

### 3. Natural Environment<sup>i</sup>

*Proposed new section title: **Environmentally Sustainable Community.***

*Note: This may be combined with other policies around energy and climate in addition to agriculture and food policies relating to land and environment. Also please note that a further round of editing will occur to improve organization, reduce verbosity and redundancies, and renumber policies as necessary.*

The natural environment that characterizes the Boulder Valley is a critical asset that must be preserved and protected. Within the Boulder Valley's complex ecological system, there are inextricable links among the natural environment, plants and animals, the built environment, the economy and community livability. These natural and human systems are connected to the region and world, and changes to the ecosystems within the Boulder Valley can have a profound effect on their viability.

Over many decades, the city and county have actively protected and managed open space around the urban area, and city and county open space plans and policies apply to those public lands acquired and managed as natural areas or used for other purposes, such as agriculture.<sup>ii</sup>

The climate of the Boulder Valley has warmed and dried over the past three decades, and the potential for further changes and intensified weather events because of climate change heighten the need for the city and county to proactively strengthen intervention and investment in natural resources (e.g. urban forestry, wetland and groundwater protection, and natural hazard mitigation) to reduce risk and protect resources. The more the community can assess risks of changes due to climate change and be prepared to preserve and protect environmental resources, the better prepared the community can be for mitigating the causes and impacts of those changes to the natural environment.

Boulder has been at the forefront of environmental protection and preservation for many years. The predominant amount of natural land protected by the city and county contributes to the high quality of life for residents and critical habitat for native plants and animals. The community's historic and on-going emphasis on clean air and water has resulted in significant progress toward a sustainable, resilient and healthy urban environment.

The city places strong emphasis on being a leader and role model to other communities for its exemplary environmental protection practices and accomplishments. The city will continue to implement state-of-the-art environmental policies both community wide and within the city government organization to further environmental sustainability goals.

The policies in this section support the following city and county goals related to the conservation and preservation of land, water, air resources and pollution prevention and resilience:

- Native Ecosystems and Biodiversity
- Urban Environmental Quality

- Geologic Resources and Natural Hazards
- Water and Air Quality

### **3.01 Incorporating Ecological Systems into Planning**

The city and county will approach planning and policy decisions in the Boulder Valley through an ecosystem framework in which natural regions like airsheds and watersheds are considered and incorporated into planning.

### **3.02 Adaptive Management Approach**

The city will employ an adaptive management approach to resource protection and enhancement. An adaptive management approach involves ongoing monitoring of resource conditions, assessment of the effectiveness of management actions, revision of management actions based on new information from research, and learning from experience what works and what does not.

### ***Native Ecosystems and Biodiversity***

#### **3.03 Natural Ecosystems**

The city and county will protect and restore significant native ecosystems on public and private lands through land use planning, development review, conservation easements, acquisition and public land management practices. The protection and enhancement of biological diversity and habitat for state and federal endangered and threatened species, as well as critical wildlife habitats/migration corridors, environmental conservation areas, high biodiversity areas, rare plant areas, and significant natural communities and local species of concern will be emphasized.<sup>iii</sup> Degraded habitat may be restored and selected extirpated species may be reintroduced as a means of enhancing native flora and fauna in the Boulder Valley.

#### **3.04 Ecosystem Connections and Buffers**

The city and county recognize the importance of preserving large areas of unfragmented habitat in supporting the biodiversity of its natural lands and viable habitat for native species. The city and county will work together to preserve, enhance, restore and maintain land identified as critical and having significant ecological value for providing ecosystem connections and buffers to support movement of native organisms between ecosystems.

*(Note: Suggest adding new policy language to “Built Environment chapter” to address conservation and design of open space connections and buffers in urban areas, recognizing that urban lands can also be important for supporting biodiversity and maintaining wildlife habitat.)*

#### **3.05 Maintain and Restore Natural Disturbance and Ecological Processes**

Recognizing that ecological processes, such as wildfire and flooding, are integral to the productivity and health of natural ecosystems, the city and county will work to ensure that, when appropriate precautions have been taken for human safety and welfare, ecological processes will be maintained or mimicked in the management of natural lands.

#### **3.06 Wetland and Riparian Protection**

Natural and human-made wetlands and riparian areas are valuable for their ecological and, where appropriate, recreational functions, including their ability to enhance water and air quality and

reduce the impacts of flooding. Wetlands and riparian areas also function as important wildlife habitat, especially for rare, threatened and endangered plants, fish and wildlife. The city and county will continue to develop programs to protect and enhance wetlands and riparian areas in the Boulder Valley. The city will strive for no net loss of wetlands and riparian areas by discouraging their destruction or requiring the creation and restoration of wetland and riparian areas in the rare cases when development is permitted and the filling of wetlands or destruction of riparian areas cannot be avoided.

### **3.07 Invasive Species Management**

The city and county will promote efforts, both public and private, to prevent the introduction or growth of invasive and non-native plant and animal species and seek to prevent their spread. High priority will be given to managing invasive species that have, or potentially could have, a substantial impact on city and county resources. Management of both non-native and non-local native species will be based on weighing impacts vs. benefits that includes documented threats to species of concern specific to each site, acknowledging that some non-native species may have become naturalized. Management decisions should also take into account changing species composition due to climate change and other human impacts, as well as the role in the ecosystem provided by each organism based on the best available science.<sup>iv</sup>

### **3.08 Public Access to Public Lands**

Certain city and county-owned or managed lands provide a means for educating users on the importance of the natural environment. Public lands may include areas for recreation, preservation of agricultural use, unique natural features and wildlife and plant habitat. Public access to natural lands will be provided for, except where closure is necessary to protect areas from unacceptable degradation or impacts to agriculture, habitat or wildlife, for public safety, or limits on access necessary to preserve the quality of the visitor experience.

### **New Policy: Climate Change Preparation and Adaptation**

The city and county are both working on climate mitigation and recognize that adaptation plans will be necessary as well. To prepare open space lands and natural areas for climate change, the city and county will consider allowing or facilitating ecosystems' transition to new states in some sites (e.g., newly adapting plants and wildlife) and increasing the stability and resiliency of the natural environment elsewhere. Biological indicators can help to identify high risk species for monitoring and/or relocations and may conduct restoration projects using arid-adapted ecotypes or species. Open space master plans guide other topics related to climate change, such as visitor experiences to open space.<sup>v</sup>

## ***Urban Environmental Quality***

### **3.09 Management of Wildlife-Human Conflicts**

The city recognizes the intrinsic value of wildlife in both the urban and rural setting. The city will promote wildlife and land use management practices to minimize conflicts with residents and urban land uses while identifying, preserving and restoring appropriate habitat for wildlife species in the urban area. When a wildlife species is determined to be a nuisance or a public health hazard, a full range of alternative wildlife and land use management techniques will be considered by the city and county in order to mitigate the problem in a manner that is humane, effective, economical and ecologically responsible.<sup>vi</sup>

### 3.10 Urban Environmental Quality

To the extent possible, the city and county will seek to protect the environmental quality of areas under significant human influence such as agricultural and urban lands and will balance human needs and public safety with environmental protection. The city will develop community-wide programs and standards for new development and redevelopment so that negative environmental impacts will be mitigated and overall environmental quality of the urban environment will not worsen and may improve.

### 3.11 Urban Forests

The city will support, promote and, in some cases, regulate the protection of healthy existing trees and the long-term health and vitality of the urban forest in the planning and design of public improvements and private development. Urban canopy plays an important role in ameliorating the role of climate change; therefore the city will guide short- and long-term urban forest management.<sup>vii</sup> that encourages overall species diversity and native and low water demand tree species where appropriate.

### 3.12 Water Conservation

The city and county will promote the conservation of water resources through water quality protection, public education, monitoring and policies that promote appropriate water usage. The city will endeavor to minimize water waste and reduce water use during peak demand periods. New development and redevelopment designed to conserve water will be encouraged.

### 3.13 Integrated Pest Management

The city and county will discourage the use of pesticides and synthetic, inorganic fertilizers.<sup>viii</sup> In its own practices, the city and county will carefully consider when pest management actions are necessary and focus on creating healthy and thriving ecosystems to lower pest pressure by natural processes. When pest management is necessary, the city commits to the use of ecologically-based integrated pest management principles, which emphasize the selection of the most environmentally sound approach to pest management and the overall goal of reducing or eliminating the dependence on chemical pest-control strategies. When public or environmental health risks are identified, the city will balance the impacts and risks to the residents and the environment when choosing management measures.<sup>ix</sup>

### **New Policy: Soil Carbon Sequestration**

The city recognizes that soil sequestration has a range of potential benefits, including water retention, soil health and stabilization. The city and county will consider soil sequestration strategies, including land management practices that may be used to sequester carbon out of the atmosphere, and explore opportunities to incentivize carbon sequestration.<sup>x</sup>

*(Note: This policy will continue to be refined.)*

## ***Geologic Resources and Natural Hazards***

### 3.14 Unique Geological Features

Due to its location at the interface of the Great Plains and the Rocky Mountains, the Boulder Valley has a number of significant or unique geological and paleontological features. The city and county will attempt to protect these features from alteration or destruction through a variety of

means, such as public acquisition, public land management, land use planning and regulation, and density transfer within a particular site.

### **3.15 Mineral Deposits**

Deposits of sand, gravel, coal and similar finite resource areas will be delineated and managed according to state and federal laws. The use of mineral deposits and other non-renewable resources will be evaluated considering the need for these resources and other community values and priorities such as natural and cultural resource protection, community and environmental health and carbon emission reduction. The city and county will work together to acquire mineral rights as appropriate.<sup>xi</sup>

### **3.16 Hazardous Areas**

Hazardous areas that present danger to life and property from flood, forest fire, steep slopes, erosion, unstable soil, subsidence or similar geological development constraints will be delineated, and development in such areas will be carefully controlled or prohibited.

### **3.17 Hillside Protection**

Hillside and ridge-line development will be carried out in a manner that, to the extent possible, avoids both negative environmental consequences to the immediate and surrounding area and the degradation of views and vistas from and of public areas. Due to the risk of earth movement and/or mud slides under adverse weather conditions, special attention needs to be paid to soil types and underlying geological strata before and during planning, design and construction of any development on or at the base of hillsides.<sup>xii</sup>

### **3.18 Wildfire Protection and Management**

The city and county will require on-site and off-site measures to guard against the danger of fire in developments adjacent to natural lands and consistent with forest and grassland ecosystem management principles and practices. Recognizing that fire is a widely accepted means of managing ecosystems, the city and county will integrate ecosystem management principles with wildfire hazard mitigation planning and urban design.

### **3.19 Preservation of Floodplains**

Undeveloped floodplains will be preserved or restored where possible through public land acquisition of high hazard properties, private land dedication and multiple program coordination. Comprehensive planning and management of floodplain lands will promote the preservation of natural and beneficial functions of floodplains whenever possible.

### **3.20 Flood Management<sup>xiii</sup>**

The city and county will protect the public and property from the impacts of flooding in a timely and cost-effective manner while balancing community interests with public safety needs. The city and county will manage the potential for floods by implementing the following guiding principles: a) Preserve floodplains; b) Be prepared for floods; c) Help people protect themselves from flood hazards; d) Prevent unwise uses and adverse impacts in the floodplain; and e) Seek to accommodate floods, not control them. The city seeks to manage flood recovery by protecting critical facilities in the 500-year floodplain and implementing multi-hazard mitigation and flood response and recovery plans.

### **3.21 Non-Structural Approach**

The city and county will seek to preserve the natural and beneficial functions of floodplains by emphasizing and balancing the use of non-structural measures with structural mitigation. Where drainageway improvements are proposed, a non-structural approach should be applied wherever possible to preserve the natural values of local waterways while balancing private property interests and associated cost to the city.

### **3.22 Protection of High Hazard Areas**

The city will prevent redevelopment of significantly flood-damaged properties in high hazard areas. The city will prepare a plan for property acquisition and other forms of mitigation for flood-damaged and undeveloped land in high-hazard flood areas. Undeveloped high hazard flood areas will be retained in their natural state whenever possible. In urban areas, compatible uses of riparian corridors, such as natural ecosystems, wildlife habitat and wetlands will be encouraged wherever appropriate. Trails or other open recreational facilities may be feasible in certain areas.<sup>xiv</sup>

### **3.23 Larger Flooding Events**

The city recognizes that floods larger than the 100-year event will occur resulting in greater risks and flood damage that will affect even improvements constructed with standard flood protection measures. The city will seek to better understand the impact of larger flood events and consider necessary floodplain management strategies, including the protection of critical facilities.

## ***Water and Air Quality***

### **3.24 Protection of Water Quality**

Water quality is a critical health, economic and aesthetic concern. The city and county will protect, maintain and improve water quality within the Boulder Creek watershed as a necessary component of existing ecosystems and as a critical resource for the human community. The city and county will seek to reduce point and nonpoint sources of pollutants, protect and restore natural water system, and conserve water resources. Special emphasis will be placed on regional efforts, such as watershed planning, and priority will be placed on pollution prevention over treatment.

### **3.25 Water Resource Planning and Acquisition**

Water resource planning efforts will be regional in nature and incorporate the goals of water quality protection as well as surface and ground water conservation. The city will continue to obtain additional municipal water supplies to ensure adequate drinking water, maintain instream flows and preserve agricultural uses. The city will seek to minimize or mitigate the environmental, agricultural and economic impacts to other jurisdictions in its acquisition of additional municipal water supply to further the goals of maintaining instream flows and preventing the permanent removal of land from agricultural production elsewhere in the state.

### **3.26 Drinking Water**

The city and county will continually seek to improve the quality of drinking water and work with other water and land use interests as needed to assure the integrity and quality of its drinking water supplies. The city and county will employ a system-wide approach to protect drinking

water quality from sources waters to the water treatment plant and throughout the water distribution system.

### 3.27 Minimum Flow Program

The city will pursue expansion of the existing in-stream flow program consistent with applicable law and manage stream flows to protect riparian and aquatic ecosystems within the Boulder Creek watershed.

### 3.28 Surface and Ground Water

Surface and groundwater resources will be managed to prevent their degradation and to protect and enhance aquatic, wetland and riparian ecosystems. Land use and development planning and public land management practices will consider the interdependency of surface and groundwater and potential impacts to these resources from pollutant sources, changes in hydrology and dewatering activities.

*(Note: Additional policies and regulatory standards will be analyzed to strengthen this language about groundwater to identify risks and potential impacts.)<sup>xv</sup>*

### 3.29 Wastewater

The city will pursue sustainable wastewater treatment processes to achieve water quality improvements with greater energy efficiency and minimal chemical use. Pollution prevention and proactive maintenance strategies will be incorporated in wastewater collection system management. The county will discourage the installation of private on-site wastewater systems where municipal collection systems are available or where a potential pollution or health hazard would be created.

### 3.30 Protection of Air Quality

Air quality is a critical health, economic and aesthetic concern. The city and county will seek to reduce stationary and mobile source emissions of pollutants. Special emphasis will be placed on local and regional efforts to reduce pollutants, which cause adverse health effects and impair visibility.

*(Note: Suggest adding language in “Built Environment” chapter about the important role of street trees and vegetative plantings in mitigating air quality and reducing exposure to pollutants at the street level.)<sup>xvi</sup>*

### Potential New Policy: Natural Environment Investments for Resilience

The city and county recognize natural environment investments contribute toward resilience by reducing risk and promoting stability. Additionally, urban forestry, tree planting, natural hazard mitigation, improvement of air quality, added recreational activities and storm water mitigation activities have co-benefits.<sup>xvii</sup>

*(Note: Policy directions about coordinated approach, vulnerable populations and resident involvement are suggested in HR&A Report and will need further review over coming weeks.)*

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## ENDNOTES

<sup>i</sup> The changes to this chapter reflect work since the 2010 Plan including:

- The city currently is working on updates to its Integrated Pest Management policy, an Urban Forest Strategic Plan, the Resilience Strategy, and draft Climate Commitment.

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- The city adopted the Bee Safe Resolution (2015) banning the use of neonicotinoids on city property and a Bear Protection Ordinance to secure waste from bears (2014). The county adopted a resolution to reduce and eliminate pesticide use to protect both people and pollinators (2015).
  - Boulder County adopted the Environmental Resources Element of the Boulder County Comprehensive Plan (2015) and is currently working on policy related to Genetically Modified Organisms in the county.
  - The city will be developing an Open Space Master Plan (2017).
  - Boulder County is analyzing on how to address local oil and gas regulations, and looking at potential policy updates to better align the Fourmile Canyon Creek Watershed Master Plan (2015), Boulder Creek Watershed Master Plan (Urban Drainage and Flood Control District, 2015), and Consortium of Cities Water Stewardship Task Force Final Report (2013).
  - HR&A's Recommendations for Resilience Integration (2016)

<sup>ii</sup> OSBT in particular asked for clarification about how this section of policies apply – to the urban vs. wildlands area, and to OSMP lands vs. more generally. This added language aims at providing that clarification. Additionally, the board asked that the section be edited to sound a bit less human-centric.

<sup>iii</sup> North Trail Study process clarification and better integration with Boulder County Comprehensive Plan.

<sup>iv</sup> Clarification of how city and county are programmatically operating – learning from best practices about an ecosystems management approach. OSBT also suggested some language for this policy, reflected here.

<sup>v</sup> From city's Climate Commitment document.

<sup>vi</sup> OSBT asked for clarification of this policy regarding “nuisance species”. This language is consistent with the Urban Wildlife Management plan which has not been updated recently, so it may need some minor adjustments over coming months to clarify.

<sup>vii</sup> City is in process of developing an Urban Canopy Master Plan.

<sup>viii</sup> Stronger language suggested by Planning Board (including applying for private lands, which the city cannot regulate according to state law). Also consistent with city programs.

<sup>ix</sup> Change reflects decades of learning and best practices to integrate Integrated Pest Management into an ecological approach to land management.

<sup>x</sup> City and county are exploring soil carbon sequestration. Also requested by public.

<sup>xi</sup> Attempting to clarify that intent of the policy is to balance relevant community values with the use of mineral deposit.

<sup>xii</sup> Recommended after 2013 flood experience. OSBT suggested to add “before”... and during development.

<sup>xiii</sup> This is an existing policy that hasn't been changed. It has generally not been applied to open space lands – its intent more focused around lands with development potential.

<sup>xiv</sup> Clarification suggested by OSBT.

<sup>xv</sup> Planning Board suggested such language.

<sup>xvi</sup> OSBT suggested some language about mitigating against pollutants at street level with plantings, etc.

<sup>xvii</sup> From HR&A Resilience Report.

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~~The natural environment that characterizes the Boulder Valley is a critical asset that must be preserved and protected. It is the framework within which growth and development take place. The city and county recognize that the Boulder Valley is a complex ecological system and that there are inextricable links among our natural environment, the economy, the built environment and community livability. The Boulder Valley is an open system in that our natural and human systems are connected to the region as well as to the entire world. The city and county acknowledge that regional and global changes can have a profound effect on the local environment and that the local economy and built environment can have adverse impacts on natural systems beyond the Boulder Valley.~~

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The city and county will protect the public and property from the impacts of flooding in a timely and cost-effective manner while balancing community interests with public safety needs. The city and county will manage the potential for floods by implementing the following guiding principles: a) Preserve floodplains; b) Be prepared for floods; c) Help people protect themselves from flood hazards; d) Prevent unwise uses and adverse impacts in the floodplain; and e) Seek to accommodate floods, not control them. The city seeks to manage flood recovery by protecting critical facilities in the 500-year floodplain and implementing multi-hazard mitigation and flood response and recovery plans.

### **3.21 Non-Structural Approach**

The city and county will seek to preserve the natural and beneficial functions of floodplains by emphasizing and balancing the use of non-structural measures with structural mitigation. Where drainageway improvements are proposed, a non-structural approach should be applied wherever possible to preserve the natural values of local waterways while balancing private property interests and associated cost to the city.

### **3.22 Protection of High Hazard Areas**

The city will prevent redevelopment of significantly flood-damaged properties in high hazard areas. The city will prepare a plan for property acquisition and other forms of mitigation for flood-damaged and undeveloped land in high-hazard flood areas. Undeveloped high hazard flood areas will be retained in their natural state whenever possible. [In urban areas,](#) ~~c~~Compatible uses of riparian corridors, such as natural ecosystems, wildlife habitat and wetlands will be encouraged wherever appropriate. Trails or other open recreational facilities may be feasible in certain areas. [xiv](#)

### **3.23 Larger Flooding Events**

The city recognizes that floods larger than the 100-year event will occur resulting in greater risks and flood damage that will affect even improvements constructed with standard flood protection measures. The city will seek to better understand the impact of larger flood events and consider necessary floodplain management strategies, including the protection of critical facilities.

## ***Water and Air Quality***

### **3.24 Protection of Water Quality**

Water quality is a critical health, economic and aesthetic concern. The city and county will protect, maintain and improve water quality within the Boulder Creek watershed as a necessary component of existing ecosystems and as a critical resource for the human community. The city and county will seek to reduce point and nonpoint sources of pollutants, protect and restore natural water system, and conserve water resources. Special emphasis will be placed on regional efforts, such as watershed planning, and priority will be placed on pollution prevention over treatment.

### 3.25 Water Resource Planning and Acquisition

Water resource planning efforts will be regional in nature and incorporate the goals of water quality protection, ~~and as well as~~ surface and ground water conservation. The city will continue to obtain additional municipal water supplies to ensure adequate drinking water, maintain instream flows and preserve agricultural uses. The city will seek to minimize or mitigate the environmental, agricultural and economic impacts to other jurisdictions in its acquisition of additional municipal water supply to further the goals of maintaining instream flows and preventing the permanent removal of land from agricultural production elsewhere in the state.

### 3.26 Drinking Water

The city and county will continually seek to improve the quality of drinking water and work with other water and land use interests as needed to assure the integrity and quality of its drinking water supplies. The city and county will employ a system-wide approach to protect drinking water quality from sources waters to the water treatment plant and throughout the water distribution system.

### 3.27 Minimum Flow Program

The city will pursue expansion of the existing in-stream flow program consistent with applicable law and manage stream flows to protect riparian and aquatic ecosystems within the Boulder Creek watershed.

### 3.28 Surface and Ground Water

Surface and groundwater resources will be managed to prevent their degradation and to protect and enhance aquatic, wetland and riparian ecosystems. Land use and development planning and public land management practices will consider the interdependency of surface and groundwater and potential impacts to these resources from pollutant sources, changes in hydrology, and dewatering activities.

*(Note: Additional policies and regulatory standards will be analyzed to strengthen this language about groundwater to -identify risks and potential impacts.)<sup>xv</sup>*

### 3.29 Wastewater

The city will pursue sustainable wastewater treatment processes to achieve water quality improvements with greater energy efficiency and minimal chemical use. Pollution prevention and proactive maintenance strategies will be incorporated in wastewater collection system management. The county will discourage the installation of private on-site wastewater systems where municipal collection systems are available or where a potential pollution or health hazard would be created.

### 3.30 Protection of Air Quality

Air quality is a critical health, economic and aesthetic concern. The city and county will seek to reduce stationary and mobile source emissions of pollutants. Special emphasis will be placed on local and regional efforts to reduce pollutants, which cause adverse health effects and impair visibility.

*(Note: Suggest adding language in “Built Environment” chapter about the important role of street trees and vegetative plantings in mitigating air quality and reducing exposure to pollutants at the street level.)<sup>xvi</sup>*

## Potential New Policy: Natural Environment Investments for Resilience

The city and county recognize natural environment investments contribute toward resilience by reducing risk and promoting stability. Additionally, urban forestry, tree planting, natural hazard mitigation, improvement of air quality, added recreational activities and storm water mitigation activities have co-benefits.<sup>xvii</sup>

*(Note: Policy directions about coordinated approach, vulnerable populations and resident involvement are suggested in HR&A Report and will need further review over coming weeks.)*

### ENDNOTES

<sup>i</sup> The changes to this chapter reflect work since the 2010 Plan including:

- The city currently is working on updates to its Integrated Pest Management policy, an Urban Forest Strategic Plan, the Resilience Strategy, and draft Climate Commitment.
- The city adopted the Bee Safe Resolution (2015) banning the use of neonicotinoids on city property and a Bear Protection Ordinance to secure waste from bears (2014). The county adopted a resolution to reduce and eliminate pesticide use to protect both people and pollinators (2015).
- Boulder County adopted the Environmental Resources Element of the Boulder County Comprehensive Plan (2015) and is currently working on policy related to Genetically Modified Organisms in the county.
- The city will be developing an Open Space Master Plan (2017).
- Boulder County is analyzing on how to address local oil and gas regulations, and looking at potential policy updates to better align the Fourmile Canyon Creek Watershed Master Plan (2015), Boulder Creek Watershed Master Plan (Urban Drainage and Flood Control District, 2015), and Consortium of Cities Water Stewardship Task Force Final Report (2013).
- HR&A's Recommendations for Resilience Integration (2016)

<sup>ii</sup> OSBT in particular asked for clarification about how this section of policies apply – to the urban vs. wildlands area, and to OSMP lands vs. more generally. This added language aims at providing that clarification. Additionally, the board asked that the section be edited to sound a bit less human-centric.

<sup>iii</sup> North Trail Study process clarification and better integration with Boulder County Comprehensive Plan.

<sup>iv</sup> Clarification of how city and county are programmatically operating – learning from best practices about an ecosystems management approach. OSBT also suggested some language for this policy, reflected here.

<sup>v</sup> From city's Climate Commitment document.

<sup>vi</sup> OSBT asked for clarification of this policy regarding “nuisance species”. This language is consistent with the Urban Wildlife Management plan which has not been updated recently, so it may need some minor adjustments over coming months to clarify.

<sup>vii</sup> City is in process of developing an Urban Canopy Master Plan.

<sup>viii</sup> Stronger language suggested by Planning Board (including applying for private lands, which the city cannot regulate according to state law). Also consistent with city programs.

<sup>ix</sup> Change reflects decades of learning and best practices to integrate Integrated Pest Management into an ecological approach to land management.

<sup>x</sup> City and county are exploring soil carbon sequestration. Also requested by public.

<sup>xi</sup> Attempting to clarify that intent of the policy is to balance relevant community values with the use of mineral deposit.

<sup>xii</sup> Recommended after 2013 flood experience. OSBT suggested to add “before”... and during development.

<sup>xiii</sup> This is an existing policy that hasn't been changed. It has generally not been applied to open space lands – its intent more focused around lands with development potential.

<sup>xiv</sup> Clarification suggested by OSBT.

<sup>xv</sup> Planning Board suggested such language.

<sup>xvi</sup> OSBT suggested some language about mitigating against pollutants at street level with plantings, etc.

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<sup>xvii</sup> [From HR&A Resilience Report.](#)

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