indian paintbrush (*Castilleja chromosa*), lupine (*Lupinus argenteus*), junegrass (*Koeleria macrantha*), green needlegrass (*Nassella viridula*), sulphur flower (*Eriogonum umbellatum*), and butterweed groundsel (*Senecio integerrimus*).

The mountain shrublands provide big game winter range and habitat for a variety of local wildlife including nesting birds and raptors. In a healthy community, a variety of grasses and forbs are present in the understory and the stands show vigorous growth. In fact, Gambel oak is most valuable for wildlife when it is between 12 and 50 years old (Ringer 2011). Decadent and over-browsed vegetation shows hedging, clubbed terminal sprouts, and a lack of understory species diversity. Some shrublands exhibit a high density of stems in a uniform age class, while other areas have shrub clumps surrounded by sparsely vegetated ground or sagebrush shrublands. Although the mountain shrublands within the project area are variable in structure and species composition, almost all have been isolated from natural disturbance regimes such as fire. Gambel oak is a fire-adapted species, and fire triggers vegetation sprouting and new plant growth, which introduces age class diversity, increases forage quantity and quality, increases associated species diversity, and improves its capability to support wildlife species.

4.2.3 Sagebrush Shrublands

Sagebrush shrublands comprise approximately 35.8% of the project area. The dominant community is the Sagebrush/Balsamroot Shrubland which predominates the northern end of Cozy Point and portions of Aspen Mass. Snowberry shrubs are often co-dominant with sagebrush in some areas, along with the minor presence of serviceberry and chokecherry. Overall, numerous native graminoids and forbs may be present in all three sagebrush communities, including graminoids such as balsamroot (*Balsamorhiza sagittata*), junegrass, green needlegrass, needle-and-thread grass (*Hesperostipa comata*), squirreltail (*Elymus elymoides*), western wheatgrass (*Pascopyrum smithii*), and Kentucky bluegrass, and forbs such as phlox (*Phlox multiflora*), ballhead sandwort (*Eremogone fendleri*), sulphur flower, lupine, Indian paintbrush (*Castilleja chromosa* and *C. linariifolia*), Rocky Mountain penstemon (*Penstemon strictus*), mariposa lily (*Calochortus gunnisonii*), pussytoes (*Antennaria parvifolia*, *A. pulcherrima*), lambstongue groundsel (*Senecio integerrimus*), and numerous others.

Sagebrush shrublands used to encompass approximately 156 million acres (63 million ha) of the Western United States, but little of this area has remained unaltered since Euro-American

settlement. It has been estimated that 50-60% of sagebrush shrublands have been converted to nonnative grasslands (West, 2000), and other tracts have been lost to agriculture, urbanization, and other human activities. Furthermore, less than three percent of sagebrush shrublands are protected in National Parks or other Federal reserves (Knick et al., 2003). The increasingly rapid and widespread degradation, fragmentation and, in some areas, near total loss of sagebrush has resulted in its being rated one of the most imperiled ecosystems in North America (Noss and Peters, 1995). Sagebrush habitats support a unique biodiversity. Several bird and mammal species are almost entirely dependent on sagebrush for survival: greater sage-grouse, Gunnison sage-grouse, sage sparrow, Brewer's sparrow, sage thrasher, pygmy rabbit, and sagebrush vole. In addition, sagebrush hosts 16 species of paintbrushes and seven species of owl-clovers, all facultative root hemiparasites (Boyle and Reeder, 2005).

Overall, the sagebrush shrublands within the project area appear to be healthy and have a high species diversity. Unlike Gambel oak, sagebrush is not fire-adapted and must reseed in order to grow after wildfire. It is likely that big sagebrush (*Artemisia tridentata*) did not historically occur in or adapt to an environment with a high severity fire regime. The lack of grazing over the last several decades over much of the project area has also likely benefitted sagebrush communities by allowing the native grasses and forbs to grow and flourish. In fact, the largest threat to sagebrush within the project area may be the invasion of non-native annual grass species such as cheatgrass (*Bromus tectorum*), which is much more fire-prone than native bunchgrasses and could potentially increase the natural fire-return interval.

4.2.4 Agricultural Grasslands

No native grasslands were observed within the project area. However both active and abandoned agricultural grasslands comprise 34.3% of the total. These grasslands occur on the Cozy Point, Cozy Point South and Aspen Mass Parcels. The active agricultural lands are currently being irrigated and hayed, and are also the location of Cozy Point Ranch, an equestrian facility. The abandoned agricultural grasslands are characterized by non-native agricultural species and weeds. Common graminoids include smooth brome (*Bromus inermis*), orchardgrass (*Dactylis glomerata*), crested wheatgrass (*Agropyron cristatum*), timothy (*Phleum pretense*), and Kentucky bluegrass. Quackgrass (*Elytrigia repens*) and intermediate wheatgrass (*Thinopyrum intermedium*) also occur occasionally. Non-native forbs and weeds present include alfalfa (*Medicago sativa*), black medic (*Medicago lupulina*), white Dutch clover (*Trifolium repens*), yellow sweet clover (*Melilotus officinalis*), field pepperweed (*Neolepia campestris*), Canada thistle (*Cirsium arvense*), plumeless thistle (*Carduus acanthoides*), and houndstongue. In some areas, native shrubs such as sagebrush and rubber rabbitbrush (*Chrysothamnus nauseosus*) have begun to invade the abandoned agricultural habitats. Because these habitats are not natural, they do not fit into any of the NatureServe vegetation community descriptions. Dense stands of weeds, such as Canada thistle, plumeless thistle and musk thistle (*Carduus nutans* subsp. *macrolepis*) are also problematic in many of these areas, however weed control was observed during the 2015 site visit.

4.2.5 Shale Barrens

Shale barrens typify the ridge tops and steep slopes of Mancos Shale on the Cozy Point and Cozy Point south parcels and comprise 4.6% of the total. These areas are characterized by extremely low vegetative cover of 30% or less, and they are exposed to harsh wind, desiccation and sheet erosion. The soils are typically shallow, calcareous, alkaline and clayey, and are often capped by a thin gravel layer. These shale barrens are best described by the Indian Ricegrass Shale Barren Community which is ranked as globally and state imperiled by the CNHP. It should be noted, however, that although Indian ricegrass (*Oryzopsis hymenoides*) is present in almost all shale barrens, it is not dominant or any more common than numerous other native plants that grow in these areas. Species commonly occurring on the shale barrens within the project area include scattered shrubs of mountain mahogany (*Cercocarpus montanus*), bitterbrush (*Purshia tridentate*), Gambel oak, serviceberry, and snowberry; graminoids such as Indian ricegrass, junegrass, and western wheatgrass; and forbs such as tapertip onion (*Allium acuminatum*), largeflower hawksbeard (*Psilochenia occidentalis*), two-form pussytoes (*Antennaria dimorpha*), balsamroot,

Douglas pincushion (*Chaenactis douglasii*), Rocky Mountain spring parsley (*Cymopterus planosus*), evening primrose (*Oenothera caespitosa*), mat penstemon (*Penstemon caespitosus*), Osterhout penstemon (*Penstemon osterhoutii*), and point-tip twinpod (*Physaria floribunda*). In addition, the silverleaf milkvetch (*Astragalus argophyllus* var. *martini*) a state rare plant, occurs in this vegetation community.

The major threat to this community was likely eliminated with the end of livestock grazing, however grazing by elk and deer still impacts this community. Historical disturbances within the shale barren community are extremely slow to recover given the lack of soil development and sheet erosion that these areas are subject to.

4.2.6 Riparian & Wetland Habitats

Wetland and riparian habitats occur along the Roaring Fork River on the Mills and Aspen Mass Parcels, along Brush Creek on the Cozy Point Ranch and Cozy Point South parcels, along Cougar Creek and the Brush Creek Ditch on the Cozy Point Ranch Parcel, and on the CDOT Intercept Lot. Each of the wetland and riparian habitat types on these parcels is described below.

1. Roaring Fork River. The riparian forest along the Roaring Fork River is best described as a narrowleaf cottonwood (*Populus angustifolia*) - blue spruce (*Picea pungens*) /thinleaf alder (*Alnus incana* ssp. *tenuifolia*) forest, which is ranked as globally and state vulnerable (G3/S3) by the CNHP. This vegetation community is well developed on the floodplains of the Roaring Fork River and contains trees up to 70 feet tall. Natural regeneration is occurring, as both young blue spruce and narrowleaf cottonwood trees were observed. Common understory species include a variety of shrubs, graminoids and forbs. These include shrubs such as alder, bush honeysuckle (*Distegia involucrata*), serviceberry, chokecherry, dogwood (*Cornus sericea*), and whitestem gooseberry (*Ribes inerme*), as well as subshrubs such as mountain lover and Oregon grape. Common graminoids include beaked sedge (*Carex utriculata*) in permanently flooded wetlands and reed canarygrass (*Phalaris arundinacea*), an aggressive non-native grass, adjacent to the river's edge. In upland riparian areas, there are numerous stands of agricultural grasses such as smooth brome, orchardgrass and Kentucky bluegrass. Native graminoids occur less often, with elk sedge being most common. Other natives commonly present include field horsetail (*Equisetum arvense*) and scouring rush (*Hippochaete hyemalis*), which are both fern allies, as well as forbs such as cow parsnip (*Heracleum sphondylium*), Richardson's geranium (*Geranium richardsonii*), bluntseed sweet cicely (*Osmorhiza depauperata*), heartleaf arnica, northern bedstraw, baneberry (*Actaea rubra*), and starry false Solomon's seal (*Maianthemum stellatum*). The striped coralroot orchid (*Corallorhiza striata*) was also observed within this riparian habitat. Although not tracked by the CNHP, this plant is relatively uncommon and should be protected. Noxious weeds observed throughout this community include houndstongue and Canada thistle. Overall, this riparian habitat appears to be in proper functioning condition; however, it is being threatened by invasive plant species. Another threat is increased use of this area by the public for fishing access.

2. Brush Creek. Brush Creek traverses the Cozy Point South and the Cozy Point Parcels. The majority of the creek supports a scrub-shrub wetland/riparian habitat type and primarily consists of mountain willow (*Salix monticola*), Bebb willow (*Salix bebbiana*), and sandbar willow (*Salix exigua*), along with hawthorn (*Crataegus erythropoda*), alder and river birch (*Betula fontinalis*). Whitestem gooseberry, bush honeysuckle, Woods' rose, and chokecherry are also frequently present. The creek banks are often dominated by the invasive reed canarygrass, and scattered stands of beaked sedge, water sedge (*Carex aquatilis*), and swordleaf rush (*Juncus ensifolius*) occur in the annual floodplains. Common forbs include cow parsnip, largeleaf avens (*Geum macrophyllum*), Macoun's buttercup (*Ranunculus macounii*), chiming bells (*Mertensia ciliata*), monkshood (*Aconitum columbianum*), and starry false Solomon's seal. Pasture grasses are also extremely common, including smooth brome, orchard grass, timothy, and Kentucky bluegrass. Portions of this willow riparian area are highly degraded by invasive plants and noxious weeds including reed canarygrass, ox-eye daisy (*Leucanthemum vulgare*), houndstongue, Canada thistle, and plumeless thistle.

The Brush Creek Riparian/Wetland is best described by the Mountain Willow/Mesic Forb Shrubland, which is common in the upper montane valleys of Colorado (NatureServe, 2011). In addition, there is a small stand of mature narrowleaf cottonwood which once lined the driveway to the Feinsinger house before the house was moved up valley (Droste, 2011). The understory of this forest stand is mainly comprised of smooth brome along with orchardgrass and Kentucky bluegrass, all introduced grasses. Houndstongue, yellow sweet clover, tansy (*Tanacetum vulgare*), and burdock (*Arctium minus*) are all common weeds. One crack willow (*Salix fragilis*) also occurs here. This community does not fit any of the IVC/NVC classification systems because it is not a natural community type. Noxious weeds threaten this area and should be controlled.

The Brush Creek stream reach appears to be experiencing significant to severe erosion and lacks well developed riparian vegetation in many areas, particularly through the active portion of the Ranch. Overall, Brush Creek is rated as *Functional-at-Risk*. Factors that may be impacting the stream include livestock grazing, roads, bridges, diversions, rock check dams, possible historic channelization, upstream development including the Snowmass Ski Area, and beaver activity. Depending on the extent of stream channel degradation and instability, enhancement and bank stabilization options can range from relatively simple treatments of only the most severe problems to full stream channel restoration involving realignment and extensive riparian vegetation re-establishment. In addition, some of the horse corrals are directly adjacent to the stream channel, which may allow nutrient laden manure runoff to enter the stream, degrading water quality. The benthic macroinvertebrate community shows signs of an impaired water quality (Malone and Emerick, 2007).

3. Cougar Creek. Another riparian/wetland shrubland occurs along an unnamed intermittent drainage north of the Cozy Point Ranch. This riparian shrubland is dominated by native willows and hawthorns (*Crataegus erythropoda*), but is being threatened by an adjacent disturbed area which contains stockpiled manure compost and topsoil. The nutrient-laden runoff from the manure pile is likely washed into the drainage during high precipitation events. In addition, portions of the right bank lack the stabilizing presence of willows, and the lower portion of this drainage appears to have been ditched and lined with large cobbles which prevents the development of a healthy riparian corridor. This stream reach is rated as *Functional-at-Risk*.

4. Brush Creek Ditch. The northern portion of the Cozy Point parcel contains a segment of the Brush Creek Ditch. The headgate of the ditch is located in the Hwy 82 right-of-way between the north and south bound lanes. Over the last hundred years or so since the ditch was created in the late 1800's, narrowleaf cottonwoods have colonized and formed a narrow riparian community. A dense herbaceous stand of smallfruit bulrush (*Scirpus microcarpus*) lines the ditch, along with scattered stands of water sedge and beaked sedge. Understory shrubs include sandbar willow, chokecherry, serviceberry, and snowberry. Weeds are present as well, and include Canada thistle, burdock, houndstongue, ox-eye daisy, and yellow sweet clover. This community does not fit any of the NatureServe classification systems. The hydrologic source for this riparian-wetland plant community is totally dependent on irrigation ditch water rights. Noxious weeds threaten this area and should continue to be controlled.

5. CDOT Stormwater Detention Ponds. The CDOT Intercept Lot supports two stormwater detention facilities. The first, a 0.25 acre pond, is located approximately 100 feet north of the existing parking lot, is completely fenced, and lacks any well-developed riparian or wetland vegetation. The second feature, located 900 feet north of the parking lot is a herbaceous wetland 1.3 acres in size and is comprised of dense stands of cattails (*Typha* spp.). Additional plantings of native trees and shrubs around these features would likely enhance their ecological value.

Those riparian and wetland habitats on the project site rated as *Functional-at-Risk* are listed below in Table 4, including the reason for the rating and recommendations for improvement.

Table 4. Riparian/Wetland Habitats Rated as Functional at Risk (FAR)			
Name	Vegetation	Reasons for FAR Rating	Recommendations
Brush Creek (Cozy Point Ranch Parcel)	Scrub-Shrub (Willows)	Bank erosion, lack of well-developed riparian vegetation, runoff from ranching operations.	Perform a geomorphological assessment of the stream reach. Develop plan to stabilize creek and replant riparian vegetation. Continue to control noxious weeds and monitor water quality.
Cougar Creek (Cozy Point Ranch Parcel)	Scrub-Shrub (Willows)	Manure compost piles are directly adjacent, lower end has been ditched and lined with cobble.	Move manure compost piles, plant willows, design and implement stream restoration plan for cobble-lined and ditched portion of creek.

4.3 Noxious Weeds

The following noxious weeds were identified in the project area during the 2011 field reconnaissance (Table 5). These weeds are currently being controlled on the subject properties. The most abundant weed observed in 2015 on the Cozy Point Ranch parcels was plumeless thistle. However, musk thistle and Canada thistle were also observed. The majority of these weeds are currently being managed. In addition, there was a small population of leafy spurge (*Tithymalus esula*) present along the new recreation path on the Mills parcel.

Table 5. Noxious Weeds Identified In Project Area			
Scientific Name	Common Name	Noxious Weed Class	Comment
Perennial Graminoids			
<i>Elytrigia repens</i>	Quackgrass	b	Occasional in agricultural areas
Perennial Forbs			
<i>Artemisia absinthium</i>	Absinth wormwood	b	Infrequent
<i>Cardaria draba</i>	Hoary cress; Whitetop	b	Infrequent
<i>Cichorium intybus</i>	Chicory	c	Infrequent
<i>Cirsium arvense</i> (Breea)	Canada thistle	b	Common in moist soil
<i>Convolvulus arvensis</i>	Field bindweed	c	Agricultural meadows and adjacent sagebrush
<i>Leucanthemum vulgare</i> (<i>Chrysanthemum leucanthemum</i>)	Ox-eye daisy	b	Common along Brush Creek
<i>Linaria vulgaris</i>	Yellow Toadflax	b	Infrequent
<i>Potentilla recta</i>	Sulphur cinquefoil	b	Infrequent
<i>Tanacetum vulgare</i>	Common tansy	b	Infrequent
<i>Tithymalus esula</i> (<i>Euphorbia esula</i> var. <i>esula</i>)	Leafy spurge	b	Along new recreation path on the Mills parcel
Annual/Biennial Forbs			
<i>Arctium minus</i>	Common burdock	c	Infrequent
<i>Carduus acanthoides</i>	Plumeless thistle	b	Common throughout project area
<i>Conium maculatum</i>	Poison hemlock	c	Infrequent

Scientific Name	Common Name	Noxious Weed Class	Comment
<i>Cynoglossum officinale</i>	Houndstongue	b	Present in low densities throughout project area.
<i>Erodium cicutarium</i>	Redstem filaree	b	Infrequent
<i>Matricaria perforata</i>	Scentless chamomile	b	Infrequent
<i>Verbascum thapsus</i>	Common mullein	c	Infrequent
Annual Graminoids			
<i>Anisantha tectorum (Bromus)</i>	Cheatgrass	c	Infrequent

4.4 Floristic Inventory and Quantitative Sampling.

A thorough floristic inventory was conducted as part of the 2011 Biological and Historical Resource Survey. No new floristic surveys were conducted in 2015. In addition, the 2011 Report included the results of quantitative sampling of 30 permanent vegetation transects for vegetative cover, species richness, and Floristic Quality. These transects were recently resampled by Golder & Associates (*Golder, in prep*). There has been no specific floristic inventory for the Brush Creek parcels.

5.0 Geologic and Soil Resources

5.1 Geology

The geologic bedrock of the project area consists primarily of the upper member of the Mancos Shale Formation. The Mancos Shale is a dark-gray shale and silty shale with a few outcrops of persistent olive-gray sandstone up to 40 feet thick (Bryant, 1972). The upper Mancos Shale member was laid down in the Upper Cretaceous Period 99 to 65 million years ago (mya) by mudrock that accumulated in offshore and marine environments of the Cretaceous North American Inland Sea. Holocene alluvial fan deposits (Qf) and older Pleistocene alluvial fan deposits (Qof) occur along many of the gentle sagebrush shrublands as well as along Brush Creek. Areas near the Roaring Fork River are dominated by Glaciofluvial deposits (Qgb), which include poorly sorted outwash gravels from the Pleistocene.

5.2 Soil Mapping

The United States Department of Agriculture Soil Conservation Service (USDA-SCS) completed a soil survey of the Aspen area in 1992 and mapped several soil units within the project area (Table 6, Figure 7). The most common soil on the project parcels is the Kobar silty clay loam (Map Unit 71), which dominates the relatively flat terraces of the Cozy Point Ranch, Cozy Point South, and western portion of the Aspen Mass and Intercept Lot parcels. Overall, this soil comprises 45.5% of all the soils present. The Kobar silty clay loam is a deep, well-drained soil present on alluvial fans and terraces which formed in alluvium derived from Mancos shale. Both the surface layer and subsurface layer are silt clay loams which are calcareous throughout. Water permeability is slow and available water capacity is high, runoff is medium, and the hazard of water erosion is moderate. This soil type has typically been used for irrigated hay meadows.

The Dollard-Rock Outcrop–Shale Complex (Map Unit 30) is also quite common and comprises 24.0% of the soils mapped. This soil occurs on ridges and mountain sides from 12% to 65% slopes. The Dollard soil is moderately deep and well drained, and formed in residuum derived from Mancos shale, which is the underlying bedrock of the project area. Typically, the surface layer is grayish brown clay loam about 4 inches thick which is underlain by a substratum of clay loam about 29 inches thick. The soil is calcareous throughout. Also present in this mapping unit

is the Rock Outcrop, which consists of slightly weathered consolidated exposures of Mancos shale. Overall, this mapping unit has a low available water capacity, high shrink-swell potential, slow permeability, rapid runoff, shallow depth and/or exposed bedrock, severe erosion hazard, and low strength. It occurs on the steeper slopes of the Cozy Point Ranch, Cozy Point South, Mills, and Intercept Lot Parcels.

The Torriorthents-Rock Outcrop Complex (Map Units 104 and 105) occurs at the higher elevations of the Cozy Point parcels and the steep slope of the Mills and Aspen Mass parcels. This unit is about 45% Torriorthents, 20% Camborthids, and 15% Rock Outcrop. The Torriorthents are shallow to moderately deep, well drained soils and the surface is covered with stones. The surface layer is reddish-brown to brown in color and the soil texture ranges from fine sandy loam to clay loam. The depth to the shale or sandstone bedrock is 4 to 30 inches. The Camborthids are similarly well drained and have a light colored surface layer with a clay loam or loam texture. Water runoff is rapid and the hazard of water erosion is severe for both soils of this map unit. Overall, these two soil complexes comprise 16.3% of the project area.

The eastern part of the Aspen Mass and the Intercept Lot parcels are dominated by the Uracca Moist-Mergel Soil Association (Map Unit 108). This deep, well-drained soil formed in alluvium derived from mixed igneous and metamorphic materials or in glacial outwash. The surface layer is typically a cobbly sandy loam or cobbly loam and the surface is covered with boulders, stones, cobbles and gravels. Large stones and boulders can also be present just below the soil surface. Permeability is moderate to moderately rapid, runoff is slow and the hazard of water erosion is slight. These soils comprise 7.1% of the project area.

Fluvaquents (Map Unit 42), a wetland soil, occurs along Brush Creek in the Cozy Point Ranch and South parcels and comprises 5.3% of the project area. This mapping unit consists of deep, somewhat poorly drained, nearly level soils on floodplains and alluvial valley floors. These soils are reported to be stratified and vary widely in texture and in depth.

Table 6. Soil Associations within the Project Area			
Soil Name	Map Unit	Acres	Percent
Kobar silty clay loam	71	180.7	45.5%
Dollard-Rock outcrop-shale complex	30	95.1	24.0%
Torriorthents-Rock outcrop complex	104, 105	64.5	16.3%
Uracca moist-Mergel	108	28.4	7.1%
Fluvaquents	42	21.0	5.3%
Water	120	7.2	1.8%
TOTAL		396.9	100.0%

5.3 Soil Sampling in Disturbed Sites

In 2011, a total of 17 disturbed sites exhibiting low vegetative cover were visited by David Buscher, a professional certified soil scientist, who described the nature and extent of the disturbances and sampled the soils for nutrients and organic matter content. Of the 17 soils samples, 7 were described from the parcels included in this study and the results are summarized below. The disturbed sites visited and the samples collected are summarized in Table 7 and recommendations are provided in Table 8. Please refer to the 2011 Report for details on methodology and results of the laboratory analysis. To date, no soil samples have been examined from the CDOT Intercept Lot.

Table 7. Summary of Disturbed Sites and Soil Samples

Sample ID	General Location	Nature of Disturbance and Composition	Sample Depth (in.)
5. Mills Road "Fishing Access"	Old road southeast of Highway 82 and Brush Creek Road.	Old road that is cut into steep escarpment of glacial terrace. Soil very rocky derived in glacial drift.	0-6
6. Cozy Pt. S. – Electric Pipeline	Pipeline corridor west of Highway 82 and south of Brush Creek Road.	Buried electric pipeline on north facing hillslope composed of shale. Some erosion on upper 1/3 portion, which has convex slope, and has shallow, clay-rich soil with weathered shale fragments. Lower 2/3 portion has deeper soil and no erosion.	0-12
9. Aspen Mass Field	Grass field east of Highway 82 and south of Smith Hill Way (south portion of field).	Grass field with areas of sparse vegetation, soil is clay-rich with weathered shale fragments.	0-6
10. Aspen Mass Field-2	Grass field east of Highway 82 and south of Smith Hill Way (north portion of field).	Grass field with areas of sparse vegetation, appears topsoil has eroded off, soil is very sandy and gravelly and was derived in glacial drift.	0-6
11. Aspen Mass Pipeline	Pipeline corridor east of Highway 82 and south of Smith Hill Way.	Buried gas pipeline on very steep, north facing escarpment of glacial terrace. Soil is loamy and very rocky, no topsoil. Shrubs are beginning to colonize area.	0-6
12. Aspen Mass Road	Old road east of Highway 2 and south of Smith Hill Way.	Old road cut into glacial terrace escarpment. Soil is sandy loam and very rocky.	0-6
13. Cozy Pt. Field	Grass field west of Highway 82 at the north end of the properties.	Grass field with areas of sparse vegetation, shallow clay-rich soil with weathered shale fragments.	0-6

Table 8. Soil Amendment Recommendations for Disturbed Sites

Sample ID	Soil Amendment Recommendations	Landform & Vegetation Recommendations
5. Mills Road "Fishing Access"	If the road prism is to be maintain but road will be closed, apply and incorporate 2500 lbs/acre of organic-rich topsoil into upper several inches of soil then apply 100 lbs/acre P ₂ O ₅ fertilizer	Apply native seed mix.
6. Cozy Pt. S. – Electric Pipeline	Till, then apply and incorporate 2,500 lbs/acre of organic-rich topsoil into the upper several inches, then apply 200 lbs/acre P ₂ O ₅ fertilizer; apply tackifier such as Startak 600 by Chemstar in accordance with manufacturer's specifications	Plant with native Gambel oak and Serviceberry shrubs. Use of temporarily irrigation and a mycorrhizal dip for shrubs is strongly encouraged. Competition from existing agricultural grasses may be an issue for shrub survival.

Table 8. Soil Amendment Recommendations for Disturbed Sites		
Sample ID	Soil Amendment Recommendations	Landform & Vegetation Recommendations
9. Aspen Mass Field	Apply and incorporate 2500 lbs/acre of organic-rich topsoil into upper several inches of soil to areas of sparse vegetation then apply 100 lbs/acre P ₂ O ₅ fertilizer	Area could be converted agricultural land use or reclaimed into native pasture and/or shrubland.
10. Aspen Mass Field-2	Apply and incorporate 2500 lbs/acre of organic-rich topsoil into upper several inches of soil to areas of sparse vegetation then apply 100 lbs/acre P ₂ O ₅ fertilizer	Area could be converted agricultural land use or reclaimed into native pasture and/or shrubland.
11. Aspen Mass Pipeline	Very steep slope, shrubs are reestablishing site, any additional disturbance of site will accelerate erosion.	Apply a native seed mix.
12. Aspen Mass Road	If the road prism is to be maintain but road will be closed, apply and incorporate 2500 lbs/acre of organic-rich topsoil into upper several inches of soil then apply 100 lbs/acre P₂O₅ fertilizer	Apply a native seed mix. This area is now a new pedestrian trail.
13. Cozy Pt. Field	Apply and incorporate 2500 lbs/acre of organic-rich topsoil into upper several inches of soil to areas of sparse vegetation then apply 200 lbs/acre P ₂ O ₅ fertilizer	Reclaim area to native sagebrush shrubland.

* Phosphorus is the nutrient that most often stimulates excessive growth of aquatic plants, leading to a variety of problems known collectively as eutrophication. Avoid applying phosphorus fertilizer in areas where it could potentially leach or runoff from the soil into the aquatic habitats. Control of noxious weeds is also recommended for all disturbed sites.

6.0 Historical Resources

The first settlers came to the Roaring Fork Valley in 1879 in search of silver. Almost all of them arrived from Leadville, Colorado, via Independence Pass. The largest silver nugget in the world, weighing over one ton, was found in Smuggler Mine on Aspen Mountain in 1894. After Aspen's mining economy started to decline in the late 1800's, farmers and ranchers who had been supporting the miners became economically prominent and a small-scale mixed farm and ranch economy developed. Between 1900 and 1950, families grazed their cattle on USFS land during the summer, and used their farmland to produce hay, potatoes, grain and vegetables (Gilbert, 1992). The parcels of land included in this study exemplify the rich farming and ranching history of the Roaring Fork Valley.

The 2011 Biological and Historical Resources report details the way in which many of the first settlers obtained land from the federal government, including direct cash sales, the Homestead Act, the Stock Raising Homestead Act, and the Desert Lands Act. In addition, the 2011 report illustrates the location of the early land patents and describes who these early settlers were (Figure 8). In addition, during the 2011 field surveys, notes were kept on any new potential historical structures found that were not already recorded by the county. Such new structures included historic farming equipment and an old cabin on Aspen Mass. Structures previously documented by Pitkin County include many of the ranch buildings on Cozy Point Ranch.

The original land patent maps, available through the BLM's General Land Office Records website, show land ownership in a much different configuration than today (Table 9). The first transfer of land ownership from the federal government occurred in 1882, in which the northern portion of the Cozy Point parcel in Section 16 was granted to the state of Colorado for school revenue. The earliest land purchases were in 1890 through cash sales. For example, Jotham M. (Jote) Smith purchased land within the Cozy Point Ranch. True A. Smith, Jote Smith's son, purchased land north of his father's land in 1892, and William Lemond later expanded his ranch to the south through the Homestead Act in 1899. In 1897, Alexander Cruikshank homesteaded lands where the Aspen Mass and Mills parcels now lie, and he purchased a small ranch along Brush Creek on the Cozy Point South parcel in 1889.

Year	Last Name	First Name	Open Space Parcel	Patent or Accession No.	Authority
1882	Colorado	State	Cozy Point	NA	State Grant
1890	Smith	Jotham M	Cozy Point, Cozy Point South, Aspen Mass	1159	Cash Sale
1892	Smith	True A.	Cozy Point	561	Cash Sale
1895	Rex	Augustus H	Cozy Point	564	Cash Sale
1897	Cruikshank	Alexander (Heirs of)	Aspen Mass & Mills	369	Stock Raising HA Original Homestead Act
1889	Cruikshank	Alexander	Cozy Point South	50	Cash Sale
1907	Smith	True A.	Cozy Point	93	Desert Land Act
1923	Wiese	Charles H	Cozy Point South	Acc# 920617	Cash Sale

Each one of these pioneers has a unique and interesting history; however, many of them are difficult to trace through time and we know little about them. Below is a brief history of some of the prominent ranching families.

Jotham and True A. Smith

Jotham Smith and his son True A. Smith were prominent ranchers where the Cozy Point Ranch stands today. True was born in Colorado in 1864. His father, Jotham was born in Maine and his mother was born in Iowa. According to the Rocky Mountain Sun (Oct. 3, 1885):

"The largest ranch, and perhaps the most profitable, is that of Jote Smith, at the mouth of the [Brush] Creek. Mr. Smith purchased this ranch in 1883, of several parties, and has over 300 acres of land. He has this year 90 acres of oats, of heavy yield, part of which will go 60 bushels to the acres. He will have between 3,500 and 4,000 bushels of oats from this field. This crop is worth \$6,000 at least. He has a fine garden and has set out a number of fruit trees, some of which are doing well."

On June 15, 1892, True married the daughter of another prominent ranching family along Woody Creek, the Bourgs who were from France. Together, True and Nettie lived on the ranch, referred to as Rathbone or Watson which were two nearby stations along the Midland Railroad. However, their marriage wasn't always picture perfect. True's wife Nettie was badly injured one year out on the farm when True accidentally nailed her with a pitchfork. The Aspen Tribune (August 3, 1898) describes it this way:

"Mrs. True Smith of Watson is in the city for surgical treatment...Mrs. Smith received a wound from a pitchfork in a most unexpected and lamentable way. She was watching her husband at work in a field, he being on top of a haystack. After a time she sat down...to rest. Mr. Smith, busy with his work, noted her disappearance and supposed she had gone to the house. When it came time to quit he carelessly tossed his pitchfork to the ground...a sharp cry from his wife warned him, however, that...the fork had struck her, one prong going through the flexor muscles of her leg below the knee..."

True and Nettie had at least four children, the first being born in 1900. According to the Aspen Daily Times (January 28, 1900), "True A. Smith of Brush Creek near Rathbone Station on the Midland Railroad, is the father of a 9 pound boy, born Saturday morning. True calls him a hay bailer."

True also bred horses and was a member of the Roaring Fork Percheron Horse Breeding association. An advertisement in the Aspen Daily Times (April 3, 1906) read: "Wanted at once. A first class horseman to handle the Percheron stallion 'Boston' for the season 1906. None but a sober, competent man need apply. See True A. Smith, Rathbone."

By 1930, True had sold the ranch and was living in Aspen with his wife, brother-in-law and two of his adult daughters. Both True and Nettie are buried in the Aspen Cemetery. True died in 1939 and Nettie passed away in 1956.

Alexander Cruikshank

Mr. Alexander Cruikshank was another pioneer of the Brush Creek Valley. The Cruikshank Ranch was located just south and east of the Smith Ranch. Mr. Cruikshank came here with his family in 1881. He was a carpenter by trade, but also had several valuable mining properties on Aspen Mountain. Unfortunately, Mr. Cruikshank died in 1886 at the age of 65 in a terrible accident. According to the Rocky Mountain Sun (Oct. 2, 1886):

"It seems that about a quarter of a mile up Brush Creek from Mr. Cruikshank's ranch, the horses the old gentleman was driving became frightened at a dead mule by the side of the road. They ran up the side of the hill, the wagon tipping over, and becoming uncoupled. He was pitched forward, and dragged some 20 rods. The horses ran up the creek two miles to Burke Brothers...Mr. Cruikshank's hired man was helping here, saw the horses, surmised trouble and he and Brandis went down the creek and found the body from which life was extinct"

In 1889, one of Mr. Cruikshank's daughters, Emma Foster, married Lee Sherwood and they lived on the ranch for a little over a decade. In 1902, "the country home known to all railroaders as Cozy Point," was sold to Mr. Weise due to the ill health of Emma Foster.

Another one of Mr. Cruikshank's daughters, Lottie, was a famous opera singer with the Chicago Ideal Opera Company. Lottie Cruikshank originally married Mr. John Wutsum, a mining operator of the Mother Shipton mine. However, in 1884 at the age of 42, Mr. Wutsum died in a terrible storm up at the mine on Aspen Mountain. According to the Rocky Mountain Sun (July 5, 1884), Mr. Wutsum was killed when "a large tree fell and crushed him to the earth". He left behind his wife Lottie and one child. Lottie continued her career as an opera singer and travelled around the country. On a trip back to Aspen in the late 1880's Lottie met Judge Joshua Deane and the two were married. Unfortunately, their son died at the age of 38 in a mining accident, and their daughter in-law and grandson moved to Chicago. The Deane's grandson, Had Deane, however, continued to visit his grandparents during the summers. When Had grew up he moved back to Aspen with his wife Lou Deane and together they purchased and developed a ranch on Maroon Creek and called it the T-Lazy Seven Ranch, which is a western ranch guesthouse to this day. Lou Deane is featured in the book, "The Story of Aspen" by M.E. Hayes.

The Name of Cozy Point

According to the United States Geologic Survey 7.5' Quadrangle Map, the name Cozy Point refers to the top of the steep shale bluff just west of Hwy 82 on the Droste Property. But how did this shale bluff get its name? The answer is revealed by a quote from Ellamae Huffine Phillips in the book "Aspen The Quiet Years" (Daily and Guenin 1994, p. 387).

"A long time ago, down by Shale Bluffs, there used to be a tunnel. That was the railroad. The Midland was running and the Rio Grande was running, too. I have to tell you why they call it the Cozy Point. There was a tunnel along that shale. The boys would get their girlfriends and buggies - we didn't have anything but wagons. If you had a car, you were rich. So, they would get together and a bunch of them would go in that tunnel and smooch. They would drive their buggies in. That is how it got the name Cozy Point. Trains didn't run at night."

7.0 Management Recommendations

The following management recommendations are provided in order to aid in future planning by the City of Aspen and Pitkin County Open Space. All open space parcel management should be adaptive. Managers should make management decisions, implement these decisions, and then monitor the effects of the management actions and adjust them accordingly based on the monitoring results.

- 1) Limit new equestrian, hay fields and crop production facilities to the abandoned agricultural areas. These areas were historically farmed and ranched and contain little wildlife habitat value.
- 2) Consider restoring abandoned agricultural areas that are not used for equestrian or agricultural activities to sagebrush shrubland. Prior to restoration, research on the appropriate subspecies of sagebrush to use, planting and/or seeding method, etc. should be conducted. Such activities could provide a useful educational tool on native landscape restoration as well as enhance Brewer's sparrow habitat.
- 3) When designing new trails, reduce habitat fragmentation and adverse impacts to wildlife by using existing trails and/or ranch roads or by aligning the new trails along Hwy 82.
- 4) Do not allow mountain bikes on any trails if the trails are designed for equestrian use. If mountain biking is desired, then there will need to be specific days of the week when

either biking or equestrian riding are the only allowed activity. This is necessary so that there is little chance of conflict between the two user groups and makes for a safer, more pleasurable experience.

- 5) Prohibit dogs on any new equestrian trails and trails that do not connect with trails on other open space parcels that allow leashed dogs. Maintain compatibility with dog regulations on adjacent open space parcels.
- 6) Continue to allow leashed dogs on existing trails on the Aspen Mass parcel. The presence of dogs on trails may help to keep some wildlife from approaching Highway 82 and attempting at-grade crossings, putting themselves and motorists at risk.
- 7) Remove all fencing that is not absolutely necessary from all parcels. Fences can present serious problems for wildlife, and prior to construction of any new fence, one must consider whether the fence will separate wildlife from their accustomed water sources, food sources, fawning/calving grounds, migration routes, or security cover. If fencing is needed, then construct such fencing to be wildlife friendly and per CPW design standards. Also remove the old “sheep fence” along the Highway 82 ROW.
- 8) Continue to implement a comprehensive integrated weed management and monitoring plan for priority noxious weed species within the project area.
- 9) Maintain adequate vegetated buffers between intensive agricultural use and wetlands and streams. Buffer width should be determined based on the intensity of adjacent activity and potential for pollutants and sediment to migrate to wetlands and streams. Ideally, a 75 to 100 foot wide buffer from the edge of the stream is recommended along Brush Creek on the Cozy Point Ranch parcel.
- 10) Restore disturbed areas which lack adequate vegetative cover. Disturbed areas that should be prioritized include those areas adjacent to wetland and riparian habitats that may be a source of sediment or excess nutrients and disturbed areas containing dense stands of noxious weeds or noxious weed seed. More specifically, the manure storage area adjacent to Cougar Creek should be relocated or appropriate buffers should be constructed to capture and process nutrient laden runoff.
- 11) Restore and enhance wetland riparian habitats rated *Functional at Risk*. These areas include Brush Creek on the Cozy Point Ranch parcel and Cougar Creek to the north of Brush Creek. The restoration plan should be developed with input from a fluvial geomorphologist or hydrologist in order to determine the most effective methods of stabilizing these creeks.
- 12) Conduct a formal biological resource inventory on the CDOT Intercept Lot to aid in future planning. The study should include an assessment of current wildlife use, a wetland habitat assessment, and a description of existing vegetation, weeds, and soils.
- 13) Conduct fishery and macroinvertebrate sampling in Brush Creek within the project area. Fishery sampling in Brush Creek was conducted in 1993, but not within the project area (Bakich, 2011). Previous benthic macroinvertebrate sampling showed signs of an impaired water quality (Malone & Emerik, 2007). Together, these two components will provide managers with useful information on the health of Brush Creek and help to formulate future management actions.
- 14) Develop a robust public education plan. At a minimum, post signs in strategic locations that will inform the public about the rich historical, geological and ecological value of these parcels. At all trailheads, provide an informative kiosk that details the importance of these properties to wildlife and the social and economic values of preserving open space and wildlife habitat.
- 15) An underpass of sufficient size where Brush Creek passes under Brush Creek Road would allow for seasonal wildlife migration without the current threat of being hit while crossing Brush Creek Road at-grade. The underpass could be used to move both wildlife and

humans safely across Brush Creek Road. Additionally, Brush Creek would flow through the same structure, creating an enhanced movement corridor. The Colorado Department of Transportation has shown that a structure 12 feet in height by 24 feet in width does allow for wildlife movement while maintaining a feeling of 'openness'.

- 16) Conduct, in cooperation with the CPW, both mule deer and elk movement and habitat use studies to better define critical habitats and movement corridors within the Roaring Fork Valley and on the Cozy Point Ranch parcels. A study on elk movement and habitat use was conducted in 2004 (Green, 2004), but significant changes to a variety of habitat types have occurred since that time which may have changed use patterns. No such studies on mule deer movement and habitat use have occurred within the Roaring Fork Valley near the project area.

8.0 References

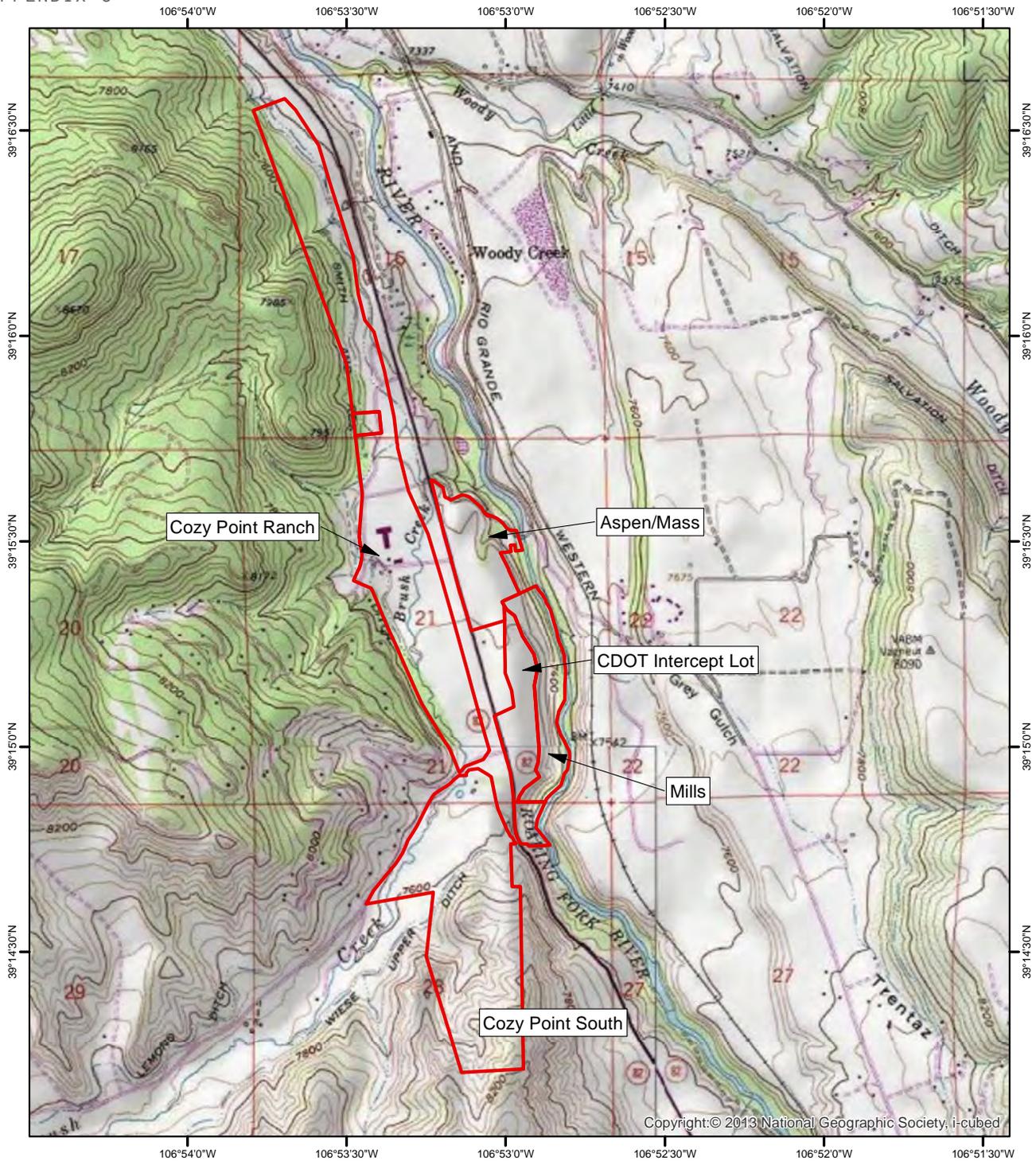
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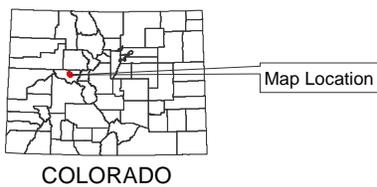
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APPENDIX C



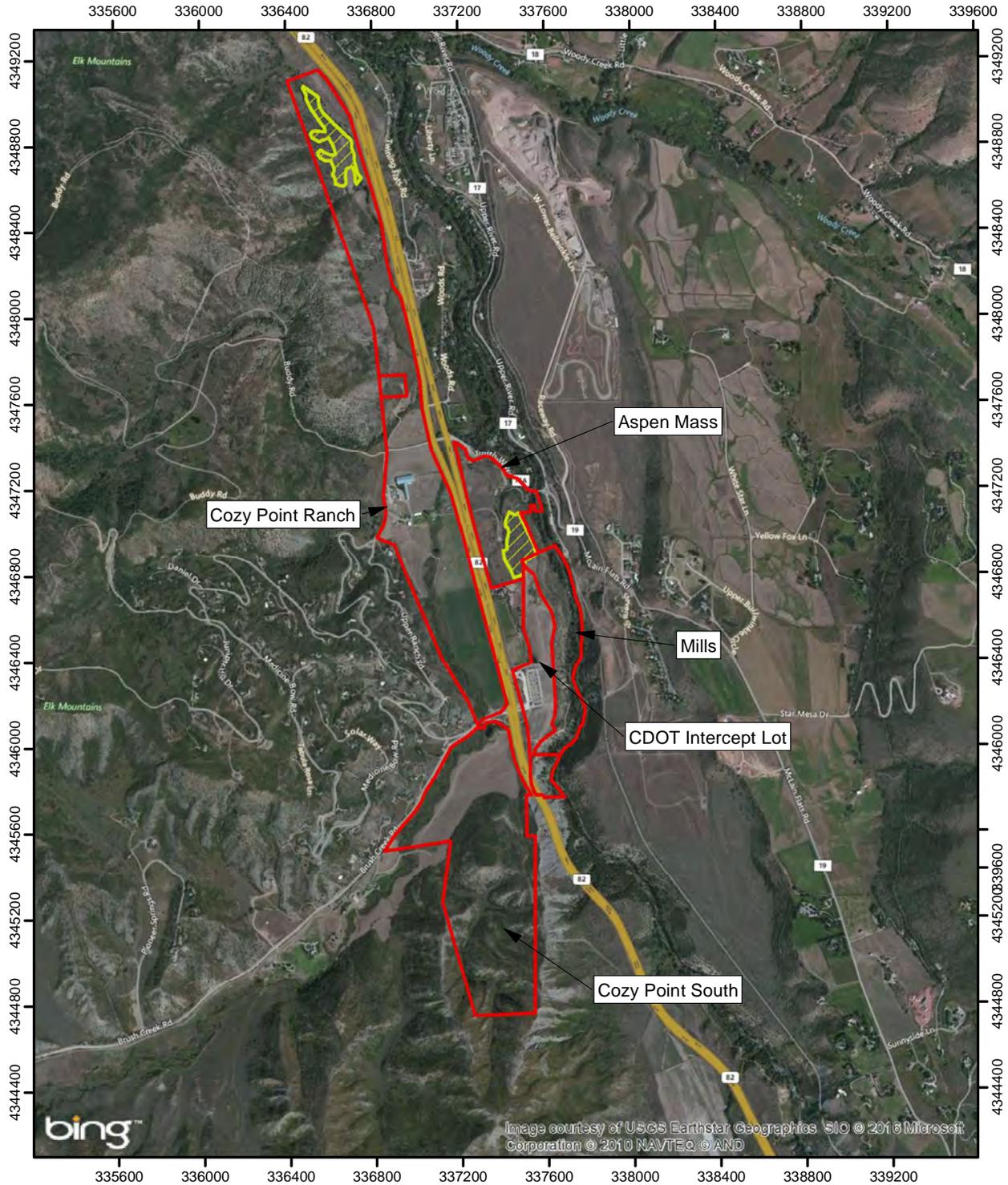
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Figure 1. Project Location Map
Cozy Point Ranch Open Space Parcels
Pitkin County, Colorado



Scale 1:30,000
1 inch = 2,500 feet

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Legend

- Parcel Boundaries
- Brewer's Sparrow Critical Habitat



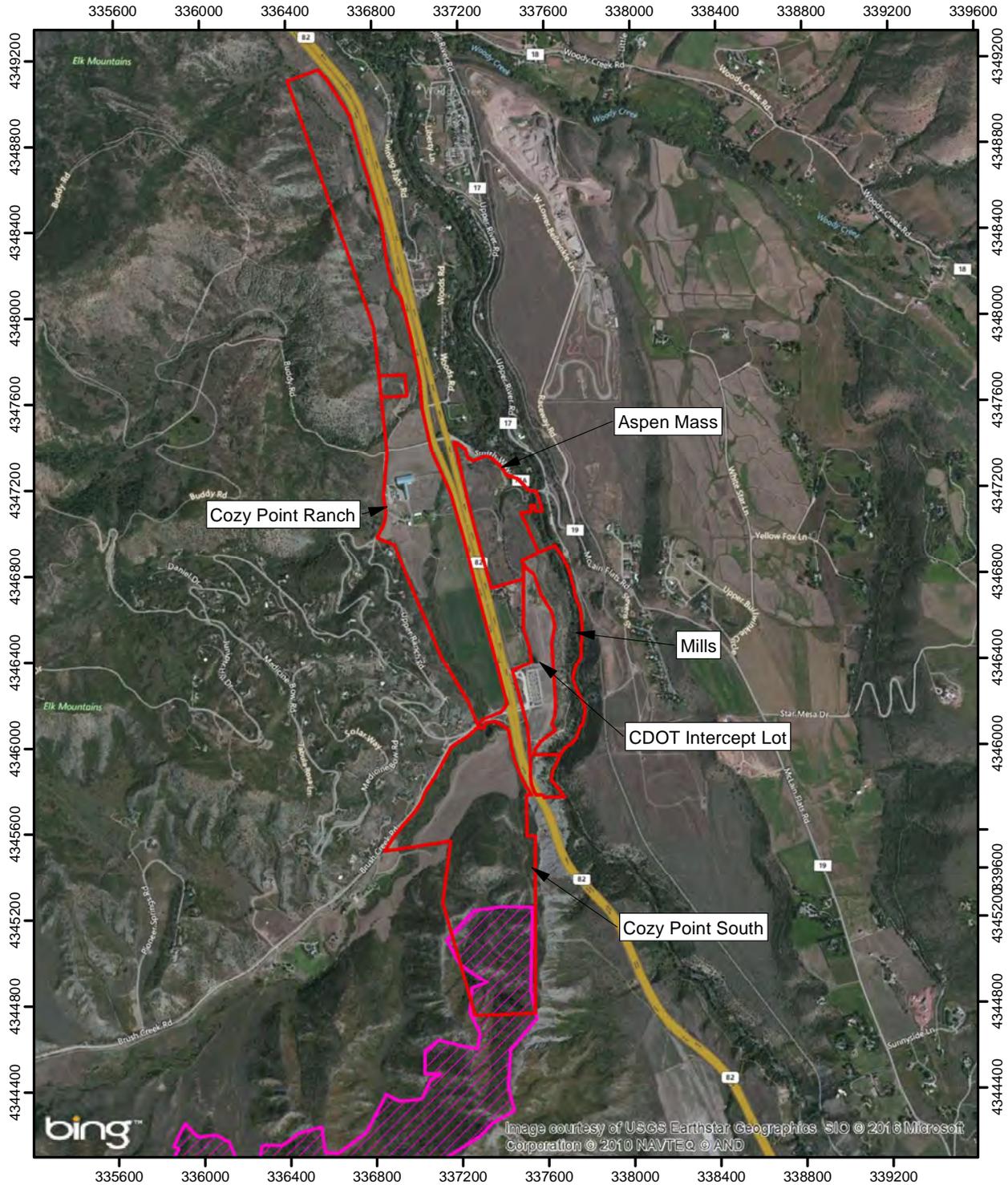
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 1 inch = 2,000 feet
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 Background: Bing Maps Aerial
 Grid: UTM NAD 83 Zone 13 North
 29

Figure 2. Brewer's Sparrow Habitat
 Cozy Point Ranch Open Space Parcels

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APPENDIX C



Legend

- Parcel Boundaries
- Virginia Warbler's Critical Habitat

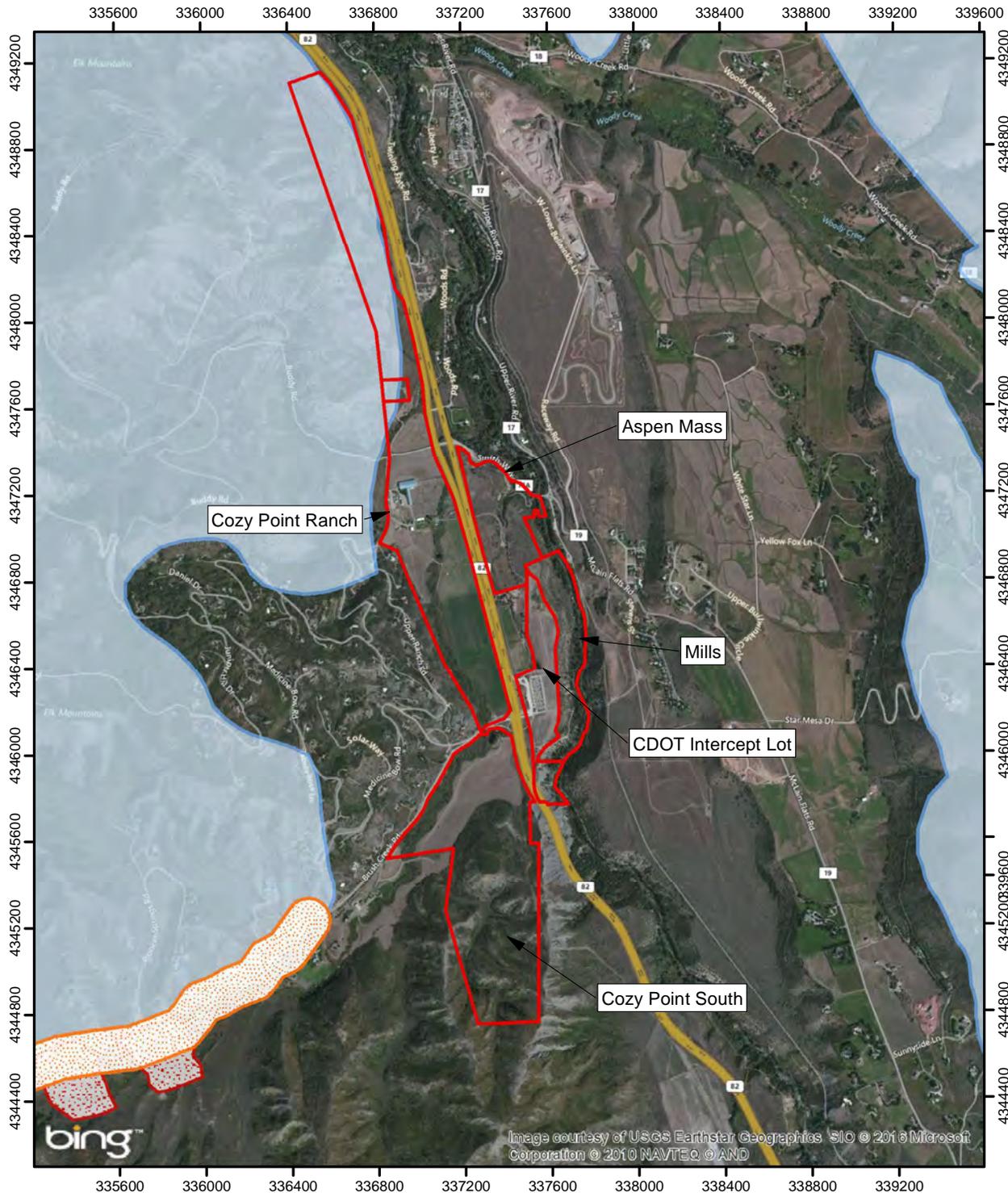


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 Background: Bing Maps Aerial
 Grid: UTM NAD 83 Zone 13 North
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Figure 3. Virginia Warbler Habitat
 Cozy Point Ranch Open Space Parcels

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Legend

- Parcel Boundaries
- Highway Crossing
- Migration Corridors
- Winter Range



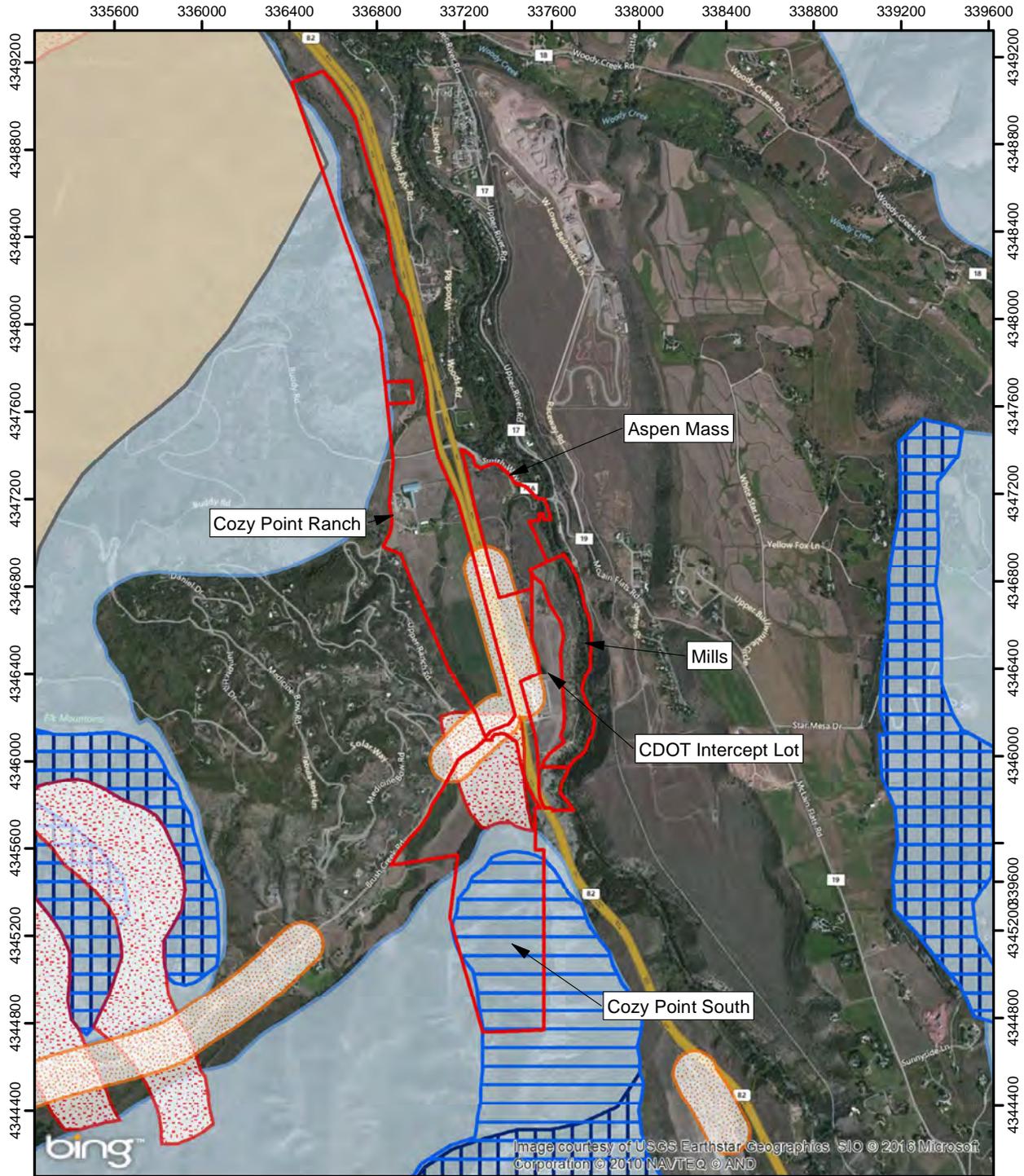
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*Figure 4. Mule Deer Habitat Types
 Cozy Point Ranch Open Space Parcels*

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APPENDIX C



- Legend**
- Parcel Boundaries
 - Highway Crossings
 - Resident Population Area
 - Migration Corridors
 - Severe Winter Range
 - Winter Concentration Area
 - Winter Range

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**Figure 5. Elk Habitat Types
Cozy Point Ranch Open Space Parcels**

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APPENDIX COZY POINT RANCH MANAGEMENT PLAN

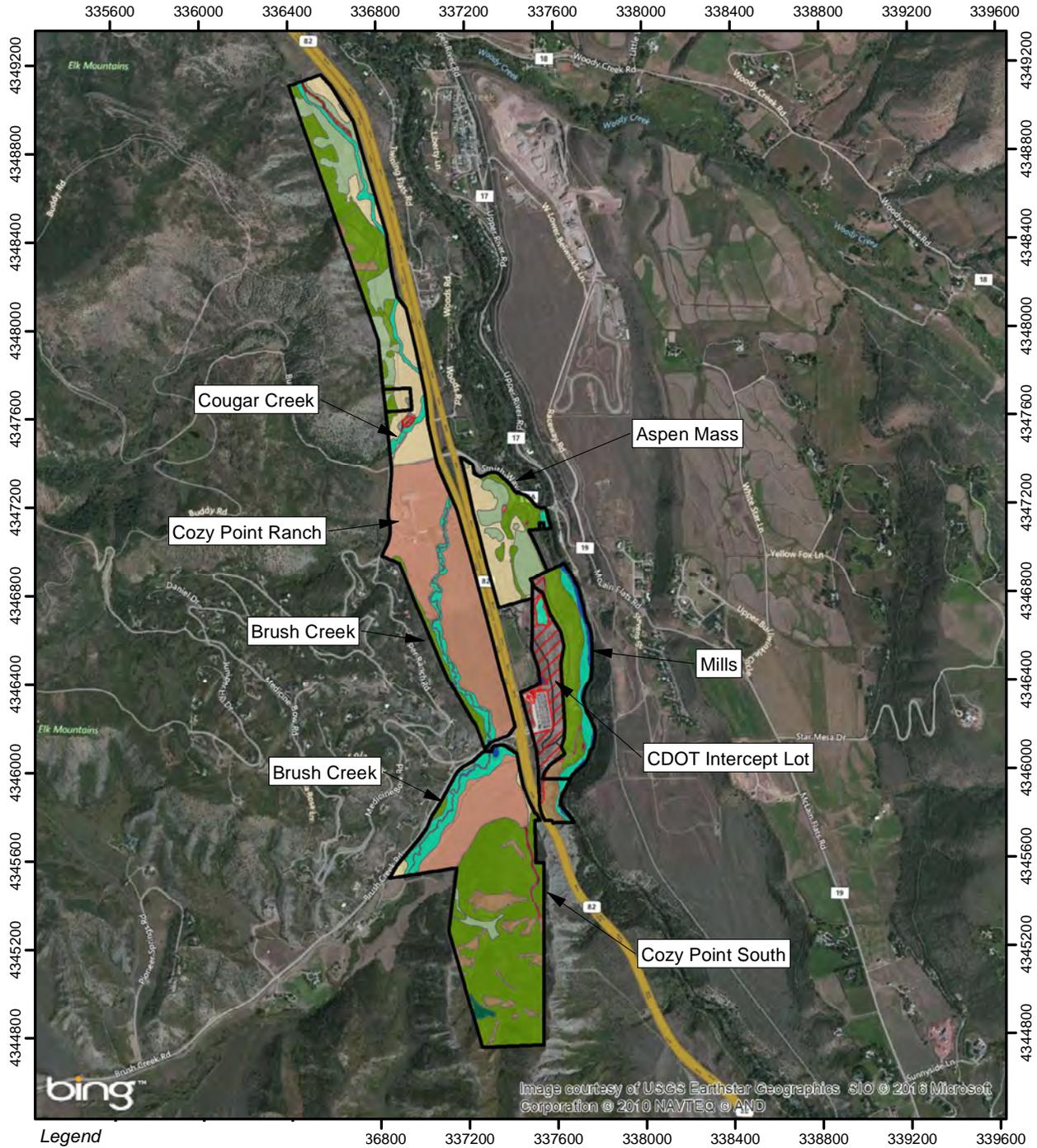
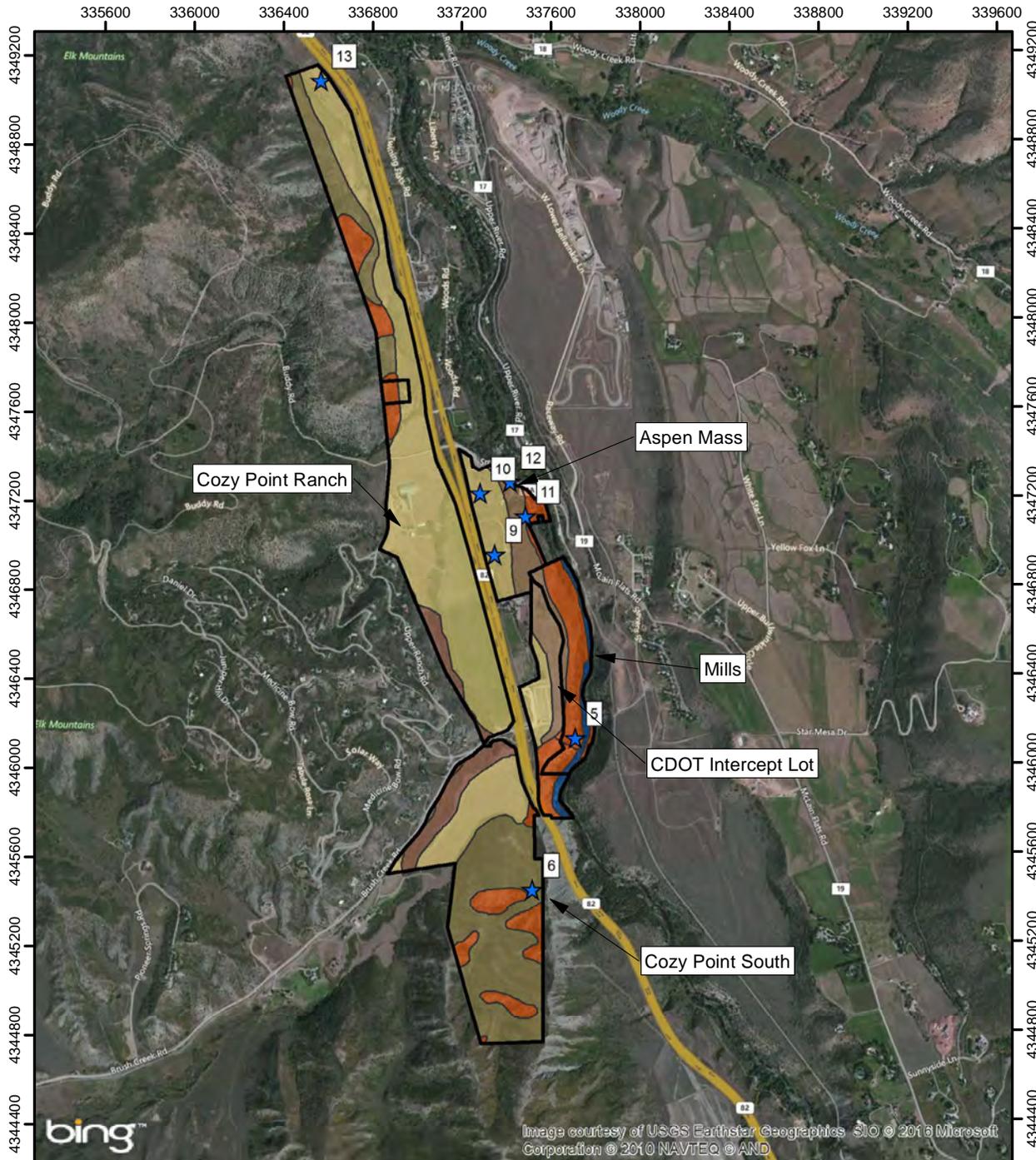


Figure 6. Vegetation Types
Cozy Point Ranch Open Space Parcels

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APPENDIX C



Legend

- Parcel Boundaries
- Soil Sample Locations
- Soil Type**
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- Fluvaquents, 42
- Kobar silty clay loam, 71
- T-C Rock outcrop, 104 & 105
- Uracca moist-Mergel, 108
- Water, 120

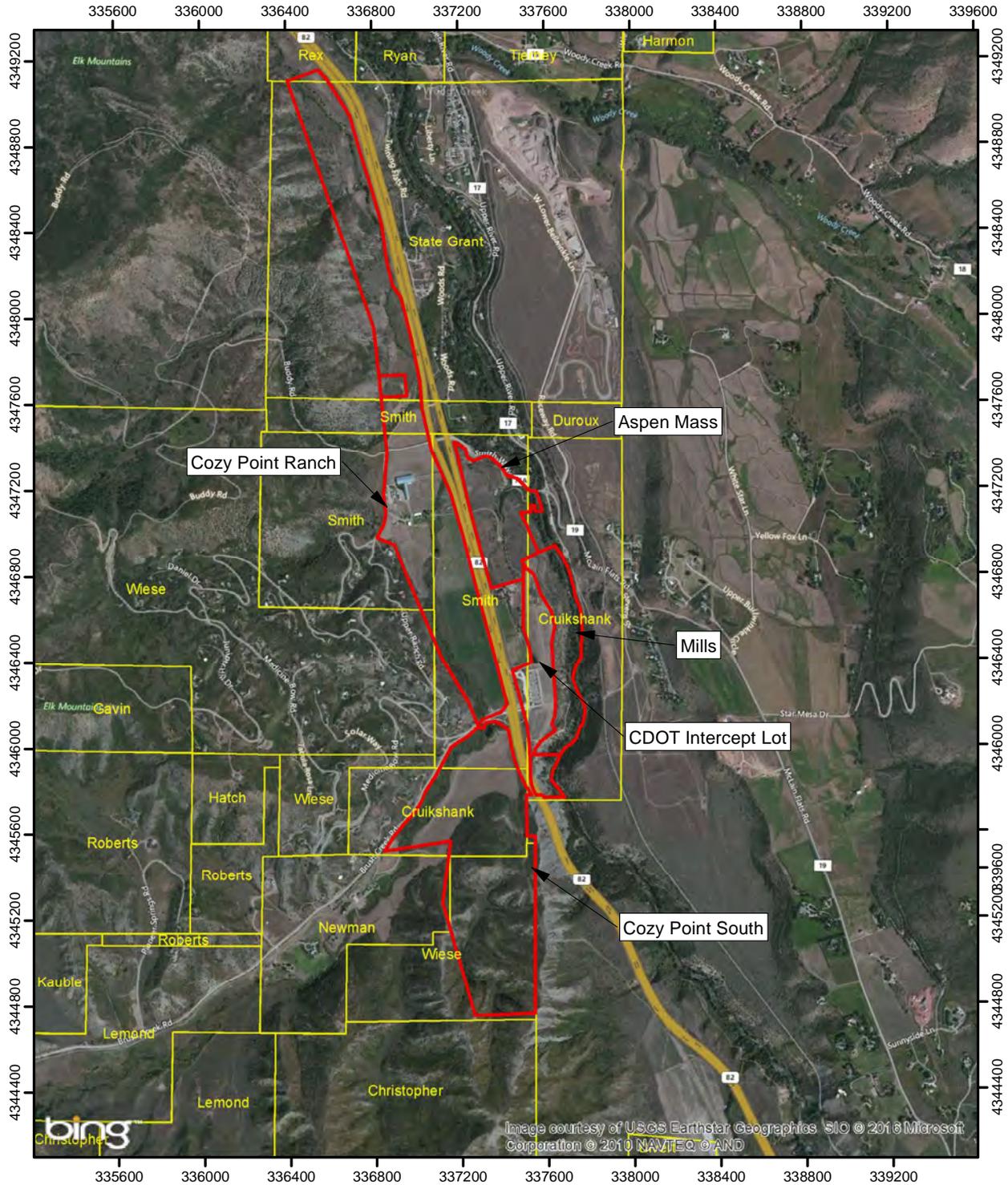
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Figure 7. Soil Associations and Soil Sampling Locations
Cozy Point Ranch Open Space Parcels

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APPENDIX COZY POINT RANCH MANAGEMENT PLAN



Legend

- Parcel Boundaries
- Land Patents



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Figure 8. Historical Land Patent Map
 Cozy Point Ranch Open Space Parcels

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Concept Stream Restoration Plan Cozy Point Ranch City of Aspen Open Space Pitkin County, Colorado

prepared for:

City of Aspen Parks and Open Space
530 E. Main St. Suite 300, Aspen, CO 81611

prepared by:

Western Ecological Resource, Inc.
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&

Black Creek Hydrology, LLC
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July 2016

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1.0 Introduction

The City of Aspen is currently developing a Master Plan for the Cozy Point Ranch Open Space, the gateway of the Aspen community. Brush Creek, which bisects this property, is an actively adjusting stream channel that includes sections of deeply incised stream bed and areas of severe bank erosion and an overly narrow riparian habitat. The stream system is presently influenced by beaver activity, encroachment by historic ranch activities, upstream watershed development, diversions, and natural geomorphic functions. Some of the impacts to the stream system by these influences are subtle, while others are quite dramatic.

A concept-level restoration plan for Brush Creek is presented in this report in order to facilitate discussion of the approach to restoring this stream channel and the important wetland and riparian habitats it supports. In addition, a brief concept level restoration plan for Cougar Creek, a small intermittent stream north of Brush Creek, is presented in Section 5.0.

2.0 Environmental Setting

Cozy Point Ranch is located at the intersection of U.S. Highway 82 and Brush Creek Road, approximately six miles north of the City of Aspen (Figure 1). The project area is bordered by Hwy 82 on the east, Cozy Point South and Sky Mountain Park Open Space to the south, and residential development on the high mountain slopes to the west. The elevations along Brush Creek range from a high of 7,560 feet on the south to a low of 7,490 feet where Brush Creek exits the parcel. Cozy Point Ranch currently supports a large equestrian boarding and training facility as well as an archery range and a greenhouse. Portions of the ranch are actively irrigated and hayed.

3.0 Methods

A preliminary geomorphic function assessment of the stream channel was performed during site visits on May 24 and July 1, 2016 by Mr. Steve Belz of Black Creek Hydrology, LLC. During those visits, the stream reach was walked and evaluated during high spring runoff flow conditions and later at lower, more typically summer flow. During the site visits the stream channel was examined for stability, function, geomorphic processes, and local impacts to the system. Measurements of channel profile, cross section, or substrate particle size were not made during the visits. Rea Orthner, a plant ecologist with Western Ecological Resource, Inc., also visited the site on May 24 in order to assess the functioning of the existing wetland and riparian vegetation and provide recommendations for specific vegetation improvement.

4.0 Brush Creek Concept Restoration Plan

4.1 Existing Condition

4.1.1 Geomorphology

The Brush Creek project reach through the Cozy Point Ranch parcel is approximately 5,000 feet in length and has a watershed of 15 square miles. Brush Creek drains Snowmass Village and much of the Snowmass Ski Area. These developments likely influence runoff timing and flow magnitude in Brush Creek due to impermeable roof tops and road surfaces, openings in the tree canopy, and increases in snow storage due to snow-making operations. Increases in the overall quantity of runoff and magnitude of flow events may affect the ability of the stream channel to mobilize and transport silt, sand and gravel sediments through the system. Such increases in stream flow can transport material in quantities greater than what historically occurred during the formation of the present channel. This increased mobilization and transport of bed materials can result in bed scour that leads to channel incisement and results in less connection between the active channel

and the floodplain and riparian corridor. Channel incisement in turn allows the erosive forces of high flows to undercut protective woody riparian species which promotes bank erosion and excessive lateral migration of the stream channel. Other current and historic impacts to Brush Creek include livestock grazing, roads, bridges, diversions, rock check dams, and beaver activity. Beaver can present a particular challenge in a wildland/urban interface since they are a normal part of natural stream systems but urban encroachment is generally not conducive to beaver operations.

Bankfull flow at the project site is estimated to be around 100 cfs and the USGS StreamStats stream flow model indicates a 100-year event peak flow rate of 350 cfs. Based on the USGS 7.5' topographic map, the channel slope is about 1%. However, a preliminary review of photographs and GoogleEarth images found that Brush Creek has plan form sinuosity greater than might be expected for a stream channel with a 1% slope. Causes of the high sinuosity could include redirection of flow by historic, failed beaver dams or historic agricultural activities. Many of the stream banks are unstable and appear to be experiencing significant to severe erosion that likely contributes to excessive lateral migration of the channel. Given the historic land use and upstream impacts to the watershed, these conditions are not unexpected because increases in flow in steep, high energy stream channels that pass through finer materials can cause stream banks on the meander bends to be easily eroded and allow for rapid lateral channel migration. Excessive channel bed scour leading to incisement can also occur when the stream flow regime is increased unless coarse bed materials are present to resist down-cutting, or natural or artificial grade control structures are present.

The upstream segment of Brush Creek on Cozy Point South Open Space and the downstream segment on Cozy Point Ranch show vastly different stream morphologies likely related to the presence of beaver and historic and current agricultural activities. The upstream segment shows a fairly wide riparian habitat of 200 to 300 feet, good floodplain connectivity and little bank erosion. Because the upstream segment on Cozy Point South appears to be in a fairly healthy and proper functioning condition, it could be considered as a reference against which downstream restoration success can be evaluated (Photo 1).

The downstream segment of Brush Creek on Brush Creek Ranch, on the other hand, has a much narrower wetland/riparian plant community, which either lacks the deep binding root masses of willows and other riparian shrubs, or supports riparian shrubs in a 100 foot wide corridor. In addition, the stream is experiencing excessive lateral stream channel migration, and contains substantial severe bank instability. Bank stability in this reach appears to be a function of the amount of woody riparian species and bank height. Willows and other woody shrubs appear to provide substantial bank protection where banks are not undercut. Locations with tall, unprotected banks provide little to no resistance to bank erosion since the eroding bank toes are below the rooting depth of the woody species. The project reach contains numerous examples of where erosion has gotten below the rooting depth of riparian species, undercut and collapsed the stream bank, and allowed the channel to migrate laterally unimpeded. Photos 2 through 13 depict numerous examples of bank instability found within Lower Brush Creek.

4.1.2 Beaver Activity

Both active and historic (breached) beaver dams were observed throughout the project reach (Photos 14 through 18). By constructing dams that impound water and retain sediment, beaver substantially alter the physical, chemical, and biological characteristics of the surrounding river ecosystem, providing benefits to plants, fish, and wildlife. Such benefits potentially include higher water tables, reconnected floodplains, an increase in wetland habitat, improved water quality, and increased habitat heterogeneity and complexity (Pollock et al., 2015). However, beaver also pose potential problems, such as clogging up culverts, creating areas of ponded water where it is not wanted, flooding adjacent infrastructure, and cutting down valuable landscape trees. Such conflicts generally arise from an overlap of preferred habitats by both humans and beavers, misunderstandings of how beavers modify their habitats, a lack of management of beaver

populations and predators, or a lack of planning or use of adaptive management on restoration projects.

Beaver populations often need to be managed in systems occupied by both humans and beaver. The historic removal and suppression of beaver was and is a common practice on ranches in order to manage agricultural operations. However, when beaver are removed and the dams are not actively maintained, they become breached, allowing streams to cut through accumulated sediments and become incised. The present high sinuosity and stream incision on Lower Brush Creek may be the result of ancient beaver dams that captured sediments, failed, and allowed the stream to cut around dams and then cut down through those captured sediments. These conditions are in strong contrast to the stable, ponded, well-vegetated and somewhat “swampy” conditions found on Upper Brush Creek where flow is relatively slow, spread out and stepped down through numerous beaver ponds.

On single thread stream systems where beaver dams back-up water, flow around the edges of the dams can be directed at and erode stream banks around the dam. In addition, the turbulent flow of water passing over a beaver dam on steep, single-thread channels can cause significant erosion of the stream banks below the dam, especially where the stream channels are located in fine grained substrates, are incised, and have high banks such as on Lower Brush Creek. Thus, if beaver are to be a component of the future restoration of Brush Creek, then a dedicated wide riparian corridor will be needed to allow stream corridor movement as a result of beaver dam activity (Photos 17 & 18).

4.1.3 Wetland and Riparian Habitat

Where present, the riparian habitat of Brush Creek consists of a scrub-shrub wetland/riparian habitat type that primarily consists of mountain willow (*Salix monticola*), Bebb willow (*Salix bebbiana*) and sandbar willow (*Salix exigua*), along with hawthorn (*Crataegus rivularis*; *C. erythropoda*), alder (*Alnus incana* ssp. *tenuifolia*) and river birch (*Betula fontinalis*). Whitestem gooseberry (*Ribes inerme*), bush honeysuckle (*Distegia involucrata*), Woods' rose (*Rosa woodsia*), and chokecherry (*Prunus virginiana* ssp. *melanocarpa*) are also frequently present. The creek banks are often dominated by the invasive reed canarygrass (*Phalaris arundinacea*), and scattered stands of beaked sedge (*Carex utriculata*), water sedge (*Carex aquatilis*) and swordleaf rush (*Juncus ensifolius*) occur in the annual floodplains. Common forbs include cow parsnip (*Heracleum sphondylium* ssp. *montanum*), largeleaf avens (*Geum macrophyllum*), Macoun's buttercup (*Ranunculus macounii*), chiming bells (*Mertensia ciliata*), monkshood (*Aconitum columbianum*), and starry false Solomon's seal (*Maianthemum stellatum*). Pasture grasses are also extremely common, including smooth brome (*Bromus inermis*), orchard grass (*Dactylis glomerata*), timothy (*Phleum pratense*), and Kentucky bluegrass (*Poa pratensis*). Portions of this willow riparian area are highly degraded by invasive plants and noxious weeds including reed canarygrass, ox-eye daisy (*Leucanthemum vulgare*), houndstongue (*Cynoglossum officinale*), Canada thistle (*Cirsium arvense*), and plumeless thistle (*Carduus nutans*). Many areas of the creek bank lack woody riparian vegetation as well.

The Brush Creek Riparian/Wetland is best described by the Mountain Willow/Mesic Forb Shrubland, which is common in the upper montane valleys of Colorado (NatureServe, 2011). In addition, there are scattered small individuals and stands of narrowleaf cottonwood (*Populus angustifolia*). One particularly large stand of cottonwoods occurs on Cozy Point South where the trees were originally planted along the driveway to the Feinsinger house before the house was moved up valley (Droste, 2011).

4.2 Desired Condition

The overall goal of the project is to stabilize the morphology of Lower Brush Creek to restore and maintain the resiliency and ecological integrity of the riparian and aquatic habitats of this area. Currently, Lower Brush Creek lacks lateral stability and floodplain connectivity. Severe bank erosion is occurring, and the riparian zone and vegetation are overly narrowed or completely

lacking in some sections. By stabilizing the stream channel with natural materials, elevating the stream bed in select locations, allowing a managed population of beaver as part of the overall management plan on portions of the stream system, and seeding and planting with native woody and herbaceous wetland/riparian plants, a diverse, native and healthy functioning ecosystem will be created. In addition, the newly created habitats will allow for natural connectivity between the stream and the floodplain, which will improve groundwater recharge, stream velocity reduction, erosion protection, and floodwater retention/peak flood reduction. In addition the water quality functions sediment removal and nutrient retention and removal will be improved, as will wildlife habitat functions.

4.3 Design Alternatives

Depending on the extent of stream channel degradation and instability, enhancement and bank stabilization options can range from relatively simple treatments of only the most severe problems to full stream channel restoration involving realignment and extensive manipulation of riparian vegetation. One of the challenges of working on small, highly sinuous stream channels is that, although the creek may be small, each meander bend has the potential to require treatment. This can lead to high design and construction costs relative to the size of the channel. However, “band-aid” treatments may not address the full scope of the problems and might require that additional treatment be performed in the future. Treatment materials often include natural large rock and/or large woody materials that can both be incorporated to create a natural, stable system and also provide excellent fishery habitat. Other treatments may include the use of cobble size materials for stream bed enhancement. Given the existing riparian conditions of Brush Creek, the use of large woody materials incorporated into the stream banks may be the preferred option. However, other treatment methods offer benefits as well.

Three alternative levels of stream restoration for Lower Brush Creek are presented here for consideration. A Level 1 restoration will include a “do-nothing” approach, and rely on the natural geomorphic and biologic processes, beaver activity and vegetation encroachment to heal the stream system over time. However, those processes are not controlled and can require many decades if not longer to become stabilized. Therefore, human intervention is often needed to speed up the stream processes and geomorphic evolution that naturally occur. A Level 2 approach would include addressing the most severely eroding stream banks with bioengineering techniques while also managing the existing beaver population. Finally, a Level 3 approach would be to remove beaver from the system or aggressively manage populations, and use bioengineering techniques and plantings to restore the entire stream corridor.

4.3.1 Level 1 - The “Do Nothing” Approach

The “Do Nothing” approach may be adequate for some shorter sections of the project reach, but there would likely be adverse implications if applied to the entire project reach. Under normal geomorphic processes including channel adjustment to impacts and catastrophic events, stream channels move around and movement can be excessive during the adjustment period. Human encroachment on a stream system often places limits on the amount of channel migration found to be acceptable. In addition, as noted above, beaver can and will modify systems in ways that redirect creeks and back up water to locations that are not acceptable for the intended land use. Another consideration is that beaver populations fluctuate based on predator populations and food supply, but their impacts to the landscape tend to be more permanent than their populations.

Additional considerations of the “Do Nothing” approach should include the existing bank erosion to the toe of the hill slope below the houses to the west of the channel. Geotechnical engineering should be consulted to evaluate the risk that this bank erosion may or may not present to those homes.

4.3.2 Level 2 - The Limited Approach

A limited approach to the restoration of Lower Brush Creek would include creating and protecting a wider riparian corridor, addressing only the most severely eroding banks with bioengineering, treating incised portions of the stream bed to provide resistance to bed scour, and actively managing beaver populations in order to allow active beaver dams where they can be sustained and provide benefits.

Protected Riparian Corridor. Protecting the 200 to 250 foot wide riparian corridor with fencing to exclude horse and cattle grazing on riparian vegetation would promote greater bank stability and the regeneration of the willows and other riparian species. Alterations to the agricultural hayfield and horse corrals will likely be necessary, and all fencing should be wildlife friendly.

Bio-Engineered Bank Treatments. Bank erosion causes land loss and increases the sediment load in the stream. Bank stabilization methods that use natural materials will address the severely eroding banks and prevent excessive lateral migration of the creek. Such locations include areas where the more severe and tall bank erosion problems exist, and where the creek is eroding the toe of the hill slope below existing homes. Bank stabilization could be accomplished by moving the channel up to 20 feet to make space for bio-engineered bank treatments that incorporate large and small woody materials (e.g. root wads with extended tree boles) and smaller quantities of rock materials. The type and amount of woody materials to use would be based on local availability. Figure 3 provides a typical plan and profile view of woody bank treatment. Live willow wattles or brush mattresses would also be used as part of the bank treatments in order to help promote revegetation of the willow shrub riparian plant community. Figure 4 illustrates the location of proposed high priority treatment areas on a map that would be implemented under this Level 2 approach

Stream Bed Treatments. Stream bed treatments will provide resistance to bed scour and channel incisement. Currently, the stream has an overall slope of around 1%. At this steep gradient, bankfull flow in Brush Creek can mobilize and transport 3-inch to 4-inch diameter cobble. Most gravel and cobble materials observed in Brush Creek are much smaller and, therefore, vulnerable to being moved out of the system. In order to stabilize the stream bed, a series of cobble riffles could be constructed. These would occur in locations to be determined based on a channel profile survey and possibly hydraulic modeling of bankfull discharge. In order to complete the streambed treatment, large cobble materials (3-inch to 12-inch diameter) would be imported and installed in locations to be determined. Photo 29 depicts a natural cobble riffle on Lower Brush Creek.

Other stream treatments could include the installation of boulder cross vane structures in order to promote deep pool fishery habitat or log structures (Photo 20). Large woody materials would be incorporated into the cross vane structures to provide fish cover and macroinvertebrate habitat. Log structures would require that logs be driven into the stream bed to secure them and then attach additional woody materials to the driven logs. When properly constructed, the rock structures tend to be more stable and secure than log structures, but log structures initially have a softer aesthetic appeal.

Riparian Plantings and Seeding. Riparian plantings and seeding would be limited in scope only to those bank treatments on the most severely eroding slopes. The following seeding and planting guidelines are recommended.

Seeding Guidelines. Following establishment of the final grade of the stream channel and its floodplain, the soil would be tilled and the native seed would be hand-broadcast and raked into the soil surface. Mycorrhizae should be applied along with the seed mix to aid in plant establishment. The project will likely require at least two different seed mixes for the different habitat types. After seeding, a hydromulch and tackifier would be applied to the seeded areas.

Examples of native wetland and upland riparian seed mixes are presented below in Tables 1 and 2.

Table 1. Native Wetland Riparian Seed Mix			
Scientific Name	Common Name	Wetland Status**	PLS lbs/acre Broadcast
Perennial Graminoids			
<i>Calamagrostis canadensis</i>	Bluejoint reedgrass	FACW	1
<i>Carex microptera</i>	Smallwing sedge	FAC	1
<i>Carex praegracilis</i>	Clustered field sedge	FACW	1
<i>Deschampsia caespitosa</i>	Tufted hairgrass	FACW	1/2
<i>Glyceria striata</i>	Fowl mannagrass		4
<i>Hordeum brachyantherum</i>	Meadow barley	FACW	8
<i>Juncus arcticus</i> ssp. <i>ater</i>	Baltic rush	FACW	1/8
<i>Juncus longistylis</i>	Long styled rush	FACW	1/16
<i>Poa palustris</i>	Fowl bluegrass	FAC	1/2
Perennial Graminoids Subtotal			16 3/16
Perennial Forbs			
<i>Geum macrophyllum</i>	Largeleaf avens	FAC	3
<i>Heracleum sphondylium</i> ssp. <i>montanum</i>	Cow parsnip	FAC	2
<i>Iris missouriensis</i>	Rocky Mountain iris	FACW	2
<i>Mimulus guttatus</i>	Monkey flower	OBL	1
Perennial Forbs Subtotal			8
TOTAL			24 3/16

Table 2. Native Upland Riparian Seed Mix		
Scientific Name	Common Name	PLS lbs/acre
Perennial Graminoids		
<i>Elymus elymoides</i>	Squirreltail	1
<i>Elymus glaucus</i>	Blue wildrye	1
<i>Elymus trachycaulus</i>	Slender wheatgrass	4
<i>Festuca idahoensis</i>	Idaho fescue	1
<i>Koeleria macrantha</i>	Junegrass	¼
<i>Oryzopsis hymenoides</i>	Indian ricegrass	1
<i>Pascopyrum smithii</i>	Western wheatgrass	4
<i>Poa fendleriana</i>	Muttongrass	¼
<i>Poa secunda</i>	Sandberg bluegrass	½
<i>Stipa viridula</i>	Green needlegrass	3
Perennial Graminoids Subtotal		15 3/4
Perennial Forbs		
<i>Achillea lanulosa</i>	Yarrow	1/8
<i>Penstemon strictus</i>	Rocky Mountain penstemon	1/8
<i>Rudbeckia ampla</i>	Goldenglow	1/8
Perennial Forbs Subtotal		3/8
TOTAL		161/8
Based on 80 pure live seeds (PLS) per square foot, drill seeded. Double this rate if broadcast. Cost is approximately \$100/acre.		

Planting Guidelines. The planting plan will identify the species to be planted; the number to plant; planting locations, times and methods; and discuss the need for any supplemental watering. We highly recommend the use of native willow (*Salix* spp.) cuttings salvaged from nearby populations and planted along the banks of the stream and in appropriate habitats on the floodplain. In addition, large pole plantings of native narrowleaf cottonwood could be used. Finally, planting nursery grown native cottonwood trees would also provide important benefits; however, any nursery grown stock will have to be effectively wrapped with wire up to 4 feet high to prevent being cut by beaver. Table 3 lists native trees and shrubs recommended for planting.

Table 3. Recommended Native Riparian Tree & Shrub Plantings		
Scientific Name	Common Name	Family
Trees		
<i>Populus angustifolia</i>	Narrowleaf cottonwood	Salicaceae
Shrubs		
<i>Alnus incana ssp. tenuifolia</i>	Thinleaf alder	Betulaceae
<i>Amelanchier alnifolia</i>	Serviceberry	Rosaceae
<i>Betula fontinalis</i>	River birch	Rosaceae
<i>Cornus sericea (C. stolonifera)</i>	Redosier dogwood	Cornaceae
<i>Crataegus rivularis</i>	River hawthorn	Rosaceae
<i>Pentaphylloides floribunda</i>	Shrubby cinquefoil	Rosaceae
<i>Prunus virginiana var. melanocarpa</i>	Native chokecherry	Rosaceae
<i>Ribes aureum</i>	Yellow currant	Grossulariaceae
<i>Ribes cereum</i>	Wax currant	Grossulariaceae
<i>Rosa woodsii</i>	Wood rose	Rosaceae
<i>Salix bebbiana</i>	Bebb willow	Salicaceae
<i>Salix eriocephala var. ligulifolia</i>	Strapleaf willow	Salicaceae
<i>Salix exigua</i>	Sandbar willow	Salicaceae
<i>Salix monticola</i>	Mountain willow	Salicaceae
<i>Symphoricarpos rotundifolius</i>	Snowberry	Caprifoliaceae

Because beaver occur in the project area, all nursery grown riparian plants or plantings of larger diameter tree poles should be effectively fenced off to avoid the damaging effects of beaver. Wire mesh cages have been shown to be the most effective method of protecting woody riparian vegetation. The following guidelines are per Pollock et al. 2015:

- Wire mesh gauge should be reasonably heavy (e.g., 6 gauge) to prevent beaver from chewing through it. Chicken wire is not recommended.
- Mesh size should be 6 x 6 inches or smaller.
- The cage should be 1 to 2 feet in diameter larger than the tree trunk.
- The cage should extend 3 to 4 feet above the ground or, in colder climates, above the anticipated snow line.
- Wire fencing can be used to encircle multiple trees.

Beaver Management. The use of beaver in restoring stream channels is an emerging science. The *Beaver Restoration Guidebook: Working with Beaver to Restore Streams, Wetlands, and Floodplains* (Pollock et al. 2015) provides a practical synthesis of the best available science for using beaver to improve ecosystem functions. As evidenced by Upper Brush Creek, beaver are successful in creating a resilient and healthy wetland and riparian ecosystem. However, it may be difficult to establish beaver in those portions of Brush Creek that have a long history of human influence, and particularly in areas which lack woody riparian vegetation.

One possible solution would be to create Beaver Dam Analogues (BDA) which are based on human-created beaver dams, as detailed in the Beaver Restoration Guidebook. However, BDAs should be used with extreme caution unless an adaptive management approach can be implemented that allows for a longer time frame for restoration and the possibility of failure. Appendix A contains excerpts on BDAs from the Guidebook; please refer to the Guidebook for further information.

One advantage of using BDAs, and thus enticing beaver to restore portions of Brush Creek, could be that this method may be a more affordable, yet also effective restoration technique. However, a short coming and perhaps consequence of relying on beaver activity for channel restoration is their lack of predictability. Beaver are mobile and may move into areas where they are not desired. Efforts are already required on Upper Brush Creek to prevent them from plugging a diversion. The inclusion of beaver into a management plan would be best viewed as them being a closely managed component of that plan but not necessarily a player to be counted on. In addition, restoration projects involving beaver are typically completed on longer timeframes than “traditional” restoration techniques. If beaver are to be seriously considered as part of the restoration plan, then a detailed beaver habitat assessment should be performed by a qualified individual and additional data should be collected to identify the specific areas where beaver dams would be beneficial for the stream corridor.

4.3.3 Level 3 – The “Do Everything” Approach

A Level 3 approach would essentially incorporate the stream restorations of Level 2, and apply them to the entire $\pm 5,000$ foot project reach. In addition to those high priority areas identified on Figure 4, other areas of the bank would also be stabilized. No BDAs would be created and beaver would be highly managed and very limited in number to increase the success of woody riparian plantings. Level 3 actions would include significant bank and bed stabilization and provide greater assurance of preventing the creek from turning existing low/moderate severity erosion problems into moderate/high severity erosion problems, and well as decreasing the risk of new erosional problems from developing. See Figure 4 for the locations of all proposed bank treatment areas. In addition, the Level 3 approach would include a higher number of riparian habitat plantings and seedings corresponding to the larger number of bank stabilization treatments.

4.4 Costs

Costs to perform enhancements on streams similar in size to Brush Creek can range from as little as \$20 per linear foot to well over \$100 per linear foot. Lower cost options typically include only the installation of occasional bank and bed treatments at specific locations to address specific problems. Higher cost options address more systemic issues and often include at least some channel realignment to create a more naturally functioning and stable stream system. Variables that influence construction costs include the degree to which the existing channel is eroding and out of equilibrium, the planned use of the stream, the type of materials used in treatments, and the distance to haul treatment materials to the project site. Overall, there are approximately 1,000 linear feet of bank treatments in the “High Priority” category which would cost between \$20,000 and \$100,000 to install. If all bank treatments are to occur, then the total bank treatment length would be approximately 1,500 feet and the total costs for stabilization could run in the range of \$30,000 to \$150,000. Additional costs would include any state, county or federal permits, baseline surveying, and preparation of a construction grading plan.

Likewise, planting and seeding costs will vary depending on the acreage to treat. Typically, seedbed preparation, seeding with native seed, and mulching can cost \$2,000 per acre. The installation of large nursery grown cottonwoods is often \$300-\$500 dollars per tree installed, depending on size, while smaller 5 gallon nursery stock shrubs are on the order of \$40-\$50 per shrub installed. Lower cost options include using native willow stock to “sprig” areas, which reduces both labor and material costs and is strongly encouraged. Other costs may include the

installation of temporary irrigation systems for any nursery planted trees and shrubs, and the installation of wire mesh cages to protect plantings from beaver. Overall, the total cost of seeding and planting will depend on the acreage to seed and the number and density of live plants to install.

5.0 Cougar Creek Concept Restoration Plan

5.1 Existing Condition

Cougar Creek is a small intermittent stream north of Brush Creek on the Cozy Point Ranch Open Space parcel (Figure 5). The majority of the riparian habitat consists of river hawthorn and strapleaf willow (*Salix eriocephala* var. *ligulifolia*) with minor amounts of chokecherry, serviceberry (*Amelanchier alnifolia*), whitestem gooseberry, and Woods' rose. Upstream of the access road, the riparian habitat has a fairly wide floodplain with good channel geomorphology and floodplain connectivity. There is a stand of mature cottonwoods along the western property boundary as well (Photos 21 and 22). Downstream of the road, however, the channel is much more incised, and adjacent to Hwy 82 the stream channel lacks well developed riparian shrubs, and is instead lined with large cobbles and boulders and has two small concrete weirs (Photos 23 and 24). In addition, the manure compost pile lies adjacent to Cougar Creek and it is possible that during heavy precipitation events, nutrient laden water may enter the stream system (Photo 25). Finally, the culvert under the existing access road appears to be very old and should be replaced (Photo 26).

5.2 Desired Condition

The overall goal of the Cougar Creek restoration is to enhance and restore the limited function of the northern reach of this stream. The narrow incised stream channel provides very limited floodwater retention/peak flood reduction and sediment removal and nutrient retention removal functions. In addition, the wildlife habitat function is low as there is a lack of structural diversity in the vegetation. Because this stream is a direct tributary to the Roaring Fork River, it is recommended that the stream and its adjacent wetland and riparian habitat be enhanced to improve water quality functions.

5.3 Design Alternatives

Two concept design Alternatives for Cougar Creek are presented here. A Level 1 Alternative would include planting additional native trees and shrubs along the steep bank of the northern reach of Cougar Creek in order to create additional woody riparian habitat that would be beneficial to wildlife. However, this alternative would not enhance water quality or floodwater retention/peak flood reduction functions as the channel would remain narrow and incised.

A Level 2 Alternative would involve excavating the high left bank of Cougar Creek in the area identified in Figure 5. The side slopes should be reshaped to a more gentle slope of 3:1 or 4:1 and the cobble and boulders should be either buried or removed. Next, high quality topsoil or soil amendments should be added and the site would be seeded and planted with native wetland and riparian plant species. The channel of Cougar Creek could be reshaped to a more sinuous geometry, or several small pools with rock drop structures could be created in order to better control the intermittent and ephemeral flows of this stream. By restoring the landform of this small "flashy" creek, not only will the ecological health of this stream system be restored, but it will also contribute to maintaining the high water quality of the Roaring Fork River just downstream.

6.0 Future Tasks

6.1 Grading Plan

The development of a grading plan for design and permitting will require a detailed survey of the channel and adjacent floodplain in order to topographically map the plan, profile and cross section of the channel. This will be a difficult task given the dense vegetation along much of the creek and would be performed during the fall after leaves have dropped and when the stream flow is low. The survey will provide information on the channel gradient, profile inflection points and channel dimension which will be needed for project design as well as flow modeling, if required.

6.2 Permits & Clearances

Several county and federal permits would be required in order to complete the project.

6.2.1 U.S. Army Corps of Engineers Wetland Permit

The U.S. Army Corps of Engineers (USACE) Section 404 Clean Water Act permit is required for dredging or placing fill in waters of the United States, including rivers, lakes, streams, creeks, and wetlands. Therefore, prior to construction, the wetland boundary must be delineated and flagged according to procedures outlined in the USACE 1987 Manual and 2010 Mountain West Regional Supplement. Then, a wetland permit application will be prepared and sent to the USACE. This project will likely fall under Regional General Permit 12, for Aquatic Habitat Improvements for Stream Channels in Colorado. This permit requires coordination with Colorado Parks and Wildlife (CPW), including a pre-application consultation preferably on-site.

6.2.2 Pitkin County Permits

Ordinarily, Pitkin County requires a Floodplain Development Permit for any work within the designated 100-year floodplain, including bank stabilization, bridges, dredging, installation of irrigation equipment, and revegetation. The permit requirements include maps, an elevation certificate, a revegetation plan, documentation of water rights (if applicable), a site plan showing all existing and proposed contours, a construction management plan, and a USACE permit. In addition, a public hearing would be necessary. However, because the property is owned by the City of Aspen, only a Location and Extent Review would likely be required. This review would include a public hearing to ensure that the proposed plan is consistent with the applicable Pitkin County Master Plan.

6.2.3 FEMA Permits

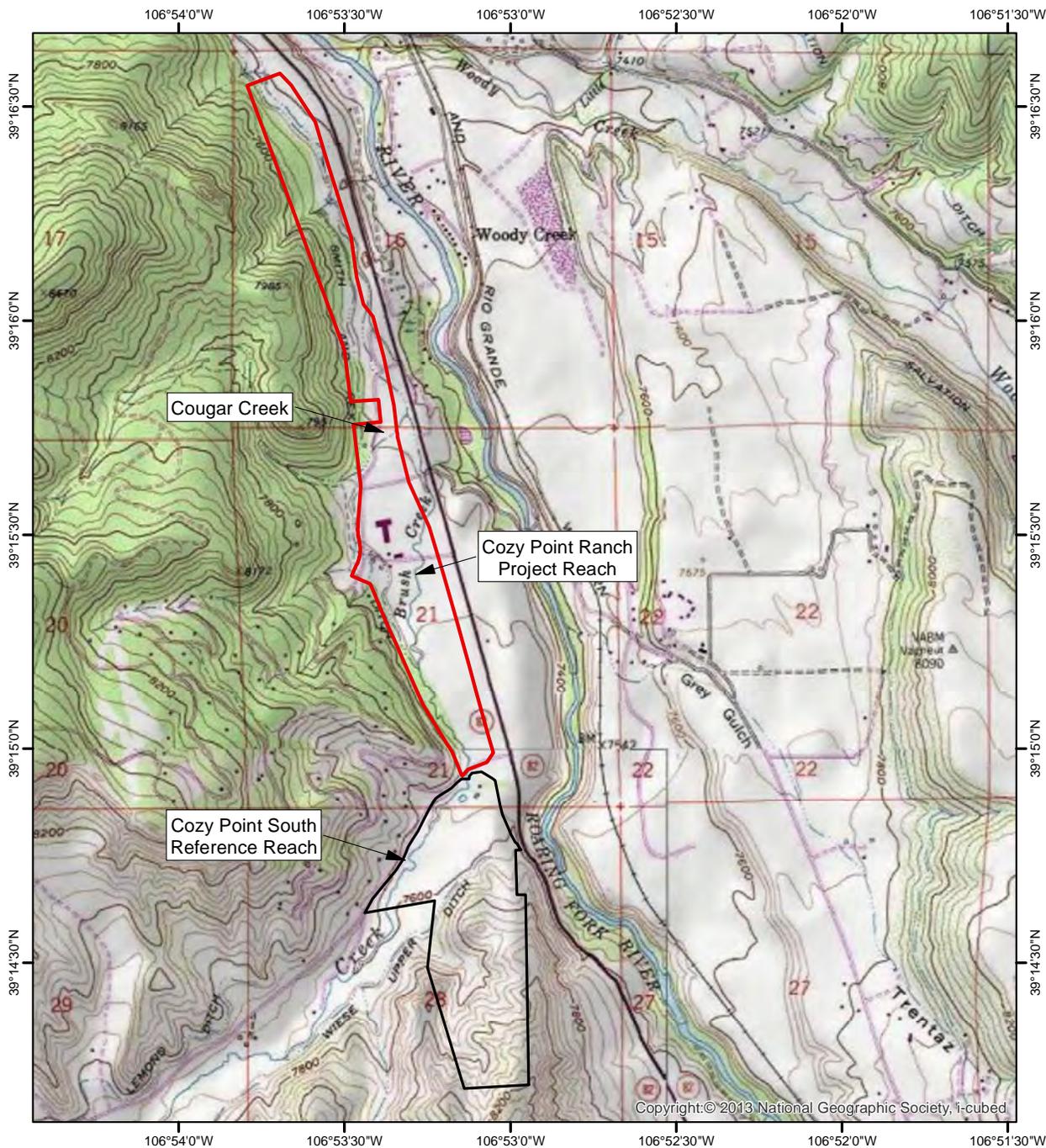
Brush Creek has a mapped 100-year floodplain (FEMA Map #08097C0203C). If the proposed project would impact the floodplain so that the floodplain elevation is raised, then a Conditional Letter of Map Revision (CLOMR) would be required by FEMA. This typically involves HECRAS modeling, which measures the hydrologic or hydraulic characteristics of a flooding source. This information would be provided to FEMA and result in the modification of the existing regulatory floodway, the effective Base Flood Elevations, or the Special Flood Hazard Areas. Once the project is completed, a request must be made to revise the Flood Insurance Rate Map (FIRM) to reflect the project. As-built survey data will be needed to support the revision request. FEMA then revises the FIRM and Flood Insurance Study report, if appropriate, by issuing a Letter or Map Revision (LOMR).

Early coordination with the Pitkin County Floodplain Development Coordinator is recommended in order to determine if the selected alternative would require a FEMA permit.

7.0 References

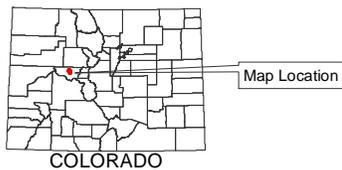
Nature Serve. 2011. Nature Serve Explorer. <http://www.Natureserve.org>. Accessed July 6, 2011.

Pollock, M.M., G. Lewallen, K. Woodruff, C.E. Jordan and J.M. Castro (Editors). 2015. The Beaver Restoration Guidebook: Working with Beaver to Restore Streams, Wetlands, and Floodplains. Version 1.02. United States Fish and Wildlife Service, Portland, Oregon. 189 pp. Online at: <http://www.fws.gov/oregonfwo/ToolsForLandowners/RiverScience/Beaver.asp>



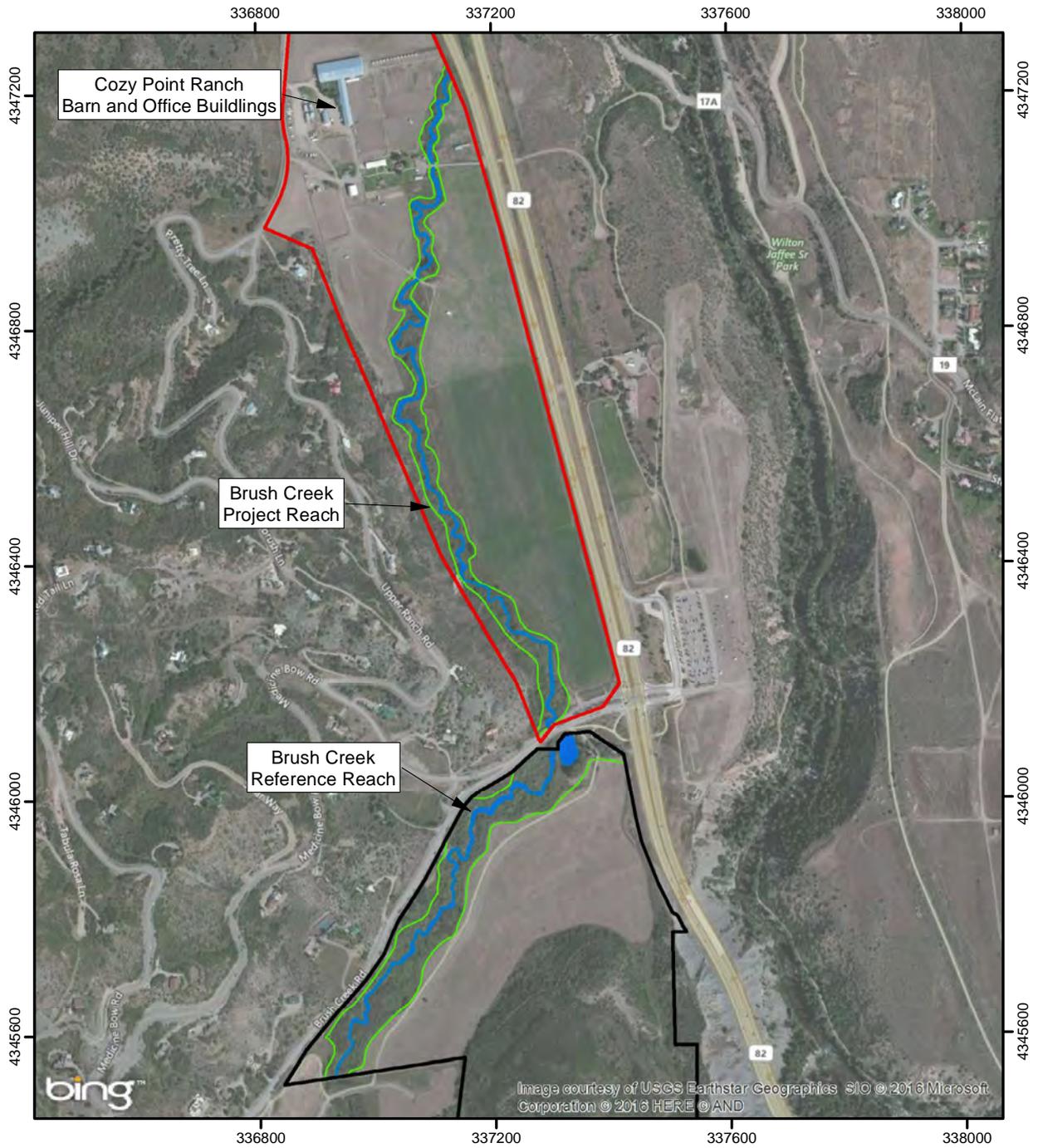
BASE: USGS 7.5' Highland Peak & Woody Creek, Colorado Quadrangles Grid Lat/Long WGS 1984

Figure 1. Project Location Map
Brush Creek Concept Restoration Plan
Cozy Point Ranch
Pitkin County, Colorado



N
Scale 1:30,000
1 inch = 2,500 feet

prepared by:
Western Ecological Resource, Inc.
711 Walnut Street
Boulder, CO 80302
(303) 449-9009 FAX (303) 449-9038



Legend

- Riparian - Wetland Habitat
- Aquatic Habitat
- Open Space Parcel**
- Cozy Point Ranch
- Cozy Point South



1:9,000
1 inch = 750 feet
Date: July, 2016

Background: Bing Maps Aerial
Grid: UTM NAD 83 Zone 13 North

*Figure 2. Riparian Habitat Map - Aerial View
Brush Creek Concept Restoration Plan
Cozy Point Ranch
Pitkin County, Colorado*

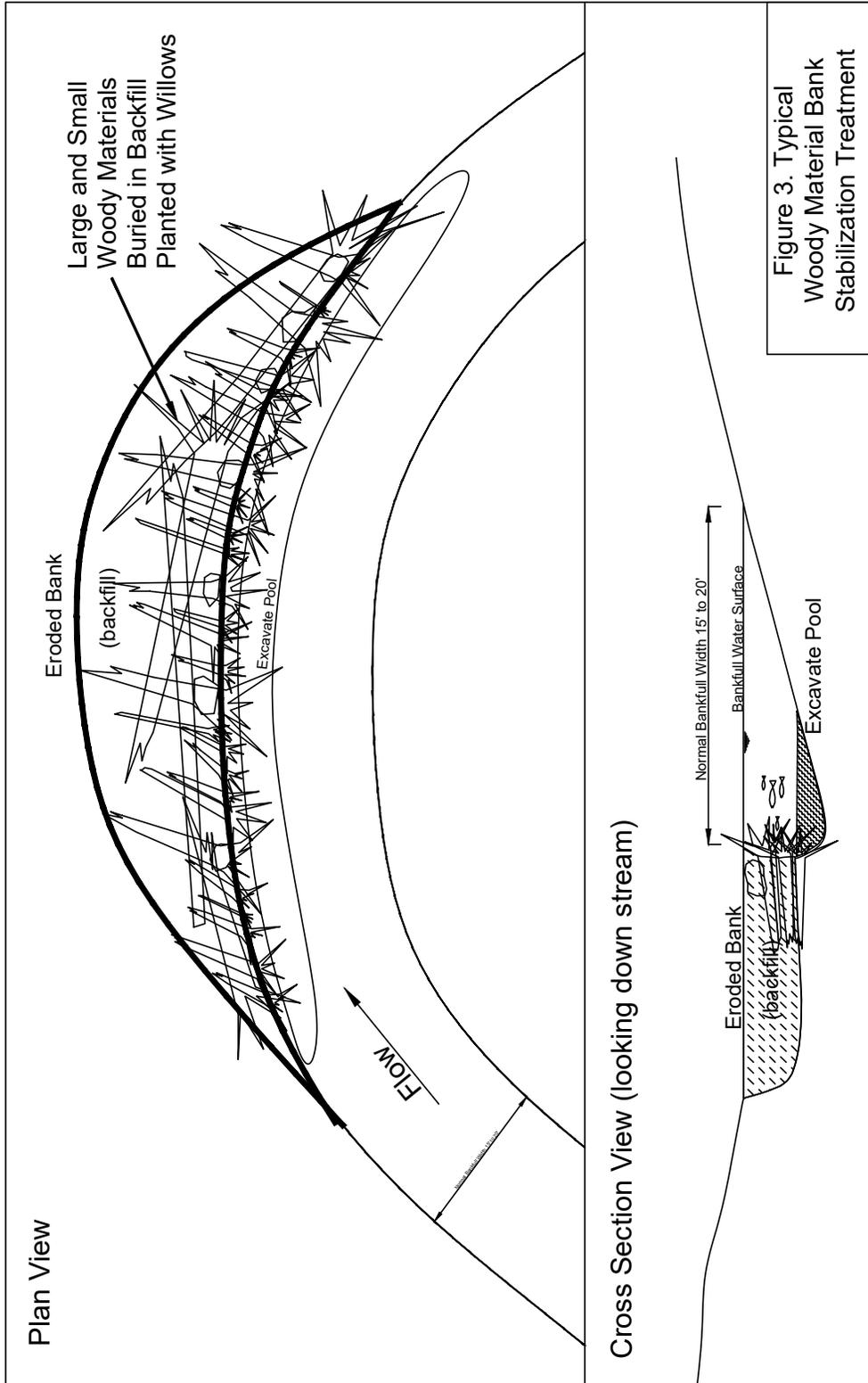
prepared by:

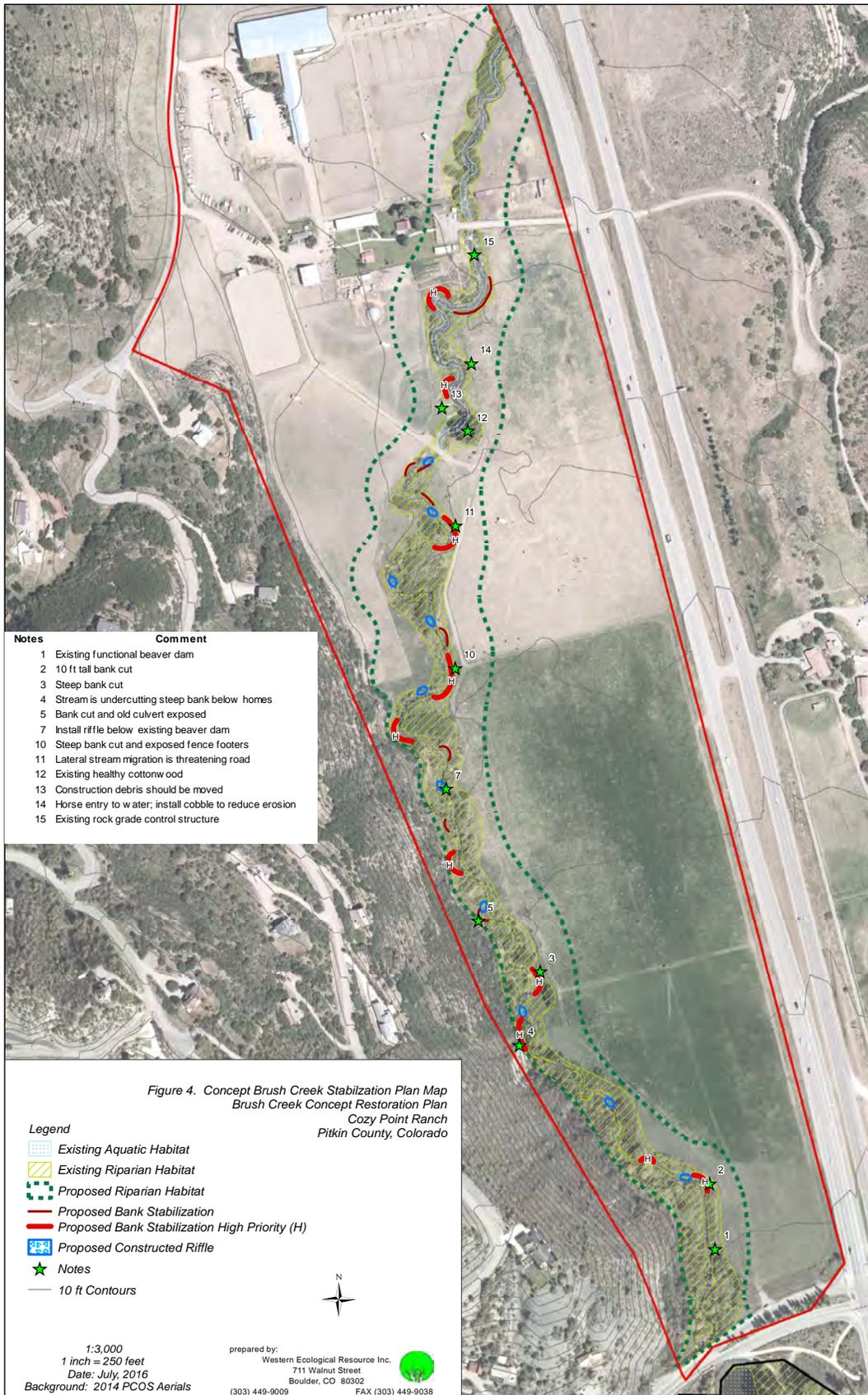
Western Ecological Resource Inc.
711 Walnut Street
Boulder, CO 80302

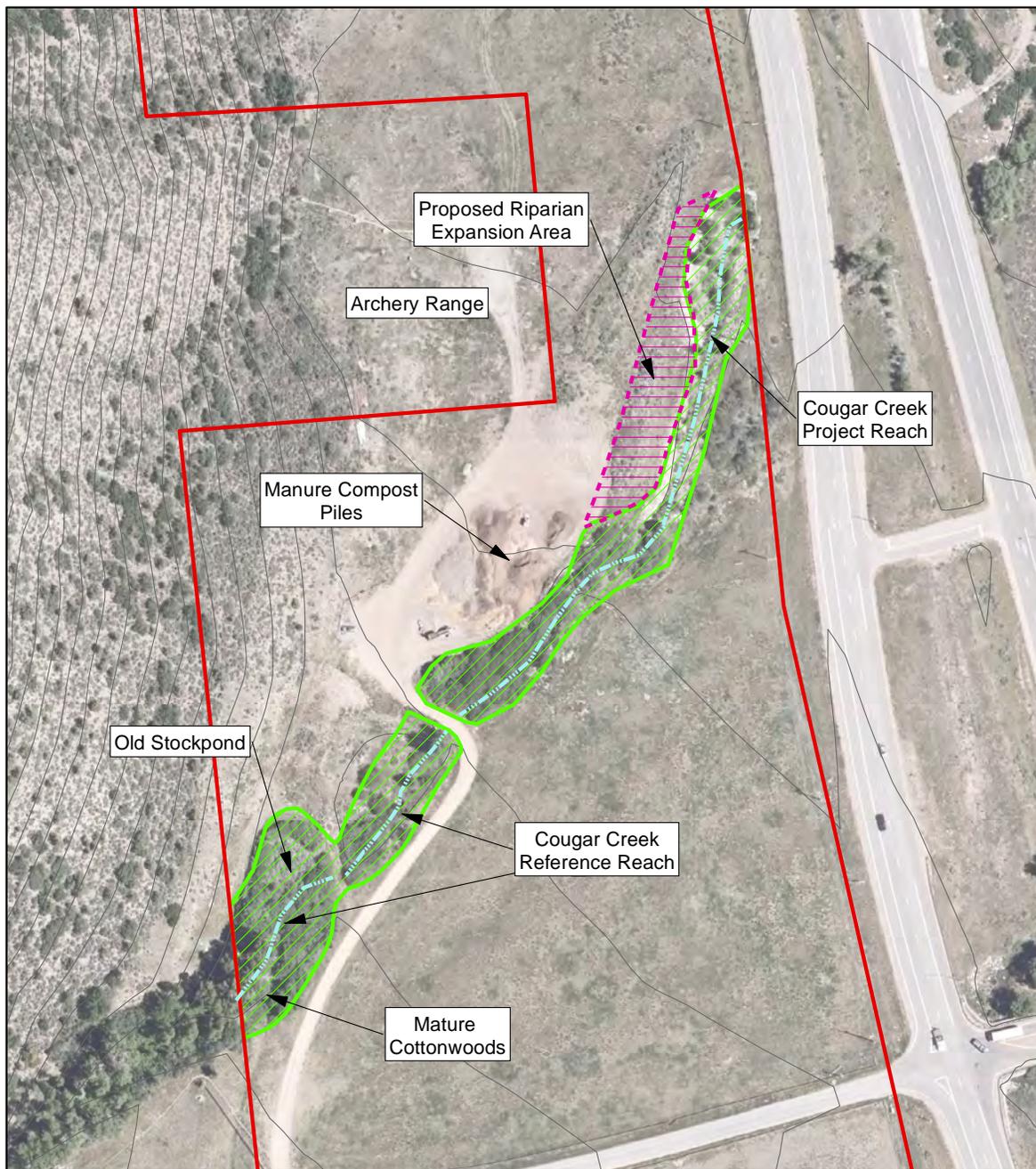
(303) 449-9009

FAX (303) 449-9038









Legend

- 10 ft Contour
- - - - Cougar Creek (Intermittent)
- Existing Riparian - Wetland Habitat
- Proposed Riparian Expansion Area


 1:1,800
 1 inch = 150 feet
 Date: July, 2016
 Background: 2014 PCOS Aerials

**Figure 5. Riparian Habitat Restoration Map
 Cougar Creek Concept Plan
 Cozy Point Ranch
 Pitkin County, Colorado**

prepared by:
 Western Ecological Resource Inc.
 711 Walnut Street
 Boulder, CO 80302
 (303) 449-9009 FAX (303) 449-9038



Photo 1. Reference reach of Brush Creek on the Cozy Point South Parcel.



Photo 2. Severe bank erosion with a high bank and evidence of channel migration on Lower Brush Creek.



Photo 3. Evidence of channel migration.



Photo 4. Example of severe bank erosion and tall bank.



Photo 5. Eroding bank below house.



Photo 6. Eroding and under-cut bank below houses.



Photo 7. Erosion of an old slump below houses.



Photo 8. Typical bank erosion problem on Lower Brush Creek.



Photo 9. Typical eroding bank and migrating bend. Note lack of woody vegetation.



Photo 10. Eroding bank adjacent to horse pasture threatening fenceline.



Photo 11. Typical bank erosion and slumping on Lower Brush Creek.



Photo 12. Incised channel but with good riparian vegetation on Lower Brush Creek.



Photo 13. Formerly eroding Lower Brush Creek bank stabilized with rocks. This method is not recommended.



Photo 14. Large beaver dam on Lower Brush Creek.



Photo 15. Small beaver dam on Lower Brush Creek.



Photo 16. Example of a washed-out beaver dam on Lower Brush Creek.



Photo 17. Bank erosion where Brush Creek flows around a beaver dam.



Photo 18. Bank erosion below a beaver dam on a fast moving section of Brush Creek.



Photo 19. Natural cobble riffle on Lower Brush Creek.



Photo 20. Existing rock check dam on Lower Brush Creek.



Photo 21. Reference area along Cougar Creek, upstream of road.



Photo 22. Mature cottonwood grove along Cougar Creek along west property boundary.



Photo 23. Cougar Creek just below the road. The left bank is lacking in riparian shrubs.



Photo 24. Cougar Creek near Hwy 82. Most of the riparian habitat has been eliminated and the stream is lined with cobble and rock.



Photo 25. Manure compost piles adjacent to Cougar Creek (left side of photo).



Photo 26. Old culvert in need of replacement.

Appendix A. Summary of Beaver Dam Analogue Restoration Technique

From the Beaver Restoration Guidebook (Pollock et al., 2015):

Beaver dam analogues are the latest iteration in a long history of constructing channel spanning structures for the purposes of restoring stream habitat (p. 82). The addition of BDAs to a fluvial ecosystem with beaver should increase both the abundance and life span of natural dams, which in turn should promote reconnection of floodplain surfaces and an overall increase in both instream and riparian habitat heterogeneity and quality (p. 82). Because BDAs are intended to mimic beaver dams, they require ongoing maintenance and repair, similar to beaver dams (p. 86). There are several ways of constructing beaver dam analogues: (1) constructing starter dams using vertical posts with willow woven between the posts (wicker weave) and fill material (such as cobble, vegetation and mud) placed upstream to create a water-retaining structure, and (2) installing just post lines with wicker weaves, which are highly permeable and may or may not initially retain water, depending on stream discharge; and (3) simply reinforcing existing natural beaver dams with vertical posts (pp. 88-89).

Beaver dam analogues have several advantages over natural beaver dams. For example, because they are constructed using posts pounded into the stream bed, they are less susceptible to failure from overtopping flow than are natural beaver dams (overtopping flow is a common failure mechanism for natural dams). Thus they can be placed in incised streams and other locations where the stream power per unit width is higher than what natural beaver dams would be able to tolerate. Another advantage of BDAs is that they can be placed at a specific location and designed to increase the likelihood of a specific outcome. Structure width and height can be controlled, and adjustments can be made as needed to facilitate restoration objectives (p. 88). Similar to the multiple dams found in beaver colonies, placement of multiple BDAs is critical. Multiple placements will increase the overall effectiveness of the system and decrease the likelihood of failure during a large flood (p. 88).

ALTA Commitment For Title Insurance



AUTHORIZED AGENT:

**PITKIN COUNTY TITLE, INC.
601 E. HOPKINS AVE. 3RD FLOOR
ASPEN, COLORADO 81611
970-925-1766-PHONE
970-925-6527-FAX
877-217-3158-TOLL FREE**

E-MAIL ADDRESS:

TITLE MATTERS:

**Nola Warnecke (nola@sopris.net)
Brandi Wolfe (pctb@sopris.net)**

CLOSING MATTERS:

**TJ Davis - (tjd@sopris.net)
Joy Higen - (joy@sopris.net)**

Issued By



Home Office:
*875 Concourse Parkway South, Suite 200
Maitland, FL 32751
Telephone (407) 629-5842*



ALTA Commitment Form (6-17-06)

COMMITMENT FOR TITLE INSURANCE

ISSUED BY

WESTCOR LAND TITLE INSURANCE COMPANY

Westcor Land Title Insurance Company, a California Corporation, ("Company"), for a valuable consideration, hereby commits to issue its policy or policies of title insurance, as identified in Schedule A, in favor of the Proposed Insured named in Schedule A, as owner or mortgagee of the estate or interest covered hereby in the land described or referred to in Schedule A, upon payment of the premiums and charges and compliance with the Requirements; all subject to the provisions of Schedule A and B and to the Conditions of this Commitment.

This Commitment shall be effective only when the identity of the Proposed Insured and the amount of the policy or policies committed for have been inserted in Schedule A hereof by the Company.

All liability and obligations under this Commitment shall cease and terminate within six (6) months after the Effective Date or when the policy or policies committed for shall issue, whichever first occurs, provided that the failure to issue such policy or policies is not the fault of the Company.

The Company will provide a sample of the policy form upon request.

IN WITNESS WHEREOF, WESTCOR LAND TITLE INSURANCE COMPANY has caused its corporate name and seal to be hereunto affixed and these presents to be signed in facsimile under authority of its by-laws on the date shown in Schedule A.

Issued By:

WESTCOR LAND TITLE INSURANCE COMPANY



By: Mary O'Donnell
President
Attest: Patricia H. Power
Secretary

Countersigned:

Brandi Wolfe

Authorized Signature
CO 1045 **
Pitkin County Title, Inc.
601 E. Hopkins #3
Aspen, CO 81611

CONDITIONS AND STIPULATIONS

1. The term "mortgage", when used herein, shall include deed of trust, trust deed or other security instrument.
2. If the Proposed Insured has or acquires actual knowledge of any defect, lien, encumbrance, adverse claim or other matter affecting the estate or interest or mortgage thereon covered by this Commitment other than those shown in Schedule B hereof, and shall fail to disclose such knowledge to the Company in writing, the Company shall be relieved from liability for any loss or damage resulting from any act of reliance hereon to the extent the Company is prejudiced by failure to so disclose such knowledge. If the Proposed Insured shall disclose such knowledge to the Company, or if the Company otherwise acquires actual knowledge of any such defect, lien or encumbrance, adverse claim or other matter, the Company at its option may amend Schedule B of this Commitment accordingly, but such amendment shall not relieve the Company from liability previously incurred pursuant to paragraph 3 of these Conditions and Stipulations.
3. Liability of the Company under this Commitment shall be only to the named Proposed Insured and such parties included under the definition of Insured in the form of policy or policies committed for and only for actual loss incurred in reliance hereon in undertaking in good faith (a) to comply with the requirements hereof, or (b) to eliminate exceptions shown in Schedule B, or (c) to acquire or create the estate or interest or mortgage thereon covered by this Commitment. In no event shall such liability exceed the amount stated in Schedule A for the policy or policies committed for and such liability is subject to the insuring provisions and Conditions and Stipulations and the Exclusions from Coverage of the form of policy or policies committed for in favor of the Proposed Insured which are hereby incorporated by reference and are made a part of this Commitment except as expressly modified herein.
4. This Commitment is a contract to issue one or more title insurance policies and is not an abstract of title or a report of the condition of title. Any action or actions or rights of action that the Proposed Insured may have or may bring against the Company arising out of the status of the title to the estate or interest or the status of the mortgage thereon covered by this Commitment must be based on and are subject to the provisions of this Commitment.
5. *The policy to be issued contains an arbitration clause. All arbitrable matters when the Amount of Insurance is \$2,000,000.00 or less shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. You may review a copy of the arbitration rules at <http://www.alta.org>.*

**COMMITMENT FOR TITLE INSURANCE
SCHEDULE A**

1. Effective Date: June 24, 2016 at 8:00 AM Case No. PCT24782W2
2. Policy or Policies to be issued:
- (a) ALTA Owner's Policy-(6/17/06) Amount\$ 0.00
Premium\$ 0.00
Proposed Insured: TO BE DETERMINED Rate:
- (b) ALTA Loan Policy-(6/17/06) Amount\$ 0.00
Premium\$ 0.00
Proposed Insured: Rate:
- (c) ALTA Loan Policy-(6/17/06) Amount\$
Premium\$
Proposed Insured: Rate:
3. Title to the FEE SIMPLE estate or interest in the land described or referred to in this Commitment is at the effective date hereof vested in:
- CITY OF ASPEN PUBLIC FACILITIES AUTHORITY
4. The land referred to in this Commitment is situated in the County of PITKIN State of COLORADO and is described as follows:
- See Attached Exhibit "A"

PITKIN COUNTY TITLE, INC.
601 E. HOPKINS, ASPEN, CO. 81611
970-925-1766 Phone/970-925-6527 Fax
877-217-3158 Toll Free

AUTHORIZED AGENT

Countersigned:



Schedule A-PG.1
This Commitment is invalid
unless the Insuring
Provisions and Schedules
A and B are attached.

EXHIBIT "A" LEGAL DESCRIPTION

A parcel of land situated in Sections 16 and 21, Township 9 South, Range 85 West of the 6th P.M. being a portion of the Cozy Point Ranch as described in Book 690 at Page 5 of the Pitkin County records described as follows:

Beginning at a point on the Westerly boundary of the Dedicated Open Space Parcel of the Cozy Point Ridge Subdivision recorded in Plat Book 22 at Page 26 of the Pitkin County records whence the Northwest corner of Section 16 (1913 Brass Cap) bears N 20°21'49" W 502.66 feet; thence N 69°23'59" E 674.16 feet to the Northwestern right of way of Colorado State Highway No. 82; thence Southerly along the Westerly right of way of Colorado State Highway No. 82 as described in Book 157 at Pages 538, 539 & 540 and Book 575 at Page 976 as follows:

S 41°33'37" E 395.21 feet;
591.57 feet along the arc of a curve to the right whose radius is 1,382.50 feet (chord bears S 29°18'07" E 587.07 feet);
S 17°02'37" E 1,360.80 feet;
130.20 feet along the arc of a curve to the right whose radius is 2,815.00 feet (chord bears S 15°43'07" E 130.19 feet);
S 14°23'37" E 2,435.30 feet;
131.14 feet along an arc of a curve to the left whose radius is 5,780.00 feet (chord bears S 15°02'37" E 131.14 feet);
S 15°40'45" E 912.95 feet;
S 74°21' W 20.0 feet;
S 02°47' W 63.2 feet;
S 15°39' E 50.0 feet;
S 64°28'14" E 53.22 feet;
S 15°40'45" E 2,039.41 feet;
S 15°41'37" E 2,084.63 feet to the Northerly right of way of Brush Creek County Road;
thence Westerly along the Northerly right of way of Brush Creek County Road as follows:
S 43°43'17" W 116.15 feet;
S 73°32'00" W 145.71 feet;
404.44 feet along an arc of a curve to the left whose radius is 1,005.70 feet (chord bears S 62°00'46" W 401.72 feet);
thence N 19°44' W 38.62 feet to the Southeast corner of Brush Creek Village Subdivision Filing 2 as Platted;
thence Northerly along the Easterly line of Brush Creek Village Subdivision Filing 2 as Platted as follows:
N 19°44' W 390.00 feet;
N 31°25' W 732.00 feet;
N 24°00' W 1,831.29 feet;
N 64°55' W 340.50 feet to the Easterly line of the Elay Parcel described in Book 228 at Page 599 of the Pitkin County Records;
thence Northerly along the Easterly line of said Elay Parcel as follows:
N 25°48'20" E 153.17 feet;
370.63 feet along an arc of a curve to the left whose radius is 531.95 feet (chord bears N 05°50'56" E 363.18 feet);
197.92 feet along an arc of a curve to the right whose radius is 630.00 feet (chord bears N 05°06'40" W 197.11 feet);
N 03°53'20" E 576.86 feet;
thence N 07°01'32" W 1,942.73 feet to the Westerly line of the Dedicated Open Space Easement of the Cozy Point Ridge Subdivision;
thence N 20°21'49" W 3,989.84 feet along the Easterly line of said Open

Space Easement to the point of beginning.

COUNTY OF PITKIN, STATE OF COLORADO.

**SCHEDULE B - SECTION 1
REQUIREMENTS**

The following are the requirements to be complied with:

- ITEM (a) Payment to or for the account of the grantors or mortgagors of the full consideration for the estate or interest to be insured.
- ITEM (b) Proper instrument(s) creating the estate or interest to be insured must be executed and duly filed for record to-wit:

THIS COMMITMENT IS FURNISHED FOR INFORMATIONAL PURPOSES ONLY, IT IS NOT A CONTRACT TO ISSUE TITLE INSURANCE AND SHALL NOT BE CONSTRUED AS SUCH. IN THE EVENT A PROPOSED INSURED IS NAMED THE COMPANY HEREBY RESERVES THE RIGHT TO MAKE ADDITIONAL REQUIREMENTS AND/OR EXCEPTIONS AS DEEMED NECESSARY. THE RECIPIENT OF THIS INFORMATIONAL REPORT HEREBY AGREES THAT THE COMPANY HAS ISSUED THIS REPORT BY THEIR REQUEST AND ALTHOUGH WE BELIEVE ALL INFORMATION CONTAINED HEREIN IS ACCURATE AND CORRECT, THE COMPANY SHALL NOT BE CHARGED WITH ANY FINANCIAL LIABILITY SHOULD THAT PROVE TO BE INCORRECT AND THE COMPANY IS NOT OBLIGATED TO ISSUE ANY POLICIES OF TITLE INSURANCE.

**SCHEDULE B SECTION 2
EXCEPTIONS**

The policy or policies to be issued will contain exceptions to the following unless the same are disposed of to the satisfaction of the Company:

1. Rights or claims of parties in possession not shown by the public records.
2. Easements, or claims of easements, not shown by the public records.
3. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, any facts which a correct survey and inspection of the premises would disclose and which are not shown by the public records.
4. Any lien, or right to a lien, for services, labor, or material heretofore or hereafter furnished, imposed by law and not shown by the public records.
5. Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date the proposed insured acquires of record for value the estate or interest or mortgage thereon covered by this Commitment.
6. Taxes due and payable; and any tax, special assessment, charge or lien imposed for water or sewer service or for any other special taxing district.
7. Reservations and exceptions as contained in Patents issued by the United States of America and the State of Colorado.
8. Terms, conditions, provisions and obligations as set forth in Quit Claim Deeds for Highway 82 Right of Way recorded September 8, 1938 in Book 157 at Page 538 and in Book 157 at Page 539. (ADDED)
9. One-Eighth oil royalty in a portion of subject property as reserved to Robert W. Sanders and Zella J. Sanders in Deed recorded April 15, 1949 in Book 166 at Page 576.
10. An undivided 1/2 of all minerals in a portion of the subject property reserved by Robert M. Burlingame in instrument recorded August 26, 1959 in Book 188 at Page 390.
NOTE: By instrument recorded December 10, 1965 in Book 217 at Page 352, the said Robert M. Burlingame relinquished any right to enter upon the surface of the land which is subject of said mineral reservations.
11. Right of Way for gas pipeline and appurtenances granted to Rocky Mountain Natural Gas Company, Inc., by Deed recorded October 19, 1961 in Book 195 at Page 444.
12. Easements, rights of way and all matters as disclosed on Rocky Mountain Natural Gas Company, Inc. Transmission Line Map as it affects subject property recorded April 23, 1962 in Plat Book 2 at Page 273. (ADDED)
13. Right of way for communication systems granted to the Mountain States Telephone and Telegraph Company by instrument recorded June 2, 1967 in Book 227 at Page 254.
14. Terms, conditions, provisions and obligations as set forth in Easement Deed for Well and Pipeline recorded September 1, 1967 in Book 228 at Page 617. (ADDED)
15. Easement for an electric transmission or distribution line or system granted to Holy Cross Electric Association, Inc., as set forth in Right of Way Easement recorded February 25, 1972 in Book 261 at Page 595.
16. Easement for an underground electric line(s) granted to Holy Cross Electric Association, Inc., as set forth in Underground Right of Way and Easement recorded February 25, 1972 in Book 261 at Page 596.
17. Easement and right of way for an electric transmission or distribution line or system, as granted to Holy Cross Electric Association, Inc., in instrument recorded November 26, 1974 in Book 293 at Page 799. (ADDED)

(Continued)

SCHEDULE B SECTION 2
EXCEPTIONS - (Continued)

18. Terms, conditions, restrictions, reservations, provisions and obligations as set forth in Right of Way Agreement recorded in Book 523 at Page 418.
19. Terms, conditions, restrictions, reservations, provisions and obligations as set forth in Resolution No. PZ-88-18 recorded in Book 568 at Page 139, and Resolution No. 88-81 recorded in Book 569 at Page 610.
20. Terms, conditions, provisions and obligations as set forth in Special Warranty Deed to State Department of Highways recorded October 17, 1988 in Book 575 at Page 976.(ADDED)
21. Terms, conditions, restrictions, reservations, provisions and obligations as set forth in Book 577 at Page 768.
22. Terms, conditions, restrictions, reservations, provisions and obligations as set forth in License Agreement recorded in Book 592 at Page 21.
23. Terms, conditions, restrictions, reservations, provisions and obligations as set forth in Mutual Easement Agreement recorded in Book 602 at Page 78.
24. Terms, conditions, restrictions, reservations, provisions and obligations as set forth in Easement Agreement recorded in Book 602 at Page 82.
25. Terms, conditions, restrictions, reservations, provisions and obligations of Lease recorded October 02, 1990 in Book 631 at Page 003 and any amendments thereto, and Crop Lease by and between The Estate of Morgan M. Merrill and John Bullard, dated August 19, 1992.
26. Terms, conditions, provisions, obligations and all matters as set forth in Agreement recorded January 21, 1992 in Book 667 at Page 289.
27. Terms, conditions, provisions, obligations and all matters as set forth in Easement Agreement by and between The Estate of Morgan M. Merrill and Brush Creek Landowners Association, Inc., recorded September 29, 1992 in Book 689 at Page 972.
28. Terms, conditions, provisions, obligations and all matters as set forth in Occupancy Deed Restriction and Agreement for a Caretaker Dwelling Unit Approved Pursuant to Section 3-8.13 of the Pitkin County Land Use Code recorded September 29, 1992 in Book 689 at Page 995.
29. All matters as disclosed on survey of the subject property by Aspen Survey Engineers, Inc., Dated January 13, 1993 as Job No. 17171D and Open Space Parcel as shown on Plat recorded in Plat Book 22 at Page 26. Not excepted shall be the portion of the property designated on said survey as the "out parcel" as such property has vested in the purchaser by virtue of a conveyance to the Seller from the Elay Corporation.
30. All matters as set forth in Deed recorded January 21, 1993 in Book 701 at Page 263.
31. Terms, conditions, provisions and obligations as set forth in Easement Agreement II recorded January 21, 1993 in Book 701 at Page 275.
32. Terms, conditions, provisions and obligations as set forth in Equestrian Easement and Permit recorded January 21, 1993 in Book 701 at Page 300.
33. Terms, conditions, provisions and obligations as set forth in Water Distribution System and Water Sharing Agreement recorded January 21, 1993 in Book 701 at Page 306.

(Continued)

**SCHEDULE B SECTION 2
EXCEPTIONS - (Continued)**

34. Easements, rights of way and all matters as disclosed on Survey of subject property recorded December 9, 1994 in Plat Book 4 at 5.(ADDED)
35. Terms, conditions, provisions and obligations as set forth in Lease Purchase Agreement recorded November 28, 1995 in Book 800 at Page 774.
36. Terms, conditions, provisions and obligations as set forth in Indenture of Trust recorded November 28, 1995 in Book 800 at Page 822.
37. Terms, conditions, provisions and obligations as set forth in Rule and Order, District Court, Pitkin County Colorado recorded August 5, 1998 as Reception No. 420255.
38. Terms, conditions, provisions, obligations and all matters as set forth in Ordinance No. 98-08, Series of 1999 by the Board of County Commissioners of Pitkin County, Colorado recorded June 24, 1999 as Reception No. 432560.
39. Terms, conditions, provisions, obligations and all matters as set forth in Resolution of the Board of County Commissioners of Pitkin County, Colorado recorded August 13, 2002 as Reception No. 470914 as Resolution No. 123-2002.
40. Terms, conditions, provisions, obligations and all matters as set forth in Resolution of the Board of County Commissioners of Pitkin County, Colorado recorded August 13, 2002 as Reception No. 470916 as Resolution No. 105-2002.
41. Easements, rights of way and all matters as disclosed on Plat of subject property recorded April 21, 2003 in Plat Book 65 at 25 as Reception No. 481689.
42. Terms, conditions, provisions and obligations as set forth in Deed of Conservation Easement in Gross recorded June 30, 2003 as Reception No. 484726.
43. Terms, conditions, provisions and obligations as set forth in Administrative Decision recorded April 16, 2008 as Reception No. 548395.
44. Terms, conditions, provisions and obligations as set forth in Administrative Decision recorded April 30, 2008 as Reception No. 548703.
45. Easement and right of way for an electric transmission or distribution line or system, as granted to Holy Cross Electric Association, Inc., in instrument recorded November 21, 2008 as Reception No. 554486.
46. Terms, conditions, provisions and obligations as set forth in Memorandum of Water Allotment Contract recorded November 24, 2008 as Reception No. 554504 and Order concerning the Inclusion of Lands recorded October 7, 2008 as Reception No. 553427.
47. Terms, conditions, provisions, obligations and all matters as set forth in Resolution of the Board of County Commissioners of Pitkin County, Colorado recorded July 30, 2013 as Reception No. 601985 as Resolution No. 040-2013 and rerecorded to include Exhibit B on March 3, 2016 as Reception No. 627491.
48. Terms, conditions, provisions, obligations and all matters as set forth in Resolution of the Planning and Zoning Commission of Pitkin County, Colorado recorded September 20, 2013 as Reception No. 603894 as Resolution No. PZ-10-2013.

(Continued)

SCHEDULE B SECTION 2
EXCEPTIONS - (Continued)

49. Terms, conditions, provisions, obligations and all matters as set forth in Resolution of the Planning and Zoning Commission of Pitkin County, Colorado recorded January 6, 2016 as Reception No. 626132 as Resolution No. PZ-6-2015.

ENDORSEMENT SCHEDULE FOR LENDERS POLICY

FILE NO: PCT24782W2

BORROWER: TO BE DETERMINED

The following endorsements will be issued in connection with the Policy to be issued hereunder as referenced above:

Form:	\$

Upon compliance with the requirements set forth below, the following exceptions will be deleted from the final title policy.

The fee for deleting exceptions 1 thru 3 is \$50.00.

The fee for deleting exception 4 is \$10.00 for Residential Property and \$25.00 for Commercial Property.

Exception Number 5 will be deleted upon recordation of the documents called for on the Requirement Page.

Exception Number 6 will be amended to read: Taxes for the current year not yet due or payable, upon evidence satisfactory that the Taxes for prior years have been paid in full.

NOTE: A satisfactory affidavit and agreement indemnifying the Company against unfiled mechanic's and materialmens liens, executed by the borrower and any additional parties deemed necessary by the Company. The company hereby reserves the right to make additional requirements as may be deemed necessary in the event additional facts regarding development, construction or other building or work are disclosed to the company that may fall within any lien period as defined in the Statues of the State of Colorado, and may result in additional premiums and/or fees for such coverage and any additional requirements deemed necessary by the Company.

The Company hereby reserves the right to deny any of the above coverage's at its sole discretion.

ENDORSEMENT SCHEDULE FOR OWNERS POLICY

ATTACHED TO AND BECOMING A PART OF CASE NO: PCT24782W2

SELLER:

CITY OF ASPEN PUBLIC FACILITIES AUTHORITY

BUYER:

TO BE DETERMINED

The following endorsements will be issued in connection with the Policy to be issued hereunder as referenced above:

ENDORSEMENTS:	For a fee of: \$
	For a fee of: \$

Upon compliance with the requirements set forth below, the following exceptions will be deleted from the final policy.

The fee for deleting exceptions 1 thru 3 is \$50.00

A satisfactory affidavit and agreement indemnifying the Company against any defects, liens, encumbrances, adverse claims, or other matters known by Seller and Buyer.

The Company hereby reserves the right to make additional requirements as may be deemed necessary in the event information regarding defects, liens, encumbrances, adverse claims, or the like are discovered.

The fee for deleting exception 4 is \$10.00 for Residential Property and \$25.00 for Commercial Property.

Exception Number 5 is automatically deleted upon recordation of the documents called for on the requirement page of this commitment.

Exception Number 6 will be amended to read: Taxes for the current year not yet due or payable, upon evidence satisfactory that the Taxes for the prior year(s) have been paid.

NOTE: A satisfactory affidavit and agreement indemnifying the Company against unfiled mechanic's and materialmen's liens, executed by the seller and any additional parties deemed necessary by the Company. The company hereby reserves the right to make additional requirements as may be deemed necessary in the event additional facts regarding development, construction or other building or work are disclosed to the company that may fall within any lien period as defined in the Statutes of the State of Colorado, and may result in additional premiums and/or fees for such coverage.

NOTE: A current survey, certified by a Registered Colorado Land Surveyor must be delivered to, approved and retained by the Company for Deletion of Printed Exception No. 3. (NOT REQUIRED FOR CONDOMINIUM OR TOWNHOME UNITS)

**ADDITIONAL INFORMATION
AND DISCLOSURES**

The Owner's Policy to be issued, if any shall contain the following items in addition to the ones set forth above:

- (1) The Deed of Trust, if any, required under Schedule B-Section 1.
- (2) Water rights, claims or title to water. (NOTE: THIS EXCEPTION WILL APPEAR ON THE OWNER'S AND MORTGAGE POLICY TO BE ISSUED HEREUNDER)

Pursuant to Insurance Regulation 89-2

NOTE: Each title entity shall notify in writing every prospective insured in an owner's title insurance policy for a single family residence (including a condominium or townhouse unit) (i) of that title entity's general requirements for the deletion of an exception or exclusion to coverage relating to unfiled mechanics or materialmen's liens, except when said coverage or insurance is extended to the insured under the terms of the policy. A satisfactory affidavit and agreement indemnifying the Company against unfiled mechanics' and/or Materialmen's Liens executed by the persons indicated in the attached copy of said affidavit must be furnished to the Company. Upon receipt of these items and any others requirements to be specified by the Company upon request, Pre-printed Item Number 4 may be deleted from the Owner's policy when issued. Please contact the Company for further information. Notwithstanding the foregoing, nothing contained in this Paragraph shall be deemed to impose any requirement upon any title insurer to provide mechanics or materialmen's lien coverage.

NOTE: If the Company conducts the owners or loan closing under circumstances where it is responsible for the recording or filing of legal documents from said transaction, the Company will be deemed to have provided "Gap Coverage".

Pursuant to Senate Bill 91-14 (CRS 10-11-122)

- (a) The Subject Real Property may be located in a Special Taxing District;
- (b) A Certificate of Taxes Due listing each taxing jurisdiction may be obtained from the County treasurer of the County Treasurer's Authorized Agent;
- (c) Information regarding Special Districts and the boundaries of such districts may be obtained from the Board of County Commissioners, the County Clerk and Recorder, or the County Assessor.

NOTE: A tax Certificate or other appropriate research will be ordered from the County Treasurer/Assessor by the Company and the costs thereof charged to the proposed insured unless written instruction to the contrary are received by the company prior to the issuance of the Title Policy anticipated by this Commitment.

Pursuant to House Bill 01-1088 (CRS 10-11-123)

If Schedule B of your commitment for an Owner's Title Policy reflects an exception for mineral interests or leases, pursuant to CRS 10-11-123 (HB 01-1088), this is to advise:

- (a) There is recorded evidence that a mineral estate has been severed, leased or otherwise conveyed from the surface estate and that there is a substantial likelihood that a third party holds some or all interest in oil, gas, other minerals or geothermal energy in the property and
- (b) That such mineral estate may include the right to enter and use the property without the surface owners' permission.

NOTE: The policy(s) of insurance may contain a clause permitting arbitration of claims at the request of either the Insured or the Company. Upon request, the Company will provide a copy of this clause and the accompanying arbitration rules prior to the closing of the transaction.

NOTICE REGARDING CONSTRUCTION FINANCING: If it is not disclosed to the company that the loan to be insured hereunder is in fact a construction loan, any coverage given under the final policy regarding mechanic or materialmen's liens shall be deemed void and of no effect.

**Pitkin County Title, Inc.
Privacy Policy**

We collect nonpublic information about you from the following sources:

- Information we receive from you, such as your name, address, telephone number, or social security number;
- Information about your transactions with us, our affiliates, or others. We receive this information from your lender, attorney, real estate broker, etc.; and Information from public records

We do not disclose any nonpublic personal information about our customers or former customers to anyone, except as permitted by law.

We restrict access to nonpublic personal information about you to those employees who need to know that information to provide the products or services requested by you or your lender.

We maintain physical, electronic, and procedural safeguards that company with appropriate federal and state regulations.

Notice of Privacy Policy
of
Westcor Land Title Insurance Company

Westcor Land Title Insurance Company ("WLTIC") values its customers and is committed to protecting the privacy of personal information. In keeping with that philosophy, we have developed a Privacy Policy, set out below, that will ensure the continued protection of your nonpublic personal information and inform you about the measures WLTIC takes to safeguard that information.

Who is Covered

We provide our Privacy Policy to each customer when they purchase an WLTIC title insurance policy. Generally, this means that the Privacy Policy is provided to the customer at the closing of the real estate transaction.

Information Collected

In the normal course of business and to provide the necessary services to our customers, we may obtain nonpublic personal information directly from the customer, from customer-related transactions, or from third parties such as our title insurance agents, lenders, appraisers, surveyors or other similar entities.

Access to Information

Access to all nonpublic personal information is limited to those employees who have a need to know in order to perform their jobs. These employees include, but are not limited to, those in departments such as legal, underwriting, claims administration and accounting.

Information Sharing

Generally, WLTIC does not share nonpublic personal information that it collects with anyone other than its policy issuing agents as needed to complete the real estate settlement services and issue its title insurance policy as requested by the consumer. WLTIC may share nonpublic personal information as permitted by law with entities with whom WLTIC has a joint marketing agreement. Entities with whom WLTIC has a joint marketing agreement have agreed to protect the privacy of our customer's nonpublic personal information by utilizing similar precautions and security measures as WLTIC uses to protect this information and to use the information for lawful purposes. WLTIC, however, may share information as required by law in response to a subpoena, to a government regulatory agency or to prevent fraud.

Information Security

WLTIC, at all times, strives to maintain the confidentiality and integrity of the personal information in its possession and has instituted measures to guard against its unauthorized access. We maintain physical, electronic and procedural safeguards in compliance with federal standards to protect that information.

The WLTIC Privacy Policy can also be found on WLTIC's website at www.wltic.com.

<p>AMERICAN LAND TITLE ASSOCIATION COMMITMENT 6-17-06</p>	<p>WESTCOR LAND TITLE INSURANCE COMPANY</p>	<p>COMMITMENT FOR TITLE INSURANCE</p>	<p>HOME OFFICE 201 N. New York Avenue, Suite 200 Winter Park, Florida 32789 Telephone: (407) 629-5842</p>
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PITKIN COUNTY TITLE, INC.
601 E. HOPKINS, THIRD FLOOR
ASPEN, CO 81611
970-925-1766/970-925-6527 FAX
TOLL FREE 877-217-3158

**WIRING INSTRUCTIONS FOR ALL TRANSACTIONS REGARDING THE CLOSING OF THIS FILE
ARE AS FOLLOWS:**

**ALPINE BANK-ASPEN
600 E. HOPKINS AVE.
ASPEN, CO. 81611**

ABA ROUTING NO. 102103407

**FOR CREDIT TO:
PITKIN COUNTY TITLE, INC., ESCROW ACCOUNT**

ACCOUNT NO. 2021 012 333

REFERENCE:PCT24782W2/TO BE DETERMINED

APPENDIX F Stakeholders Meeting Log

2014

July

22nd City Council Site Visit and Review

October

8th Rock Bottom Ranch Review of Farm

9th Brush Creek Metro District

November

Brush Creek HOA

December

11th Roaring Fork Horse Council

18th Staff

2015

January

6th Staff Preparation for Meeting On 8th

6th AVL

8th Pitkin Open Space and Trails Board

8th Meeting with Aces

15th Meeting with Aces

15th City Open Space & Trails Board

22nd Joint Meeting of Pitkin and Aspen Open Space & Trails Boards

February

2nd Tony Vaguer

13th Pitkin County Community Development

17th Building Assessment at Cozy Point with Capital Asset

17th City Council Work Session Yearly State of Parks and Open Space

18th Capital Asset Building Walk Through to Summarize Conditions

19th Food Security Group

24th Molly Haberman "Agriburbia"

26th Tom Moore

March

6th Community Development & Capital Asset

9th Edward Sanditen (Water)

April

2nd Aspen Historical Society

3th Steve Childs

14th Aces

14th Roaring Fork Horse Council

20th Town of Snowmass Village

30th Woody Creek Caucus

May

5th Gwen Garcelon, Roaring Fork Food Council

July

13th Town of Snowmass Village

August

7th Joel Salatin

25th CRMPI (Central Rocky Mountain Permaculture Institute)

September

17th Gary Gardner

18th Eliot Coleman

APPENDIX F

October

9th Western Ecological Resources
20th Sustainable Settings

November

27th Aspen Tree

2016

January

21st OS&T Board Meeting
RFVHC
Aspen Tree
27th CPR Planning
 Wester Ecological Resources
 Fox, Tuttle, Hernandez

February

12th Anne Cure, Cure Farms

April

12th RFVHC

May

6th AVLT

June

13th Friends of Cozy Point
16th Pattie and Rob Covington

July

13th Archery Community Representatives
28th Eden Vardy – Aspen TREE

August

25th OS&T Board Meeting
 Draft 1 Update

September

15th Joint Open Space Board Meeting
Plan Reveal
 Beginning of Public Comment
22nd Draft Plan Feedback Meeting with Cozy Point Ranch LLC

October

13th Community Open House @ Cozy Point Ranch
20th Community Open House @ Red Brick Community Center
28th RFVHC Equestrian Center Site Visits
 Rumble Ridge
 White's Ranch
 Carbondale Polo Facility
 Lauren Sherry's Barn

November

18th RFVHC Equestrian Center Site Visits Part 2
 Iron Rose Ranch
 Carbondale Polo Facility
 Strange Ranch
21st RFVHC Walk Through at CPR
22nd Farm Management Experts
Natural Resource Conservation Services, Soil Specialists Dereck Wyle
Colorado State University Extensions Visit from Small Acreage Farm Specialists Jeff Pieper & John Rizza.

Cozy Point Ranch Management Plan

Do you currently use/visit Cozy Point Ranch? If so, what elements of the ranch do you use/enjoy?

What do you see as opportunities for improvement at Cozy Point Ranch?

What would your vision be for this open space property?

Other Comment, Suggestions, Concerns:

Please Return to:

City of Aspen Parks & Open Space Department
585 Cemetery Lane
Aspen, CO 81611

Questions?

We're open to any suggestions and we'd be happy to answer any questions on this planning process.
Parks Dept. 970-920-5120

Or drop off at City Hall front office Parks Mailbox. Scanned or digital comments may be submitted to:
austin.weiss@cityofaspen.com

Analysis Methods & Discussion

The Cozy Point Ranch Management Plan strives to align the ranch vision with the community's sentiments and values and their hopes and ideas for its future. In order to achieve this there were two phases of input. Phase one, stakeholder input, was implemented to collect and organize public sentiments into categories. These categories were then used in the management plan to help structure and guide visioning and actions.

All comments were distilled down using two methods. The first method identified common words, phrases and thoughts, simplified the diversity of comment thoughts into one representative word or phrase, and created a word cloud using those representative words or phrases. Comments with lengthy explanations were shortened using more succinct language. For instance, if a writer describes the what he or she learned from experiencing Aspen T.R.E.E.'s programs and then brought those techniques to their own yards, the sentences are represented with "agricultural education". The goal of this first method was to identify general sentiments about the Cozy Point property.

The second method transcribed and categorized comments into eight general categories derived from the common phrases found in method one, and important values identified by the extensive research performed by professional. This method was more definitive and looked more closely at the public comments to help identify where people place value on the property.

Of the three data collection types, the questionnaire and online comments produced the most diverse comments, meaning those who wrote to these forums described Cozy Point and its potential more in depth, as opposed to writing about one specific need or desire for the landscape. Both the questionnaire and the online comments had an average of 3 values per comment. The emails and online letters expressed on average 2 values.

Method one revealed a relatively well-distributed emphasis on open space, community, agriculture, and equestrian values, with mentions of history. Method 2 further broke these categories down to find that sustainable agriculture and equestrian activities are the most important need/use for the Cozy Point Ranch property. Education and youth experiences/activities play a key role in the community values. Many people expressed a love for the natural and rural character of the space. This is reflected in the desire for open space, natural resources, and ranching history and heritage.

From the collected information, key principles to guide the property developed: sustainability, community health, education, historical and natural preservation, and safety. Other input identified key components of the site to concentrate on, such as equestrian operations and natural resources.

Public input from Phase Two collected information about public sentiments, concerns, and desires related to the first draft of the plan. This information was then reapplied to the management plan in order to produce a comprehensive and well-rounded plan for Cozy Point Ranch. The second phase further emphasized the themes, principles, and key components generated from Phase One.

The Cozy Point Ranch Management Plan aims to represent every theme, value, concern and principle identified from public input in some way. Decisions for prioritizing actions were based on a combination of public input, the City's goals, and professional research. All public comments can be found in a separate document titled, "Cozy Point Ranch Public Comment," provided by the City of Aspen Parks Department.



PUBLIC COMMENT THEMES

Model Landscape

There is a strong desire to maintain a landscape that exemplifies the high quality values of sustainability, environmental protection, and historical preservation synonymous with Aspen. The visual presence and cultural significance of its location as the "Gateway" to Aspen and its past make a model landscape most valued by the community.

Sustainable Agriculture

Sustainable agriculture comments were measured by mentions of food security and local food production ranging from community gardens, the Aspen T.R.E.E. agricultural learning center, to large scale innovative production. Desires for increased pasture health, and weed- and herbicide-free haying operations were also considered a component of sustainable agriculture.

Equestrian

Mentions of equestrian values were generally framed in a desire to maintain and improve the existing facilities in efforts such as improved safety, drainage, fencing and other upgrades, as well as mentions of equestrian trails, cross country jumps, and other equestrian-centered recreation. Accolades and primary care for the Cozy Point Ranch LLC were also counted in this category.

Education

Educational values ranged from passive experience in nature to programs such as Aspen T.R.E.E and Camp Cozy Point. Stories described life lessons gained from the agricultural processes included horse care, growing food, animal husbandry. Much of this was expressed in terms of childhood learning, however some adults appreciated the experiences gained from a historical perspective.

Community Access

This category marked the desire to connect the Cozy Point property with adjacent properties, and the potential to improve internal infrastructure. This included the need for better signage and designated parking, as well as multi-modal trails and other forms of passive use associated with public land. Other connections included experience and advancements for community health. The mention of safe use across all components of the site was included.

Natural Resources & Wildlife

Care for wildlife and habitat were mentioned often, including concerns about riparian areas, elk and deer migration corridors, and the quality of agricultural fields and water.

Open Space Activities

Includes activities that most associate with open space recreation, for example, hiking, biking, and wildlife viewing. Other open space values include preserving land for the future.

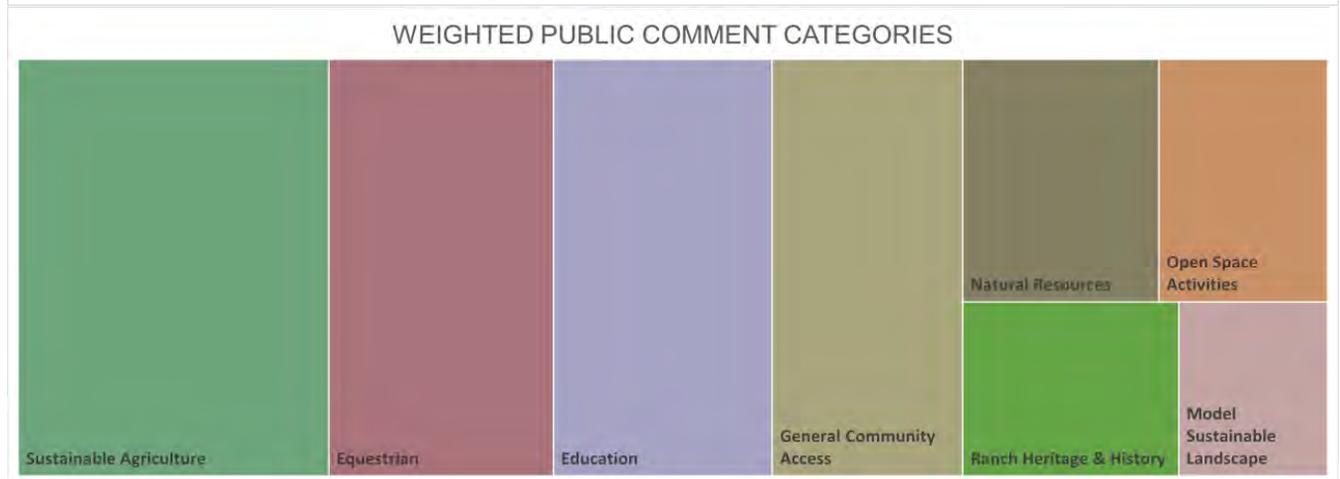
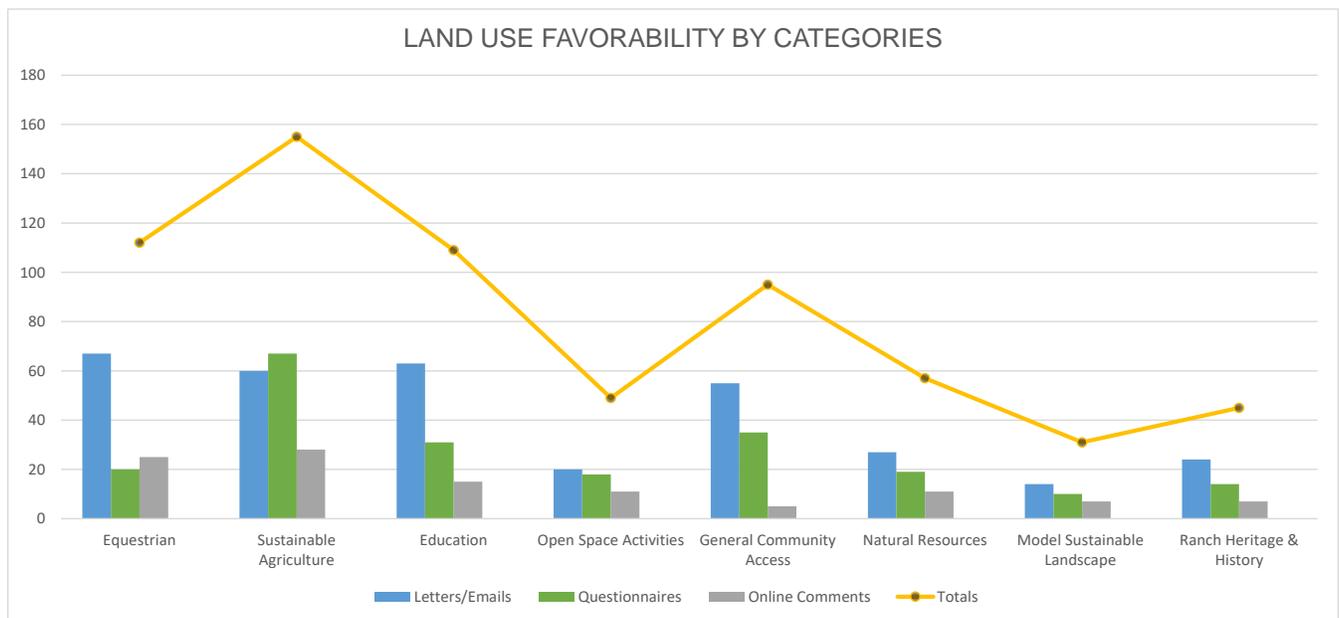
Ranch Heritage and History

This category general marked a value in the valley's agrarian heritage. This includes ranching, agriculture, and equestrian history. Mentions of the "Old Aspen" and maintaining its "rural character" were also considered a hat tip towards historical preservation.

PUBLIC COMMENT ANALYSIS

LAND USE FAVORABILITY									
Comment Type	Total	Individual Comments							
		Equestrian	Sustainable Agriculture	Education	Open Space Activities	General Community Access	Natural Resources	Model Sustainable Landscape	Ranch Heritage & History
Letters/Emails	109	67	60	63	20	55	27	14	24
Questionnaires	71	20	67	31	18	35	19	10	14
Online Comments	40	25	28	15	11	5	11	7	7
Totals	220	112	155	109	49	95	57	31	45
Petition Signatures/Letters	178	178	0	150	178	178	0	0	0

*Hiking, Biking, Archery, etc.
 ** Connectivity, access, gathering space
 *** Gateway, Agriculture and Equine Cooperation, etc.



Cozy Point Ranch Strategic Plans	
City of Aspen Parks Department	5-Dec-16
Purpose of Document	
<p>Serve</p> <p>Envision</p> <p>Guide</p>	
Vision Statement	
<p>Preserving our valley’s ranching heritage and fostering the environmental and community health through innovative, sustainable management approaches that provide locally-grown food, enhance equestrian and agricultural operations, and connects the community with the land</p>	
Guiding Principles*	
<p>Safety</p> <p>Education</p> <p>Preservation</p> <p>Sustainability</p> <p>Community Health</p>	
Sustainability Pillars**	
<p>Economy***</p> <p>Ecology</p> <p>Social</p>	
Site Management Components	
<p>General Site</p> <p>Natural Resource</p> <p>Agricultural</p> <p>Equestrian</p> <p>Archery</p> <p>Community Connection</p>	

* Derived from public comment sentiments and the City of Aspen Open Space and Trails priorities.

** See CPR Sustainability Objectives Table

*** The City of Aspen Open Space and Trails and potential non-profit lessees do not operate for a profit, however economically sound decisions must be made to meet budget needs. Private for-profit business will need to operate towards sustained profit.

Cozy Point Ranch Action Plans						
	Goals	Strategies	Action Items		Site & Plan Evaluation	
			Short (1-5 years)	Mid (5-10 years)	Long (10 - 20 years)	
General Site	Coexistence of Components					
		City of Aspen Open Space & Trails organization & support	Appoint ranch manager <i>(year one)</i>	Re-assess management plan effectiveness		
		Integrate Operations for Sustainable Use	Identify lessees <i>(year one)</i>	Explore sustainability certifications	Re-measure and evaluate sustainability indicators for effectiveness	
			Collectively organize land use areas <i>(Riparian, dry-land habitat, agricultural land, equestrian land)</i>	Re-measure and evaluate sustainability indicators for effectiveness		
			Design and implement collective sustainability and efficiency measures			
			Design Stewards' Code-of-Conduct			
			Measure baseline of sustainability indicators			
	Infrastructures & Resource Efficiency					
		Upgrade Facilities & Structures	Improve drainage on roads and parking lots <i>(includes re-paving office parking lot, re-grading service roads & horse paddocks)</i>	Design/construct renewable energy initiatives <i>(photovoltaic, anaerobic digester)</i>		
			Research more and improve staff housing <i>(for all ranch hands)</i>	Construct staff housing		
		Continue to implement energy efficiency upgrades to existing buildings				
	Wise Waste Management	Research efficient composting system	Implement composting improvements			
		Improve recycling systems	Implement new waste management system			
		Redesign waste management system <i>(replacing leach field w/ other technology such as anaerobic digestion)</i>				

	Preserved Agricultural Heritage			
	Restore Historical Buildings & landscapes	Assess unattended fields for renovation <i>(see natural resource actions)</i> Renovate third pan-abode	Continue to renovate red barn	
Natural Resources	Functioning Ecosystems			
	Designate Wildlife Habitat & Riparian Areas	Preserve sensitive wildlife habitat Assess unattended fields for renovation Identify and restore CDOT impacted land		
	Restore & Enhance Riparian Habitat	Select and implement Brush Creek restoration level <i>(Including riparian buffer areas)</i> Select and implement Cougar Creek restoration level <i>(Including riparian buffer areas)</i>		
	Dry-lands Wildlife Habitat Restoration	Restore dry-land habitat In need Continue weed management		
Goals	Strategies	Action Items	Site & Plan Evaluation	
		Short (1-5 years)	Mid (5-10 years)	Long (10 - 20 years)
Agricultural	Model Landscape For Food Production & Ecosystem Health			
	Agricultural Land Use Optimize	Restore and maintain existing fields as needed Update unattended fields for production <i>(see natural resource actions)</i> Implement best hay production practices <i>(nutrient cycles, land use diversity)</i> Expand food production Fix fencing in fields where needed	Integrate efficient compost system <i>(see general site actions)</i> Explore food production in unattended fields	Expand to AspenMass

Agricultural	Maintain Ecosystem Health <i>(Land quality, waste, etc.)</i>	Collectively organize land use areas <i>(see general site actions)</i> Implement sustainable practices <i>(driven by co-designed sustainability measures in general site actions)</i> Continue weed management management system <i>(see general site actions)</i>	Expand on sustainability practices Implement new waste management system	
	Agriculture Water Use Efficiency	Extend water use to the north of Juniper Hill Road Continue irrigation infrastructure improvements Collaboration with ditch owners for Improved management	Expand to northern unattended fields	Expand to AspenMass
	Connect & Educate Community Around Agriculture			
	Improvements to Education Facilities	Optimize Brush Creek access points		
	Expand Capacity	Research more staff housing <i>(see general site actions)</i> Research education opportunities expansion	Construct staff housing <i>(see general site actions)</i>	
	Connect Community	Improve visual presence <i>(see community connection actions. i.e. signs, outreach, etc.)</i>	Community garden feasibility study	
	Improve User Safety	Improve separate dedicated operational access Formalize visitor entrance <i>(see community connection actions)</i>		

	Goals	Strategies	Action Items		
			Short (1-5 years)	Mid (5-10 years)	Long (10 - 20 years)
Equestrian	Sustainable Equestrian Facility				
		Update Equestrian Infrastructure & Safety	Fencing repair/replace <i>(including bison fencing)</i>	Create horse servicing stall	
			Redesign paddocks <i>(improved drainage, soil quality, quarantine area and ease of access)</i>	Implement paddock redesigns	
			Eliminate leach fields from paddocks <i>(see waste management in general site actions)</i>	New pole barn for efficient hay storage	
			Repair large barn <i>(including ventilation, insulation, etc.)</i>	Replace grain storage unit	
			Repair indoor arena <i>(dust control and ventilation)</i>		
			Horse shelter repair		
		Increase Sustainable Practices	Implement sustainable land use practices <i>(driven by co produced sustainability goals in General Site Actions. i.e. composting, rotational grazing, bio-filtration etc.)</i>	Integrate efficient compost system <i>(see general site actions)</i>	
			Restore existing pastures as needed		
			Sustainable hay production <i>(see ag. actions)</i>		
	Upgrade facilities for resource efficiency <i>(see general actions)</i>				
Enhanced Public Access to Equestrian Facilities					
	improve Public Equestrian Access	Improve public trailer parking <i>(Including north field lot. See community connection actions.)</i>	Revisit Brush Creek Road crossing		
		Safe crossings of Juniper Hill Rd <i>(see community connection actions)</i>			

	Goals	Strategies	Action Items		
			Short (1-5 years)	Mid (5-10 years)	Long (10 - 20 years)
		Expand Equestrian Recreation Opportunities	Equestrian loop trail design/construction Create cross-country jumping course		
			Site & Plan Evaluation		
			Short (1-5 years)	Mid (5-10 years)	Long (10 - 20 years)
Archery Range	Enhanced Archery Range Facilities				
		Upgrade Facilities & Introduce Comfort Station	Parking lot and footpath improvements Formalize target paths Shade structures and picnic tables Re-arrange targets Youth-friendly improvements to targets		
		Explore Opportunities for Events	Feasibility study for events		
Community Connection	Safe Community Accessibility & Recreational Activity				
		Explore Opportunities For Additional Recreational Uses	Plan and construct trails in north end of property		
		Create Better Public Access With Signage, Bus Access, & Parking	Signage (<i>guide, inform, direct</i>) Formalize north property parking Formalize Juniper Hill Road entrance Restrict Ranch Office Road access Improve public trailer parking	Design/construct soft surface trail from bus stop at Juniper Hill Road	
	Reduce User Conflicts Education & Design	Design site to ease user conflicts (<i>includes paddock area redesign, dedicated operational entrances, trails, etc.</i>) Increase ranger presence Informational signs (<i>see above "signage" action</i>)			

Safe Connections to Adjacent Properties			
Improve Safe Access	Safe Juniper Hill Road crossings Revisit Brush Creek Road crossing	Research multi-use trail alignment	Construct multi-use trails
Connect People to History & Environment			
Historical Ranching Education	Uphold rural character	Identify historical education opportunities	Improve educational infrastructures
Environmental Education	Provide environmental education		Improve educational infrastructures

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