

APPENDIX B

Sustainability Evaluation System Summary Button Rock Management Plan Initial Planning Meeting March 8, 2019



The City of Longmont's Sustainability Evaluation System (SES) is designated in the City's Sustainability Plan as the tool for reviewing the sustainability aspects of projects, plans, and programs. An evaluation of the **Button Rock Management Plan** using the SES was completed on December 21, 2018 by a review team made up of representatives of Public Works & Natural Resources (Natural Resources/Open Space, Water Resources) and one of the consultants for the plan (DHM Design).

The SES has two modules. **Module 1** is used to review sustainability categories and topics to determine which topics are applicable to the project, plan or program under consideration, identify where there are gaps or where improvements that can be made and document any relevant comments or observations resulting from the review. **Module 2** is used to rate alternatives based on the applicable topics in Module 1. The categories and topics are aligned with and support the goals and policies in the Sustainability Plan, as well as the Envision Longmont Multimodal and Comprehensive Plan. The sustainability categories in the SES are:

Best Practices (Organizational)
Best Practices (Assets and Infrastructure)
Best Practices (Financial)
Buildings and Infrastructure
Energy
Transportation

Community and Individual Well-being Economic Vitality Materials and Waste Natural Environment Water Resources Water Quality

Each of the above categories contains related sustainability topics to help guide the discussion and evaluation of the project being reviewed. The topics are listed in the summary table, below. A copy of the SES review that shows all the categories and topics is also attached.

The **Button Rock Management Plan** is a guidance document that may include proposals for land management techniques or specific projects. As such, Module 1 of the SES is appropriate for the review of this plan. This SES review was done at the initial stage of the plan to help identify the sustainability topics that apply to and should be included or discussed in the plan. The review also documents comments from the review team. The SES review produces a numerical rating for each category normalized to a range of 1 to 5 (low to high), based on the number of applicable topics in each category. The rating is not an indication of the degree to which the topics in each category are being met. A lower rating for a category does not mean that it is unimportant, just that fewer topics in that category were found to be relevant to the project. If a topic was determined to be "not applicable" or "unknown" by the review team, the reasons were documented in the SES. Comments and observations from the review team for some topics deemed to be "applicable" were also recorded in the SES to explain or provide context for how the topics were viewed by the team.

The following table lists the sustainability categories in the SES, a list or brief description of the topics in the categories, a summary of the comments and observations from the review and recommendations from the review team for each category.

SES Category/ [Applicability Rating]	Topics	Comments/Observations		
Best Practices (Organizational) [5.0; all 5 topics applicable]	 Alignment with other plans Integration with other plans or projects Partnerships Stakeholder engagement 	 This plan is aligned with City and department policies and existing land management plans A technical advisory committee is being formed that will include various stakeholders; see partnerships below Possible partnerships include adjacent landowners, Boulder County, US Forest Service, Colorado State Forest Service, Colorado Parks & Wildlife, Trout unlimited 		
Recommendations		escription of the public and stakeholder engagement k from stakeholders will be considered		
Best Practices (Assets and Infrastructure) [5.0; all 6 topics applicable]	 Adaptability Commissioning Monitoring and evaluation Long-term maintenance and repair (asset management) Reliability Resilience 	 The plan will reflect changes in needs and the effects of increasing community population. GIS will be updated to reflect changing conditions Initial verification of water-related infrastructure, and usage-related infrastructure (cameras, trail counters) Confirm the ecological characteristics identified by and monitor impacts on the ecological characteristics identified by the Natural Heritage Program; continue or expand ongoing water quality monitoring Maintenance and repair needs are an ongoing process; assessment of resource needs, compare to other facilities Reliability of water sources, resilience of infrastructure 		
Recommendations	 incorporated into the plan, at the ecology of the area The plan should include some maintenance and repair The plan should emphasize drinking water The plan should include an inwater management and that 	The plan should include some evaluation and estimate of ongoing resource needs for maintenance and repair The plan should emphasize the requirement to have a reliable and resilient source of		
Best Practices (Financial)	 Debt rations Capital cost funding O&M cost recovery	 Any debt incurred by implementation of the plan is unknown at this time; costs will depend on any projects identified as a result of the plan 		

SES Category/ [Applicability Rating]	Topics	Comments/Observations
[3.8; 3 out of 4 topics applicable]	• Rate impacts	 Question about any general fund component that is applicable to capital and O&M O&M budget and asset management are concerns. PW&NR Operations also has a reservoir management budget in addition to specific Button Rock budget items There could be rate impacts resulting from wildlife management recommendations in the plan Discuss user fees, permits, resident vs non-resident fees, etc. Consider how to help low income populations
Recommendations	cycle considerationsThe plans should include an taking into account existingThe plan should include a di	scussion of cost-based management approaches, such as dent), permits, etc. and also address minimizing those
Buildings and Infrastructure [3.3; 11 out of 15 topics applicable]	 Accessibility Light & noise Cultural/historic preservation Development footprint Floodplain protection Heat island effect Housing options Indoor air quality Infill or redevelopment Public spaces Low impact development Public spaces Scale and massing Site compatibility Vegetation Wayfinding 	 Accessibility issues include WQ sampling locations, public access and use, ADA Light and noise could be related to hours of operation for maintenance activities in area by various parties (USFS, etc.) Housing options, infill/redevelopment, indoor air quality not applicable to this property or plan Interpretive signs for historic conditions, archaeological findings, adjacent properties LID could be used in updates to infrastructure, trails, etc. There could be restrictions on whatever development might occur (such as connections to adjacent properties via trails, etc. based on wildlife and other considerations Post flood facilities have been completed. Future facility needs unknown Flood protection is enhanced by bank and stream restoration, forest management Concerns about appropriate use of public amenities, special use requests Non-urban location, but carrying capacity of park, parking lots, etc. could be affected by use & development; effects on wildlife

SES Category/ [Applicability Rating]	Topics	Comments/Observations			
		 Priorities and intentions for use of property, specifically water supply protection, access and parking Vegetation :Monitoring, restoration, baseline conditions and inventory Wayfinding issues - Staffing & resource restrictions, providing alternative locations for passive recreation when conditions do not allow access to Button Rock; advance notice, trail reports 			
Recommendations	 trail reports, alternatives with although the preserve is purintentions for use, specificathrough limitations on publications. Carrying capacity restriction of development to accomm Any light and/or noise imparance and remedial activities or reserved. The plan should outline the 	os should be noted with respect to effects on wildlife, impacts odate parking and access cts from USFS or other operations should be assessed and			
Energy [3.8; 3 out of 4 topics applicable]	 Alternative fuels Energy efficiency Renewable and alternative energy Embodied energy 	 Possible energy source from wood waste from forest thinning options, however energy used to transport materials might be high Shuttle bus from parking lot is efficient use of energy Could be solar or hydro potential Energy from dog waste or wood chips 			
Recommendations		there are any energy savings related to minimizing rany possible alternative energy sources from materials (e.g.			
Transportation [5.0; 6 out of 6 topics applicable]	 Bicycles and pedestrians Freight delivery systems Level of service Parking Transit Vehicle Miles Traveled (VMT) 	 Main issue is public access in general and conflicts between multiple uses (kayak, equestrian, etc.) Public access needs cannot affect other priorities (water supply, watershed protection) Freight or delivery concerns include removal of trees/timbers, sediment, deliveries to residents (LPG, construction activity, fish deliveries) Resources limit level of service and management of parking, including possible use of shuttle buses Increases in use of and access to preserve will increase VMT 			
• The plan should evaluate and recommend levels of access, parking, and other impacts associated with public use in light of the primary objectives of protecting water supply,					

SES Category/ [Applicability Rating]	Topics	Comments/Observations				
	maintaining the preserve for wildlife and allowing some level of public passive recreational use Resource needs to accommodate any changes to access or use (such as shuttle buses) need to be identified in the plan					
Community and Individual Wellbeing [3.5; 7 out of 10 topics applicable]	 Art and culture Crime and law enforcement Diversity and rights Education Environmental justice Food and nutrition Hazard mitigation Health & human services Safety Sense of community 	 Is community culture supported by use of this preserve? Use of property has crime & regulatory implications Access for different populations supports community diversity and rights Opportunity to provide education about preserve features and primary use as water supply Food topic not applicable because fishing is primarily a recreation program not a food supply; some takes from reservoir not creek Hazards reduced by fire mitigation, hazards in preserve also related to good neighbor concerns, road conditions, deadfall trees & rocks, resident vs. public road use Health and human services issues not applicable to this plan Safety features include signage, emergency evacuation provisions, access, fire roads Environmental justice not applicable to this plan Sense of community related to status as City-owned preserve, accessible to everyone, and also a major water source for Longmont 				
Recommendations	 The plan should discuss the relationship of the preserve and reservoir's role as a major drinking water source and how that has supported the City's development and status and sense of community The plan should discuss the law enforcement and crime aspects of public access to the reservoir and recommend measures to limit these impacts Maintenance of public access can be noted as supporting community equity and rights The plan should address addition of educational features to inform the community about the primary uses and functions of the reservoir and preserve The plan should identify and discuss hazards and hazard mitigation measures, including road access and maintenance, fire mitigation efforts, trees & rocks, resident use of roads, etc. Safety features, both existing and proposed, should be included in the plan, including signage, emergency evacuation provisions, access roads, etc. The plan should stress the positive aspects of managing and/or limiting the use of and access to the preserve, including hazard mitigation through forest thinning, protection of the water supply, minimization of erosion, maintaining and improving wildlife habitat and corridors by preserving natural flood plains 					
[2.0; 2 out of 5 topics applicable]	Business development*Affordable housing*Jobs	 Business development, affordable housing and economic resilience not related to this plan The plan should identify potential for use of local materials and labor. 				

SES Category/ [Applicability Rating]	Topics	Comments/Observations				
	Local commodities and servicesEconomic resilience*	More staff could be needed depending on decisions for use of preserve, which would add some local jobs				
Recommendations	 The plan should include som supplies. 	ne language about supporting use of local services and				
Materials and Waste [5.0; 2 out of 3 topics applicable]	Deconstruction/reuseUse of environmentally responsible materialsWaste management	 Forestry management & use of associated waste materials Human and dog waste concerns 				
Recommendations	management activities; moi	reuse potential for materials generated by forest re discussion about this can be in review committee meetings human and dog waste problems and recommend methods				
Natural Environment [5.0; 9 out of 9 topics]	 Agricultural lands Air quality Aquatic habitat Climate adaptation Ecological connectivity Natural floodplains Greenhouse gas emissions Tree canopy Wildlife and habitat 	 All topics in this category are applicable to this management plan Some grazing use in watershed on private and County land Reducing traffic/access improves air quality and reduces GHGs Aquatic habitat is protected by limiting pollutant impacts in preserve and downstream Forest health is a major focus of plan Ecological connectivity supported by USFS, Boulder County, state forest Management of tree canopy in preserve improves forest health and water quality and reduces fire danger Wildlife and habitat considerations include Identification of critical areas and minimizing use/development to insure connectivity, corridors, ecological; appropriate vegetation to promote diversity 				
Recommendations						
Water Resources [2.5; 2 out of 4 topics applicable]	 Water efficiency (irrigation, conservation)* Water source protection Water resource management 	 Water source protection is a major focus of and reason for plan Could be staffing issues related to management of supplies, releases and downstream stream flow 				
Recommendations	 As noted in other categories, the plan needs to strongly emphasize that protection of Longmont's water supply is a major focus of the plan and a primary reason for any recommendations in the plan The plan should identify any resource/staffing needs associated with new or expanded activities related to water management 					

SES Category/ [Applicability Rating]	Topics	Comments/Observations	
Water Quality [5.0; 3 out of 3 topics]	Watershed healthPollution controlStormwater management	 Major influence on water supply, uses of watershed can affect health Dog waste, ash, herbicides (IPM), Erosion control, fire concerns; managing forest health can help control erosion 	
Recommendations	 The plan should emphasize the relationship between watershed health and water quality and how management of the reservoir and preserve can protect the environment and the safety of Longmont's drinking water supply by controlling or eliminating pollutant sources and preventing erosion 		

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Category	Discuss and determine the applicability of the following topics to the project, plan or program.	Response	Evaluation Notes & Other Details	Comments
Best Practices Organizational	Alignment	Yes		
	Integration	Yes		Technical advisory committee of various stakeholders
	Partnerships	Yes		Adjacent landowners, County, USFS, CSFS, CPW, TU (members of TAC)
	Stakeholder engagement	Yes		Description of public process and engagement
Best Practices Assets and Infrastructure	Adaptability	Yes		Reflect changes in needs, community population increases, GIS will be updated to reflect changing condition
	Commissioning	Yes		Water-related infrastructure, also usage- related infrastructure (cameras, trail counters)
	Ongoing monitoring & evaluation	Yes		Confirm and monitor impacts on Natural Heritage Society , ongoing water quality monitoring
	Long-term maintenance and repair	Yes		Maintenance and repair needs are an ongoing process; assessment of resource needs, compare to other facilities

	Reliability	Yes		Reliability of water sources,
	Infrastructure Resilience	Yes		
Best Practices Financial	Debt ratios	Not Applicable		Management plan, not applicable at this time
	Funding of capital costs	Yes	Question about if there is a general fund component that is applicable to capital and O&M	Plan needs to address capital funding, replacement costs/life cycle considerations
	Operations & Maintenance (O&M) cost recovery	Yes	O&M also has reservoir management budget in addition to specific Button Rock budget items	O&M budget considerations, asset management
	Rate impacts	Yes		Discuss user fees, permits, resident vs non-resident fees, etc. Consider how to help low income populations
Buildings and Infrastructure	Accessibility	Yes		WQ sampling locations, public access and use, ADA
	Ambient light and noise	Yes		Possible hours of operation for maintenance activities in area by various parties (USFS, etc.)
	Cultural and historic preservation	Yes		Interpretive signs for historic conditions, archaeological findings, adjacent properties

Development footprint	Unknown	Restrictions on development based on wildlife and other considerations ; connections to adjacent properties (trails, etc.	Post flood facilities have been completed. Future facility needs unknown
Floodplain protection	Yes		Bank and stream restoration, forest management
Heat island effect	Not Applicable		No effect
Housing options	Not Applicable		Not in control of city land use
Indoor air quality	Not Applicable		No identified impact
Infill or redevelopment	Not Applicable		not urban location
Low impact development (LID)	Yes		Updates to infrastructure, trails, etc.
Public spaces	Yes		Appropriate use of public amenities, special use requests
Scale and massing	Yes		Non urban location, but carrying capacity of park, parking lots, etc. could be affected by use & development; effects on wildlife
Site compatibility	Yes		Priority use and intentions for use of property, specifically water supply protection, access and parking

	Vegetation	Yes		Monitoring, restoration, baseline conditions and inventory
	Wayfinding	Yes	Staffing & resource restrictions	Providing alternative locations for passive recreation when conditions do not allow access to Button Rock; advance notice, trail reports
Energy	Alternative fuels	Not Applicable	Energy used to transport is a concern	Forest thinning options, possible use of wood waste
	Energy use & efficiency	Yes		Shuttle bus from parking lot
	Renewable energy	Yes		Solar or hydro potential
	Embodied energy	Yes		Dog related energy use, mulch/wood chips
Transportation	Bicyclists and pedestrians	Yes	Main issue is public access in general and conflicts between multiple uses (kayak, equestrian, etc.)	Public access needs cannot affect other priorities (water supply, watershed protection)
	Freight delivery systems	Yes		Freight or delivery concerns include removal of trees/timbers, sediment, deliveries to residents (LPG, construction activity, fish deliveries)
	Level of service	Yes		Resource needs
	Parking	Yes		Availability, resource needs to manage, shuttle bus

	Transit	Yes	
	Vehicle miles traveled (VMT)	Yes	Increase in use =increased VMT
Community and Individual Well- being	Arts and culture	Yes	Is community culture supported by use of this preserve?
	Crime and law enforcement	Yes	Use of property has crime & regulatory implications
	Diversity and rights	Yes	Access for different populations
	Education	Yes	Education about preserve features and primary use as water supply
	Environmental justice	Not Applicable	No effect
	Food and nutrition	Not Applicable	Fishing is primarily a recreation program; some takes from reservoir not creek
	Hazard mitigation	Yes	Fire mitigation, good neighbor concerns, road conditions, deadfall trees & rocks, resident vs. public road use
	Health and human services	Not Applicable	N/A
	Safety features	Yes	Signage, emergency evacuation, access, fire roads

	Sense of community	Yes		City-owned preserve, accessible to everyone, major water source
Economic Vitality	Business development	Not Applicable		No effect
	Affordable housing	Not Applicable		Does not apply to this plan
	Jobs	Yes		Could need more staff depending on ultimate use decisions
	Local commodities and services	Yes		Statement in plan re use of local services and supplies
	Economic resilience	Not Applicable		Not for this plan
Materials and Waste	Deconstruction/Re use	Unknown	Forestry management & use of materials	Discuss in technical committee review meeting
	Environmentally responsible materials	Yes		
	Waste	Yes		Dog & human waste, trash, trees
Natural Environment	Agricultural lands	Yes		Some grazing use in watershed on private and County land
	Air quality	Yes		Reducing traffic

	Aquatic habitat	Yes		Protection from pollutant impacts in preserve and downstream
	Climate adaptation	Yes	Healthy forest is key	Forest health is major focus
	Ecological connectivity	Yes		USFS, Boulder County, state forest connections for wildlife etc.
	Natural floodplains	Yes		Forest health is major focus
	Greenhouse gas emissions (GHG)	Yes		Forest health is major focus
	Tree canopy	Yes		In context of forest health and water quality, fire danger
	Wildlife and habitat	Yes		Identification of critical areas and minimizing use/development to insure connectivity, corridors, ecological services; appropriate vegetation to promote diversity
Water Resources	Irrigation efficiency	Not Applicable		No irrigation impacts
	Water conservation	Not Applicable		No irrigation impacts
	Water source protection	Yes		Major focus of management plan!!!!
	Water management	Yes		Could be staffing issues related to management of supplies, releases and downstream stream flow

Water Quality	Watershed health	Yes		Major influence on water supply, uses of watershed can affect health
	Pollution control	Yes		Dog waste , ash, herbicides (IPM),
	Stormwater management	Yes	Forest health and management can help control erosion	Erosion control, fire concerns

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	Raw Score
Best Practices - Organizational	5.0
Best Practices - Assets and Infrastructure	5.0
Best Practices - Financial	3.8
Buildings and Infrastructure	3.3
Energy	3.8
Transportation	5.0
Community and Individual Well-being	3.5
Economic Vitality	2.0
Materials and Waste	3.3
Natural Environment	5.0
Water Resources	2.5
Water Quality	5.0
Total (Out of 5)	3.9

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