



Parks and Open Space

5201 St. Vrain Road • Longmont, Colorado 80503
303.678.6200 • Fax: 303.678.6177 • www.bouldercounty.org

RES

TO: Board of County Commissioners

DATE: Thursday, December 11, 2014

AGENDA ITEM TITLE: Boulder County Parks and Open Space 2015-2020 Capital Improvement Projects

PRESENTER: Tina Nielsen

ACTION REQUESTED: Approval

Background

Boulder County annually approves a five-year Capital Improvement Project plan and budget for the Parks and Open Space Department. The plan helps the department to prioritize improvements on open space and engage the public to get input on new facilities. The plan also provides a structure for seeking partnerships and grant funds to help leverage our budget.

The capital budget is distributed between six project categories: Recreation & Facilities, Historic Preservation, Public Education, Agricultural Resources, Ecosystems, and Forestry. Funding for all of these categories except for Ag Resources and a portion of the Forestry budget comes from the sales tax approved by voters in 2010. Ag Resources capital projects are funded from revenue generated by crop leases.

Staff prioritizes projects based on our Department Mission and Goals; the Boulder County Comprehensive Plan; obligations established in management plans, purchase agreements and intergovernmental agreements; previous Capital Improvement Plans; and requests from our partner agencies in the county and the public.

2015 Capital Improvement Project Budget Summary

	2015				
	2014 Carryover	Grants	Partner/ Other	CIP	Total
Recreation & Facilities	\$250,000	\$200,000	\$8,000	\$150,000	\$608,000
Historic Preservation	\$50,500	\$170,487	\$0	\$100,000	\$320,987
Public Education	\$0	\$0	\$0	\$50,000	\$50,000
Agriculture	\$0	\$0	\$107,000	\$125,000	\$232,000
Forestry	\$25,000	\$371,000	\$0	\$200,000	\$596,000
Ecosystems	\$0	\$31,330	\$80,000	\$105,000	\$216,330
Grand Total	\$325,500	\$772,817	\$195,000	\$730,000	\$2,023,317

Staff Discussion and Recommendation

Our work plans continue to be affected by the historic floods of September 2013; flood recovery work is ongoing and because funding is separate from our capital budget, that work is not reflected here. In the 2014 CIP, a number of projects were delayed and budgets reduced due to flood damage and recovery work. As a result, in 2015 we are carrying forward CIP funds in three categories, and the domino effect plays out throughout the planning time frame. In 2015, the good news is that we will be able to spend our full CIP budgets in most categories. The exception is in the Ecosystem category, where we are spending about two-thirds of our normal CIP budget due to ongoing flood restoration efforts. For that reason, the 2015 CIP budget is \$730,000 rather than the usual \$775,000.

Thanks to contributions of partners, grants, and other funding sources, we are able to leverage the CIP budget by nearly \$1 million. These additional funding sources include:

- Grants from Great Outdoors Colorado, the Rocky Flats Natural Resource Defense Fund, Urban Drainage and Flood Control District, Colorado State Forest, Colorado Parks and Wildlife, USDA, FEMA Pre-Disaster Mitigation grant, and the State Historic Fund.
- Contributions of funding partners, including the Transportation Department, City of Louisville, City of Lafayette, and agricultural tenants.
- Cash-in-lieu (CIL) funds that have been generated over the years by subdivision development in the Niwot and Gunbarrel areas.

Finally, it is important to remember that the CIP budget does not reflect the personnel costs of the Parks and Open Space Department. In normal years, we conservatively estimate that 40% of staff time is devoted to capital projects. Staff costs are funded through the department's operating budget, and are significant – over \$2 million annually. The department spends a considerable amount of sales tax funds to hire seasonal employees to assist in the construction of CIP projects. Finally, the county pays for the cost of the Youth Corps, whose assistance is vital on many POS capital projects. Thus, the real cost of Capital Improvement Projects, including both the estimated project costs and personnel costs, is much greater than the capital budget.

POSAC Action

POSAC held a hearing on this item on November 20, 2014, and unanimously recommended BOCC approval of the CIP.

BOCC Action Requested

Approval

Attachments

- A: Boulder County Parks and Open Space Proposed 2015 – 2020 CIP Spreadsheets
- B: Capital Improvement Project Descriptions for 2015 – 2020 CIP

Summary of 2015 Capital Improvement Projects

		2015				
		2014 Carryover	Grants	Partner/ Other	CIP	Total
Recreation & Facilities						
1	Lagerman / Imel / AHI Rec. improvements	\$250,000	\$200,000	\$0	\$130,000	\$580,000
2	Walker Ranch Management Plan Implementation	\$0	\$0	\$0	\$10,000	\$10,000
3	Cardinal Mill Access	\$0	\$0	\$0	\$10,000	\$10,000
	Recreation & Facilities CIP Subtotal	\$250,000	\$200,000	\$0	\$150,000	\$600,000
Recreation & Facilities other funding						
4	Niwot / Somerset Trail & Dry Creek Repairs (CIL2)	\$0	\$0	\$0	\$8,000	\$8,000
	Other Recreation & Facilities Funding Subtotal	\$0	\$0	\$8,000	\$0	\$8,000
	Recreation & Facilities CIP Subtotal	\$250,000	\$200,000	\$8,000	\$150,000	\$608,000
Historic Preservation						
5	Rocky Mountain Mammoth Mine Shaft House	\$50,500	\$170,487	\$0	\$0	\$220,987
6	Ramey Barn & Granary	\$0	\$0	\$0	\$95,000	\$95,000
7	Altona School	\$0	\$0	O&M funds	\$5,000	\$5,000
	Historic Preservation Subtotal	\$50,500	\$170,487	\$0	\$100,000	\$320,987
Public Education						
8	Trailside Interpretive Panels	\$0	\$0	\$0	\$15,000	\$15,000
9	Ag Heritage Center Exhibits	\$0	\$0	\$0	\$15,000	\$15,000
10	Cardinal Mill Exhibits	\$0	\$0	\$0	\$10,000	\$10,000
11	Educational Exhibits	\$0	\$0	\$0	\$5,000	\$5,000
12	Traveling Ag Exhibit	\$0	\$0	\$0	\$5,000	\$5,000
	Public Education CIP Subtotal	\$0	\$0	\$0	\$50,000	\$50,000
Agricultural Resources						
13	Conventional Center Pivot	\$0	\$0	\$90,000	\$65,000	\$155,000
14	Organic Market Farms (H-L, Egg Farm, Bishop)	\$0	\$0	\$17,000	\$60,000	\$77,000
	Ag CIP Subtotal	\$0	\$0	\$107,000	\$125,000	\$232,000
Forestry/Fire CIP						
15	Ponderosa Forest Restoration, Betasso	\$0	\$316,000	\$0	\$102,000	\$418,000
16	Ponderosa Forest Restoration, Hall Ranch	\$0	\$0	\$0	\$0	\$0
17	Mixed Conifer Forest Restoration, Reynolds Ranch	\$25,000	\$0	\$0	\$0	\$25,000
18	Prescribed Fire, Heil Valley Ranch		\$0	\$0	\$48,000	\$48,000
	Forestry CIP Subtotal	\$25,000	\$371,000	\$0	\$200,000	\$596,000
Ecosystems						
19	Native Plant Propagation	\$0	\$21,330	\$0	\$23,500	\$44,830
20	Grassland Restoration	\$0	\$0	\$0	\$31,000	\$31,000
21	Riparian Restoration	\$0	\$10,000	\$80,000	\$20,000	\$110,000
22	Plaque Properties	\$0	\$0	\$0	\$5,500	\$5,500
23	Wildlife Habitat Restoration	\$0	\$0	\$0	\$25,000	\$25,000
	Ecosystems CIP Subtotal	\$0	\$31,330	\$80,000	\$105,000	\$216,330
	Grand Total	\$325,500	\$772,817	\$195,000	\$730,000	\$2,023,317

Recreation & Facilities Capital Improvement Projects 2015-2020

	RAF CIP: \$150k	2015				2016	2017	2018	2019	2020	Project Descriptions	
		2014 Carryover	Grants	Partner/ Other	CIP							Total 2015
1	Lagerman / Imel / AHI Rec. improvements	\$250,000	\$200,000		\$130,000	\$580,000	\$140,000				GA	AHI Loop trail construction. Grant funding approved. 2020 apply for grant for southern trail connection. \$250,000 "other" is carryover from previous years.
2	Walker Ranch Management Plan Implementation				\$10,000	\$10,000	\$10,000	\$60,000				Implement Management Plan improvements: trail improvements, design and construction of Ethel Harold parking lot, road redesign between Meyer's lots, and Natural play area design and installation.
3	Cardinal Mill Access				\$10,000	\$10,000	\$10,000	\$10,000				Public access to Mill Site. Coordinate with Historic Preservation (Additional \$10,000 in Historic CIP for 2016). Start to design improvements in 2015 and start on site improvements in 2016.
4	Castle Rock Recreation Site Improvements						\$100,000					Existing bridge improvements.
5	Trail Planning Approvals						GA	\$30,000	\$90,000	\$150,000	\$75,000	Implement identified new trails from trail planning efforts. This could include trails and facilities at Betasso, Heil South, Rabbit Mountain, South County Grassland area, Sherwood Gulch, Kenosha, Toll Property, Eldorado Canyon to Walker Ranch, Gold Hill, Northrim, Reynolds/Rogers/Castle Rock, and Rock Creek Spurs - 104th Street..
6	Rock Creek Grasslands Trails									GA	\$75,000	Unknown estimate for trail to Lafayette in 2020 from Pony Estates subdivision to the confluence area of Rock and Coal Creek. Partner with
Recreation & Facilities CIP Subtotal		\$250,000	\$200,000	\$0	\$150,000	\$600,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	
Recreation & Facilities other funding												
7	Niwot / Somerset Trail & Dry Creek Repairs (CIL2)				\$8,000	\$8,000						Pursue easement for Somerset to Legend Ridge connection to build this segment of Niwot System. Cash in Lieu funding available (Zone 2)
8	Niwot / LHVJ Johnson Park CIL					GA	\$30,000					Redesign of Parking Lot, restroom, kiosk, and possible trails at LHVJ and Niwot area.. In-kind POS labor, Zone 2 and 3 CIL funding, BC Transportation funding for restroom, and apply for GOCO local funding possibility. Niwot Trails Amendent process is currently occurring in the fall of 2014.
9	Braly Loop Trail & Parking Lot (CIL1, and CIP)						GA	\$63,000				Development of site dependent on flood restoration. Transportation funding of restroom. CIL funding of 48k available for R & F or Historic. Donation account 15k.
Other Recreation & Facilities Funding Subtotal			\$0	\$8,000		\$8,000	\$30,000	\$63,000	\$0	\$0	\$0	
Recreation & Facilities CIP Subtotal		\$250,000	\$200,000	\$8,000	\$150,000	\$608,000	\$180,000	\$213,000	\$150,000	\$150,000	\$150,000	

MP=Master or Management Plan scheduled to start during this year. GA=Grant application: grant award and funding in subsequent year.

Cash In Lieu (CIL) Balances as of September 15, 2014

Zone 1 (North of Nelson Road)	\$48,614	Use on Braly Loop
Zone 2 (Nelson to Arapahoe)	\$19,028	Distribute money to Somerset and other Niwot area projects
Zone 2 Johnson Park (funds to be used only on LHVJ)	\$21,526	Allocate to Lefthand Valley Grange Trailhead improvements
Zone 3 (south of Arapahoe)		

Historic Preservation Capital Improvement Projects 2015 - 2020

	Historic Preservation: \$100k	2015				2016	2017	2018	2019	2020	Project Descriptions
		2014 Carry over	Grants	Partner/ Other	CIP						
1	Rocky Mountain Mammoth Mine Shaft House	\$50,500	\$170,487			\$220,987	\$20,000	\$35,000		\$50,000	2015 - Contract out Phase I rehabilitation. Project will extend into 2016 due to wildlifehold delaying start date until September. If project extends into 2016, additional funds will be needed that year to complete project. RM budget to pay additional \$8,000 towards project due to delayed start and project extension. 2016 - If needed, Phase I additional funds. October 1 apply for a State Historical Fund Grant (SHF) grant for Phase II rehabilitation. 2017 - If awarded, contract out Phase II. 2020 - Contract out deconstruction and recycling of non-historic 1976 era house.
2	Ramey Barn & Granary				\$95,000	\$95,000					2015 - Contract out structural and civil engineering to repair flood damaged barn and granary including the cutbacks around the building's perimeter area.
3	Altona School			O&M funds	\$5,000	\$5,000	GA*	\$35,000			2015 - Buildings & Historic Preservation (B&HP) to begin restoration by deconstructing non-historic additions with O&M funds. If deconstruction is complete by June 1, then apply for a October 1 SHF grant to develop restoration construction documents. If awarded, contract out restoration construction documents. Project would be completed in mid 2016. 2016 - Apply for a October 1 SHF grant to complete restoration work. 2017 - If awarded, contract out restoration work.
4	Carolyn Holmberg Preserve at Rock Creek Farm Barn #22						\$25,000	\$10,000			2016 - In-house or contract out repairs on Barn #22 as per structural engineering drawings completed in 2014. 2017 - In-house repairs to outbuildings.
5	Cardinal Mill Tunnel Enclosure			O&M funds			\$25,000				2015 - Buildings & Historic Preservation to begin rehabilitation with O&M funds. 2016 - Continue in-house rehabilitation if B&HP do not complete project
6	Cardinal Mill Public Access						\$10,000				2016 - Develop public access plans with contractor assistance and coordinate with Recreation & Facilities Division on other public access elements .
7	Reynolds Ranch Log House		GA*				\$10,000	\$10,000	GA*	\$30,000	2015- Apply for a SHF grant to complete a historic structure assessment. No cash match required. Complete project by end of year. Reynolds Family lease expires April 21, 2015. 2016 - In-house or contract out immediately needed repairs. 2017 - April 1 - Apply for a SHF grant to complete construction documents based upon historic structure assessment findings. If awarded, begin project in fall and possibly continue into 2018. Project completed by summer 2018. 2018 - Apply for October 1 SHF grant to complete repairs identified in construction documents. 2019 - If 2018 repair grant awarded, in-house or contract out repairs.
8	Henning Barn						\$5,000	\$5,000			external visual interpretation value the barn will project and along the future St. Vrain Trail.
9	Braly Barn							\$85,000	\$60,000		2018- Contract out rehabilitation with 2013 revised structural plans. 2019 - Continue rehabilitation.
10	Olivieri Buildings							\$10,000			2018 - In-house rehabilitation of cabin, garage and stone office building for possible use as an artist-in-residence. Remove collapsed bunkhouse.
11	Tumbleson House at Hall Ranch									\$50,000	2020 - Contract out foundation or other repairs.
12	Miscellaneous Small Buildings						\$5,000	\$5,000	\$5,000	\$10,000	Cabin, Rogers, Walker outbuildings, Wall Street outbuildings, Heil II outbuildings, Puzler, Betasso, Blue Bird outbuildings, Braly outbuildings) in partnership with
	Historic Preservation Subtotal	\$50,500	\$170,487	\$0	\$100,000	\$320,987	\$100,000	\$100,000	\$100,000	\$100,000	

Agricultural Resources Capital Improvement Projects 2015-2020

	Agricultural Resources: \$125k	2015			2016	2017	2018	2019	2020	
		Grants**	Partner/ Other	CIP						
Center Pivot Sprinkler--Conventional										
1	Cattell/Sheburne Center Pivot		\$90,000	\$65,000	\$155,000					Full center pivot (cost shared)
2	Henry/ Ross Center Pivots (2)				\$125,000					2 Full center pivots (EQIP grant & tenant cost share)
3	Quicksilver Lateral Sprinkler						\$90,000			lateral sprinkler system (tenant cost share)
4	Dodd Farm - Center pivot							\$80,000		pipeline, diversion structure and electric service
Center Pivot Sprinkler--Organic										
5	ERTL - Center Pivots (1 organic)					\$125,000				2 Full center pivots (EQIP grant & tenant cost share)
6	AHI-Replace center pivot							\$90,000		Replace existing centerpivot
Organic Market Farms										
7	Organic Market Farm #1 - Harney Lastoka		\$17,000	\$17,000	\$34,000					New irrigation system and new electric service
8	Organic Market Farm #2 -Egg Farm			\$30,000	\$30,000					New irrigation system and new electric service
9	Organic Market Farm #3 - Bishop			\$13,000	\$13,000					Pump and irrigation pipeline
10	Organic Market Farm #4 - Platt						\$35,000			new irrigation system and new electric service
11	Organic Market Farm #5 - Wilkie/Miller							\$35,000		New irrigation system and new electric service
12	Other Irrigation projects									
	Stromquist - irrigation pipeline on Leggett Ditch							\$45,000		Bury irrigation pipeline to replace open ditch (ravine)
Ag CIP Subtotal			\$107,000	\$125,000	\$232,000	\$125,000	\$125,000	\$125,000	\$125,000	\$125,000

Forestry-Fire CIP 2015-2020

	Forestry/Fire CIP: \$200,000	2015				2016	2017	2018	2019	2020	Project Descriptions
		2014 Carryover	Grants	Partner/ Other	CIP						
1	Ponderosa /Forest Restoration Large-Scale Treatments >50 Acres										Forest ID Team will work out Details
	Betasso PA1		\$316,000		\$102,000	\$418,000					91 Ac @ \$4,593/ac = \$418k (\$216k FEMA grant, \$100K CFR Grant, \$102k POS = \$418K)
	Heil PA1/PA2						\$159,000				Contract, apply for grant, (Priority in County and local CWPP, P2P-LRP, & POS Mgt. Plan)
	Walker PA1							\$161,000			Contract, apply for grant, (Priority in County and local CWPP & POS Mgt. Plan)
	Hall PA5 Units 1-6								\$150,000		Contract, apply for grant, (Priority in County and local CWPP, P2P-LRP, & POS Mgt. Plan)
2	Ponderosa/Forest Restoration Small-Scale Treatments <50 Acres										Forest ID Team will work out Details
	Hall PA6U1 Stands 1-8 (44 Ac)		\$55,000		\$50,000	\$105,000	\$62,500				CSFS WUI SAF Grant \$55,000 staff, \$55,000 Staff Match. We will need to contract about 25 acres of the 44, @2500 therefore need \$62500 in CIP. The grant will be done in 2 years: 2015 and 2016 with aim of getting the contract done in 2015)
	Hall PA6U2 Stands 11-19 (17.8 Ac)						\$32,500				Bumped up due to grant opportunity. CSFS has forwarded grant app to the final selection group for the the entire state.
	Hall PA4U4 Stands 1-9 (30 ac)						\$15,000	\$10,000			Apply for grant (Priority in County and local CWPP, P2P-LRP, & POS Mgt. Plan) nelson loop
	Hall PA7U5 Stands 1-3 (12.5ac)						\$15,000				Apply for grant (Priority in County and local CWPP, P2P-LRP, & POS Mgt. Plan) nelson loop, Bump a year due to flood.
3	Mixed-Conifer Forest-Health Small-Scale Treatments <50 Acres										Forest ID Team will work out details
	Reynolds Unit 10, Meeker or Ridge*	\$25,000				\$25,000					*Carry-over from 2014
4	Mixed-Conifer Forest-Health Large-Scale Treatments >50 Acres										Forest ID Team will work out details
	Caribou PA1 +Sherwood (60+ ac)								\$150,000		Mgt. Plan Priority for property, with homes on adjacent properties
	Reynolds PA1U2,3								\$10,000		Very fragmented landscape with homes in between open space parcels
5	Prescribed-Fire/Activity Fuels Projects										Burning activity fuels from completed(2010-2013) contract mechanical operations
	Heil PA7				\$48,000	\$48,000	\$20,000				Burning activity fuels from completed (2013) contract mechanical operations
	Hall PA4U5						\$25,000				Burning activity fuels from mechanical operations
	Hall PA7 Unit 3 and 5 (183 ac)						\$25,000				Burning activity fuels from mechanical operations
	Betasso PA1							\$20,000			Burning activity fuels from mechanical operations
	Heil PA1								\$31,000		Burning activity fuels from mechanical operations
	Heil PA2							\$3,000	\$10,000	\$40,000	Burning activity fuels from mechanical operations
6	Weed Management/Post-Reclamation Work										
	Mud Lake						\$5,000				
	Reynolds Forestry Units 2008-2014							\$3,000	\$3,000	\$3,000	
	Betasso PA1							\$3,000	\$3,000	\$3,000	
	Hall PA4,PA7									\$3,000	
7	Access Road Maintenance										Use Road Maintenance or Contract to complete LU approved project
	Heil PA1 Units 1-3						\$10,000				Temporary Road, Use Road Maintenance or Contract, LU Process
	Forestry/Fire CIP Subtotal	\$25,000	\$371,000	\$0	\$200,000	\$596,000	\$175,000	\$200,000	\$200,000	\$200,000	

Boulder County Parks and Open Space Capital Improvement Project Descriptions 2015-2020 December 2014

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RECREATION AND FACILITIES Projects: CIP Funds

1. **Lagerman/Imel/AHI/Recreational Improvements:** 2015 CIP, carryover CIP funds and GOCO grant. The management plan, completed in 2012, includes approximately 6.4 miles of additional trail: a crusher fine loop trail to the north of Lagerman Reservoir, and a trail to the south of Lagerman Reservoir to Oxford Road.

2. **Walker Ranch Management Plan Implementation:** 2015, 2017-18 CIP. The management plan update for Walker Ranch was completed in 2013. Recommended improvements include the upgrade of the Ethel Harrold trailhead, for which trailhead and property boundary surveys were completed in 2010; road redesign between Meyer's lots; and natural play area design and installation.

3. **Cardinal Mill Access:** 2015 CIP. Extensive restoration of the Cardinal Mill restoration work over 10 years was completed in 2013. The next phase is to create infrastructure to allow public access and interpretation of the mill. Funds will be used to design parking and a trail along the east side of the mill along with visitor access pods in 2015, and begin site improvements in 2016. Additional funding is in Historic Preservation and Public Education.

4. **Castle Rock:** 2017 CIP. This highly visible site adjacent to State Highway 119 in Boulder Canyon abuts the BCPOS Platt Rogers property; partners include Colorado Division of Transportation (which owns the actual Castle Rock) and the Boulder Climbing Community group. Castle Rock is a very popular site, used by rock climbers, anglers, and picnickers. A recreation plan was created for the general site in 2012, and will be added to the upcoming Rogers Reynolds management plan update. The Castle Rock recreation plan addresses the many challenges posed by the site, including two old vehicle bridges, highway access, parking, resource protection, recreation access, and human waste management. In 2012, site work included new signage, a survey, road work, and clearing for the

highway visibility. In 2013 and 2014, engineering work was completed for bridge redesign. In 2017, funds will be used to complete bridge upgrades.

5. **Trail Planning Approvals:** Future grant funds and CIP funds 2017-2020. From time to time staff undertakes supplemental trail planning efforts. One such effort is underway for Eldorado Canyon-to-Walker Ranch trail connection, and future efforts are anticipated for trails and facilities at Betasso Preserve, Heil Valley Ranch/South, Rabbit Mountain, South County Grasslands area, Sherwood Gulch, Kenosha, Toll Property, Gold Hill, North Rim, Reynolds/Rogers/Castle Rock, and Rock Creek Spurs/104th St. We anticipate submitting a grant to help fund this work in 2016.
6. **Rock Creek Grasslands Trails:** Grant application in 2019, 2020 CIP and possible grant funds. Based on direction in the 2011 Management Plan, in 2014 BCPOS completed a trail along State Highway 287 from Broomfield through Ruth Roberts and connecting to the regional Rock Creek trail. This project was a partnership with Broomfield and was awarded GOCO “mini” trails grant in fall 2013 for \$45,000 in the fall of 2013. Broomfield and the GOCO grant funded construction of a trail on the Ruth Roberts property in 2014. The Pony Estates-Lafayette connector trail is planned for 2020, following a grant application in 2019. An estimated scope and budget estimate for this trail segment still needs to be determined.

RECREATION AND FACILITIES Projects: Other Funds

7. **Niwot/Sommerset Trail and Dry Creek Repairs:** 2015 Cash-in-lieu. At Somerset, funds will be used to construct a cross walk to Legend Ridge, replacing an ad hoc social trail. At Dry Creek, erosion has created a safety hazard for the trail. The trail easement granted by St. Vrain Valley School District requires us to maintain the adjacent ditch bank; we will work to stabilize the ditch bank to remedy the problem. (UPDATE)
8. **NIWOT/Left Hand Valley Grange (LHVG) Johnson Park.** Grant application in 2015 plus Cash-in-lieu funds to complete work in 2016. Work includes redesign of parking lot, restroom, kiosk, and possible trail reroute at LHVG and Niwot area.
9. **Braly Loop Trail & Parking Lot (CIL 1 and CIP).** Creating a loop trail, Trail Head and parking facility, to eventually be part of the St. Vrain corridor trail. Coordinating with Historic Preservation and Public Education.

HISTORIC PRESERVATION CIP Projects:

1. **Rocky Mountain Mammoth Mine Shaft House and Cabin:** SHF Grant, 2014 CIP carryover and 2015-2017 CIP. Located at the top of Magnolia Road, the Rocky Mountain Mammoth Mine is one of Boulder County’s most intact examples of a late 19th and early 20th century small scale hard rock mining operation once common in the foothills of Boulder County. Such intact sites are extremely rare and offer a unique opportunity for interpretation. The shaft house and cabin date from the late 19th century.
 - 2009: Purchased by Boulder County in early 2009. The previous year, the, the Division of Reclamation Mining & Safety appropriated emergency funding to close the dangerous shaft opening inside the shaft house.
 - 2010: BCPOS nominated the property to the National Register of Historic Places.

- 2011: Developed engineering plans for the shaft house and cabin in preparation for rehabilitation.
 - 2013: SHF grant award for Phase I shaft house rehabilitation work. BCPOS rehabilitated the cabin.
 - 2014: Shaft house rehabilitation work delayed until 2015 (CIP fund carryover).
 - 2015-2016: Phase I shaft house rehabilitation; apply for Phase II shaft house work that includes roof, doors, siding and windows.
 - 2017: If awarded complete Phase II rehabilitation.
 - 2020: Deconstruct 1976 unfinished house that is a non-contributing feature the site.
2. **Ramey Barn & Granary.** 2015 CIP (see also Public Education). The Ramey Farm is located in the Hygiene area and was first settled by Boulder County pioneers George W. Webster and Charles C. True in the early 1860s. In 1862, Webster filed a 160 acre homestead patent and most likely built the house that stands today. The property is significant as a well-preserved and intact farm complex that retains a high degree of historic physical integrity. The house and barn are thought to be one of the oldest remaining buildings in the County.
- 2001: Purchased by Boulder County.
 - 2002-2012: BCPOS rehabilitates the 7 buildings on the property.
 - 2013: September flood severely damaged the property. The barn and granary undermined by flood waters that resulted in major damage to both buildings.
 - 2014: BCPOS stabilizes barn and relocates granary to temporary location to await permanent repairs.
 - 2015: Contract out structural and civil engineering to repair flood damaged barn and granary including the cut banks around the building's perimeter area.
3. **Altona School:** SHF grant and 2015& 2017 CIP (see also Public Education). The 1880 Altona School is the oldest remaining one-room stone school house in Boulder County. The school educated children from the Altona community from 1880 until about 1949 when consolidation and declining population forced the school to close. The Heil family purchased the property in July 1949 and began using the building as a residence. Several small additions were added in the 1950s, but the stone school house remains remarkably intact.
- 2012: Purchased as part of the Heil Valley Ranch II acquisition.
 - 2013: Landmarked in February 2013. Awarded a SHF Historic Structure Assessment grant.
 - 2014: SlaterPaull architects completed historic structure assessment.
 - 2015: BCPOS to deconstruct 1950s additions by June 1. Apply for SHF grant to develop construction documents.
 - 2016: Apply for SHF grant for restoration work.
 - 2017: Complete restoration work.
 - 2018: submit a SHF grant application to complete the restoration work.
 - 2019: using grant funds, hire contractors to complete restoration work
4. **Carolyn Holmberg Preserve at Rock Creek Farm Buildings.** 2016 CIP. Rock Creek Farm is a historic farm complex that is associated with the early agricultural development of Boulder County. The 1,124 acre property is located in southeast Boulder County and features numerous historic agricultural buildings that are under an agricultural lease. The 1912 Goodhue Farmhouse was rehabilitated in 2005 and is currently used as a meeting facility. In 2015, funds will be used to stabilize Barn #22, which is an early 20th century wood framed building used by the agricultural tenant. It shows signs of structural failure due to the lack of cross bracing in its original construction method. Stabilization work will be based on,

engineering plans were contracted out in 2014. Funding is allocated in 2017 for additional work on Rock Creek Farm buildings.

5. **Cardinal Mill Tunnel Enclosure.** 2015 Non-CIP Funding & 2016 CIP. Adjacent to the Cardinal Mill, the Boulder County Tunnel snow shed is a historically important element to Cardinal Mill. The snow shed served as the entrance to the Boulder County Tunnel portal where the ore was extracted deep underground by miners and hauled to the surface with ore carts and transported a short distance to the Cardinal Mill for processing. The tunnel portal collapsed after the mine closed and eventually the snow shed collapsed leaving a partially standing structure. The goal is to rebuild the structure as it historically stood when the mine was in operation and incorporate the structure in the interpretation of the site. 2015 Buildings & Historic Preservation to begin rehabilitation with O&M funds. 2016 - Continue in-house rehabilitation if B&HP do not complete project.
6. **Cardinal Mill Public Access.** 2016 CIP. Cardinal Mill is located on a 0.63-acre parcel a few miles west of the Town of Nederland. Purchased on April 25, 2003, the 1901 building is one of only three contemporary mills left in the state with most of its equipment remaining inside. The mill's 7 year rehabilitation project concluded in November 2012. Develop public access plans with contractor assistance and coordinate with Recreation & Facilities Division on other public access elements.
7. **Reynolds Ranch Log House.** 2015-2019 CIP. The circa 1865 log house is part of the historic Hockaday Ranch located southeast of the Town of Nederland. Charles Hockaday, who most likely constructed the building, settled in the area after working as a freight operator from St. Joseph Missouri to Central City Colorado. The property is significant for its association with the early settlement of the area and the development of high country ranching. Reynolds Family lease expires April 21, 2015. After lease expires apply for a SHF grant to complete a historic structure assessment. 2016 complete immediately needed repairs. 2017 apply for a SHF grant to complete construction documents based upon historic structure assessment findings. If awarded, begin project in fall and possibly continue into 2018. Project completed by summer 2018. 2018 - Apply for SHF grant to complete repairs identified in construction documents. 2019 – if grant is awarded, in-house or contract out repairs.
8. **Henning Barn:** 2016-2017 CIP. The 1905 barn is located on the Western Mobile property just west of Hygiene. Once part of a multi building agricultural complex, the barn, silo and loafing shed are all that remains. The large wood framed three-portal barn is located in the expansive flat open land that characterizes the area and is highly visible to travelers along Hygiene Road. BCPOS began rehabilitation in 2014, but was not able to complete the project due to other higher priority projects. 2016-2017 - Continue in-house rehabilitation to keep barn standing to provide the external visual interpretation value the barn will project and along the future St. Vrain Trail. 2016-2017 - Continue in-house rehabilitation to keep barn standing to provide the external visual interpretation value the barn will project and along the future St. Vrain Trail.
9. **Braly Barn:** 2018-2019 CIP. The circa 1903 Braly barn is located on the historic Wencel Farm northwest of Hygiene. The County purchased the 112.48-acre property on June 27, 2000. Both the main branch and the south branch of St. Vrain Creek cross the property. 2018-2019 - Plans call for the rehabilitation of the barn so that it will be suitable to use for interpretation purposes and as a meeting point for the public when the proposed St. Vrain trail crosses through the property. Engineering plans were updated in 2013 for the planned rehabilitation.
10. **Olivieri Buildings:** 2018 CIP. Purchased in 2007, the Olivieri property is located in Sunshine Canyon and originally operated as a small-scale hard rock mining operation before becoming a vacation home for the Olivieri family for over 50 years. The buildings are a representative example of

the types of rustic mining cabins that were typically constructed during the early 20th century through their simplicity of design and use of readily available natural materials. 2018 - Complete in-house rehabilitation of cabin, garage and stone office building for possible use as an artist-in-residence. Remove collapsed bunkhouse.

11. **Tumbleson House:** 2020 CIP. The landmarked Tumbleson House at Hall Ranch was rehabilitated with part of a GOCO Legacy Grant in 2003. In the past few years, mobile soils have increased the movement of the building resulting in serious cracks in the stone walls. In 2010 a structural engineer was hired to evaluate the issue and make recommendation for repairs. Based upon the engineer's recommendations, a partial foundation will be installed in 2020 to alleviate the movement of the building and other repairs completed in order to keep the house viable for a potential future use for intern housing or meeting center.
12. **Miscellaneous Small Buildings:** 2017-2020 CIP. A group of smaller historic buildings that need a lesser degree of work are scheduled for rehabilitation work each year from 2017- 2020. The high priorities include the Geer Cabin (Heil Valley Ranch), Rogers Ranch buildings (Rogers), Walker Ranch outbuildings, Wallstreet outbuildings (Wallstreet Assay Office), Heil Valley Ranch II outbuildings, Puzzler town site (Arapahoe Lodes), Betasso outbuildings, Blue Bird outbuildings (Caribou Ranch) and Braly outbuildings. The list and work will be refined and prioritized based on forthcoming assessments. Work may be done in partnership with the Boulder County Youth Corps.

PUBLIC EDUCATION CIP Projects:

1. **Trailside Interpretive Panels at Various POS Sites,** 2015-17 and 2019-20 CIP. Each year, interpretive panels will be created for various POS properties open to the public. In some years we will be replacing weathered, damaged panels or updating the information. Panels focus on the property's natural, cultural, and agricultural resources, as well as resource management activities. In 2015, the series of panels at Walker Ranch will be replaced. Two new panels about the effects of the 2013 flood will be installed at Heil Valley Ranch and Walden Ponds, and new panel at the Ag Heritage Center & McIntosh Lake intersection inviting trail users on the McIntosh to visit the Ag Heritage Center. The cost for a trailside panel ranges from \$1,500 to \$3,000 depending on whether they are designed by POS or consultant, as well as the number of photographs and original artwork.
2. **Ag Heritage Center Exhibits:** 2015, 2016, 2018 & 2020 CIP. In 2015, we will modify the "Faces of Boulder County" exhibit and convert the tractor video to digital format. In 2016, the "Preserving Ag Lands" exhibit will be replaced.
3. **Cardinal Mill Exhibits:** 2015-2017 CIP. In 2015, two interpretive panels will be installed at the tunnel entrance about the local geology that made mining possible in the area and information about working in a gold mine. In 2016, we will begin fabricating interior exhibits, including a model of a mill. We anticipate finishing the interior exhibits in 2017. Interior exhibit themes will include: Old Cardinal and current Cardinal site, life in a mining town, and how a mill works.
4. **Educational Exhibits,** 2015-17 and 2019-20 CIP. Replace small displays and purchase items needed to enhance educational experiences at various sites including the Hard Rock Mining Museum, Assay Office Museum, Agricultural Heritage Center, and Walker Ranch.
5. **Traveling Ag Exhibit:** 2015 CIP. The department's Agricultural Resources Division will use a portable exhibit at the many festivals and event they attend, including local farmer's markets, "Our Lands to Your Hands" school event and the Boulder County Fair.

6. **Altona School House:** 2017 CIP. We'll furnish the interior of one-room school house so we can bring local school groups to really experience what school was like in earlier times.
7. **Braly & Ramey:** 2017 CIP. Once the trails are constructed, a spotting scope to public to view nesting raptors in the northern part of the Braly property will be installed (no quarters needed!). Also a series of trailside panels will installed at Braly and Ramey properties highlighting the natural and cultural resources.
8. **Hard Rock Mining Museum and Other Hard Rock Mining Sites:** 2017 & 2020 CIP. As we develop our hard rock mining sites, we will add interpretive panels for driving tour sites including Rocky Mountain Mammoth Mine, Blue Jay, etc.
9. **Ed Trailer:** 2018-2019 CIP. After 17 years of use, we anticipate that we will need to replace the Ed Trailer with another traveling exhibit/vehicle to take to local schools and festivals.
10. **Assay Office Museum:** 2018 CIP. Funds will be used to expand assaying exhibits.

AGRICULTURAL RESOURCES CIP Projects:

Center Pivot Sprinklers: We install center-pivot irrigation systems to conserve water, reduce erosion, reduce labor costs, and increase crop production. The Natural Resources Conservation Service (NRCS) offers cost-share through their voluntary Environmental Quality Improvement Program (EQIP). This program will cost-share on the average 50% of the total cost. In addition to the environmental benefit, center pivots provide an economic benefit for the County through increased production; typically a 25% increase in production or more is attainable. This correlates into increased revenue. Center pivot sprinklers are also a great benefit to our stewardship responsibilities. The farm field roads and open irrigation ditches are eliminated, reducing the prime location for noxious weeds to get established. This reduces the weed management costs.

1. Center Pivot Sprinkler—Conventional Farms

- a. Cattell/Sherburne Center Pivot: 2015
 - Approximately 105 acres
 - POS cost share is about \$43,000 or 29%
 - Ag tenant cost share is \$29,000 or 20%
 - EQIP funds cost share at \$80,000 or 53%
 - Total cost of \$152,000
- b. Henry/Ross Center Pivots (2): 2016
 - Approximately 320 acres for 2 pivots
 - POS cost share estimated at \$125,000 or 38%
 - Ag tenant cost share estimated at \$100,000 or 31%
 - EQIP cost share will max at \$100,000 or 31%
 - Total cost of \$325,000
- c. Quicksilver Lateral Sprinkler: 2018

- Approximately 125 acres
 - POS cost share estimated at \$52,000 or 26%
 - Ag tenant cost share \$63,000 or 32%
 - EQIP estimated cost share at \$85,000 or 42%
 - Total cost estimated at \$200,000
- d. Dodd Farm Center Pivot: 2019
- Approximately 95 acres
 - POS cost share estimated at \$55,000 or 34%
 - Ag tenant cost share estimated at \$29,000 or 18%
 - EQIP cost share estimated at \$80,000 or 48%
 - Total cost estimated at \$164,000

2. Center Pivot—Organic Farms

- a. ERTL Center Pivot: Configuration A (one larger pivot) 2017
- Approximately 248 acres
 - POS cost share estimated at \$117,000 or 40%
 - Ag tenant cost share at \$63,000 or 23%
 - EQIP cost share will maximum at \$100,000 or 37%
 - Total cost estimated at \$270,000
- b. ERTL Center Pivot: Configuration B (2 smaller pivots) 2017
- Approximately 130 acres
 - POS cost share estimated at \$73,000 or 39%
 - Ag tenant cost share at \$30,000 or 16%
 - EQIP cost share ate \$84,000 or 45%
 - Total estimated cost of \$187,000
- c. AHI Replacement Center Pivot: 2020
- Approximately 70 acres (losing 6 acres to trail)
 - Swing arm system to allow for trail alignment
 - Estimated cost of \$90,000

3. **Organic Market Farms.** Organic market farms are generally small acreage farms and have the irrigation water and soils that are suited to growing vegetables or “Farmers Market” type produce. These types of crops are raised more efficiently with drip or sprinkler irrigation. This will require new irrigation infrastructure, which typically includes an irrigation water holding structure or pond, pumping station, some underground pipeline, and new electric service brought to the irrigation pump. These types of systems can supply irrigation water to overhead sprinklers and/or drip-tape irrigation.

- a. Harney-Lastoka: 2015
- Approximately 12 acres converted to a CSA or Market Farm
 - Existing pipeline with no gravity, a booster pump is required
 - Estimated cost is \$40K to \$50K cost sharing with Cities of Lafayette and Louisville

- b. Egg Farm: 2015
 - Approximately 11 acres
 - Dependent on water quality for crop production (high sodium concerns)
 - Well development estimated at \$30,000
 - Irrigation system (underground pipeline and risers) at \$30,000
 - Update electric power at \$15,000
- c. Bishop: 2015
 - Improve irrigation diversion structure
 - Improve irrigation water conveyance with pipeline
 - Estimated cost of \$13,000
- d. Platt: 2018
 - Approximately 43 acres converted to organic
 - Construct small irrigation holding pond and new electric service
 - Estimated cost of \$35,000
- e. Wilkie/Miller: 2020
 - Approximately 38 acres
 - Construct small irrigation holding pond and new electric service
 - Estimated cost of \$35,000

4. **Other Irrigation infrastructure**

- a. Irrigation pipeline Stromquist/Leggett Ditch
 - Approximately 1950 feet in length
 - Estimated at a 24 inch diameter pipeline
 - Requires a large amount of fill dirt to be hauled at place in existing deep ditch
 - Estimated cost at \$45,000 with Transportation Departments assistance

FORESTRY CIP Projects:

1. **Ponderosa Forest Restoration Large Scale Treatments (>50 ac.):** FEMA PDM Grant; 2015, 2017-2019 CIP. Boulder County developed a Community Wildfire Protection Plan (CWPP) to identify areas at greatest risk for wildfire, and to target areas where forest management is appropriate. We use this plan to help formulate forest management on Boulder County Open Space properties.
 - a. \$316,000 FEMA Pre-Disaster Mitigation grant for hazard mitigation work on Mud Lake and Betasso. The Mud Lake project, slated to be completed by end of 2014, will protect the Town of Nederland if a wildland fire were to come from the north. In addition to reducing the wildfire potential in this mixed conifer forest, it also will improve forest health. The Betasso project is slated to begin in 2015 and is a fire mitigation project that will reduce wildfire risk for the Betasso Water Retreatment Plant and adjacent neighbors in the Four Mile fire protection district. POS match was \$105,000 for Mud Lake and \$102,000 for Betasso.
 - b. The large scale projects we are proposing for 2017-2019 include more work at Heil Valley Ranch, a project at Walker Ranch, and Hall Ranch. These projects have all be identified in the property specific manage plans, and will be contracted out. In addition, these are targeted projects for upcoming grant opportunities.
2. **Ponderosa Forest Restoration Small-scale treatments (<50 ac.):** CSF Grant; 2015 CIP

- a. POS received a Colorado State Forest Service Grant for working on Hall Ranch. This includes inventory and planning on 175 acres, and treatment on about 44 acres in the next two years. The grant is for \$55,000 and POS Forestry CIP will match it with \$50,000 in 2015.
 - b. Hall Ranch will continue to be our focus for small scale ponderosa pine restoration for 2016 – 2018.

3. **Mixed-Conifer Forest-Health Large-Scale Treatments <50 Acres:** 2015 CIP. POS received a grant from the Department of Natural Resources to purchase a grinder. Our matching contribution is all the small scale treatments on numerous properties. Our CIP will match this grant with \$25,000 (carryover from 2014) for treatment on the Reynolds property, the Ridge Road property, and/or the Meeker community forestry sort yard.

4. **Mixed-Conifer Forest-Health Large-Scale Treatments >50 Acres:** 2020 CIP. The mixed-conifer forest type occurs at approximately 6,900 feet to 10,500 feet in elevation, nestled between lower-elevation forests such as ponderosa pine and higher-elevation subalpine forests such as spruce-fir. Treatments in mixed-conifer aim to keep the forest stand healthy and diverse, and can be used to plan for climate change impacts by favoring species that are able to survive hotter and dryer conditions. Funds are allocated to Reynolds Ranch and Caribou Ranch near the Peak to Peak highway in 2020.

5. **Prescribed Fire/Activity Fuels Projects:** 2015-2020 CIP.
 - a. After BCPOS has completed mechanically thinning some of our forests, the ideal next step for ecological process is to reintroduce fire. Our Prescribed Fire team identifies appropriate areas to use this management practice. It can include areas of grassland and shrub land, as well as forests that have been thinned in the last several years. Heil Valley and Hall Ranches are key areas where we would like to use prescribed fire in 2015 for \$48,000.
 - b. 2016 – 2020 prescribed fire activities will continue to target Heil Valley Ranch as well as Hall Ranch and Betasso Preserve. We have treated hundreds of acres on these properties that will benefit from the reintroduction of fire.

6. **Weed Management/Post-Reclamation Work:** 2016-2019 CIP. After we complete a forest restoration project, there is typically a flush of non-native species, including noxious weeds. This is due to the soil disturbance and the fact that weed seeds can remain viable in the soil for years or even decades. In order to keep the weed infestation in check, we dedicate funds to treating the weeds and reseeding with desirable species if appropriate.

7. **Access Road Maintenance:** 2017 CIP. After we complete a forest restoration project, the access roads used by large trucks usually need some grading and repair. This fund is dedicated to leaving the access roads as good as we found them. Funds will be used to restore access roads at Heil Valley Ranch.

ECOSYSTEMS CIP Projects:

1. **Native Plant Propagation:** 2015-2019 CIP. POS is collecting local, native ecotypes of seed that are not available commercially. Some of the funding for this project is provided by the Rocky Flats Natural Resources Damages Fund through 2017. Six native species are currently in production with Benson Farms Native Seed in Washington State for seed increase. In addition, we have five native species being grown out on 0.2 acres at the Peck Property, called the Peck Native Seed Garden. The native seed we generate will be available for BCPOS ecological restoration projects in the future.

2. **Grassland Restoration Projects:**

- **Mowing:** 2015-2019 CIP. Because of all the mowing maintenance needed on multiple grassland restoration properties, a separate category was created for this need. Funds will be used to rent a tractor and hire a seasonal mower, enabling more efficient and effective mowing on Rock Creek Grasslands, Egg Farm, CEMEX and others.
- **Rock Creek Grasslands:** 2015-2017 CIP. BCPOS has been working to restore several agricultural properties in the southeast part of the county to native prairie beginning with restoration of the Tommy Thompson property in 1996. The project is now focused on reseeded problem areas and maintenance. The focus in 2015 is 45 acres at Ruth Roberts.
- **CEMEX Restoration:** 2015-2018 CIP. Restoration efforts began in 2004 and will continue through 2019. In 2015, a cover crop of slender wheatgrass should establish on 150 acres. This area will be planted to perennial natives in 2017.
- **Mountain View Egg Farm:** 2015 CIP. Funds will be used to maintain 33 acres that were seeded in 2014.
- **Future Projects:** 2016-2020 CIP. Potential areas for future grassland restoration have been identified at Verhey, Rock Creek Farm west of 104th Street, Heil 2, and Loukonen Dairy.

3. **Riparian Restoration Projects:**

- **Rock Creek:** Grants from Urban Drainage and Flood Control District, Colorado Parks and Wildlife wetland grant, partner contributions from Town of Superior, and 2015 CIP. A portion of Rock Creek through the Carlson/Lastoka and Scriffany properties was historically straightened, with little valuable wildlife habitat. The historic meandering channel still exists and will be restored. In 2014, the designs for the stream restoration were completed. Construction was delayed because of the flood and is now expected to be implemented in early 2015.
- **Future riparian restoration** work is planned on Lower Boulder Creek, St. Vrain Creek at Hiel 2, Geer Creek at Hall 2, DeLonde Creek at Caribou Ranch, and Sherwood Gulch.

4. **Plague Properties:** 2015-2020 CIP. Funds to revegetate properties after prairie dog die-off due to plague outbreak. Reseeding is planned on Erin Arensault in 2015. Funding is allocated in 2016-2020 although property priorities are not specifically identified.

5. **Reclamation/Revegetation Projects:**

- **Conger Mine at Sherwood Gulch:** 2016 CIP. Shooting has become a problem at the Conger Mine. Bare areas will be reclaimed and large piles of woody debris will be moved so that they are not used as shooting targets.
- **Hall 2 Mine Reclamation:** 2019-2020 CIP. Maintenance of reclamation, post-bond, in conjunction with management plan implementation.

6. **Wildlife Habitat Restoration Projects:**

- **AHI Turkey Farm:** 2015-2016 CIP. The remainder of the turkey barns will be removed in 2014. Areas in need of reclamation between existing wildlife habitat and the area of turkey barn removal will be restored using irrigation.
- **Kenosha Water:** 2016-2020.
- **Ag Wildlife Habitat:** 2016-2017. Wildlife habitat and pollinator projects on ag properties: Swanson, Ertl, Puma, Montgomery Farms, AHI
- **Other Projects:** 2016-2017. Aspen Fencing, etc.
- **US36 Wildlife Crossing:** 2016-2017. Underpass or fencing for possible US36 wildlife crossing. Would require grant funds and CDOT involvement.

7. **Road/Social Trail Closure:** 2016-2017 CIP. Closing social trails/roads in partnership with USFS on the Ruth Reynolds property.