

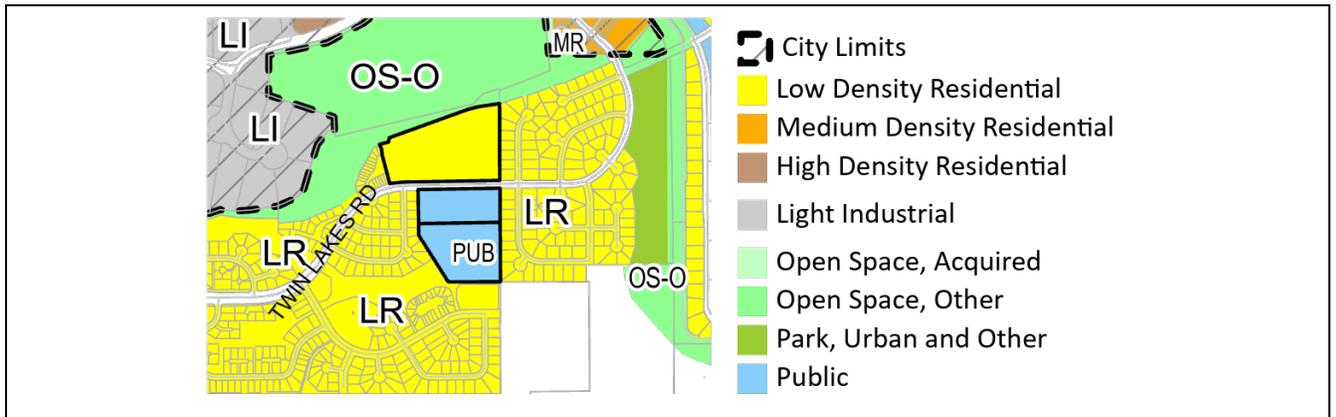
Requests #10 - 12

6500 Twin Lakes Road (approx. 4 acres owned by Boulder County Housing Authority)

0 Kalua Road (approx. 6 acres owned by Boulder Valley School District)

6655 Twin Lakes Road (approx. 10 acres owned by the Boulder Valley School District)

Initiated by local community organization



Request:

6500 Twin Lakes Road, 0 Kalua Road: Land Use amendment from Public (PUB) to Open Space (OS)

6655 Twin Lakes Road: Land Use amendment from Low Density Residential (LR) to Open Space (OS)

The applicant seeks the integration of all three parcels into the Twin Lakes Open Space area to provide for a wildlife corridor, preservation of agricultural land, community buffer, wetlands, and recreation-oriented trail connections.

Staff Recommendation: No

Staff recommends that this request not be considered further as part of the 2020 BVCP Mid-Term Update for the following reasons:

1. Further analysis relating to the land use change and expansion of the Boulder County Open Space program will take a considerable amount of time and allocation of resources, requiring coordination of multiple city, county and public meetings. This effort is not within the scope of the mid-term update.
2. Changing the land use designations of these parcels and incorporating them into Boulder County Open Space underlines a significant policy change, which is out of scope of the mid-term update.

ANALYSIS:

1. Consistent with the purposes of the mid-term update?

No. Changes to the BVCP and associated maps may only occur in the mid-term update if they do not involve significant city and county resources to evaluate. The proposal for all three parcels is not a minor change to the BVCP.

2. Consistent with the current policies in the BVCP or relevant subcommunity or area plans?

No. The proposed land use change and acquisition of land by Boulder County Parks & Open Space would require a significant policy change and staff resources.

3. Compatible with adjacent land uses and neighborhood context?

Current land use designations for the three parcels are compatible with the land uses and neighborhood context of the surrounding area.

4. Was the proposed change requested or considered as part of a recent update to the Comprehensive Plan or other planning process?

Yes. As part of the 2015 BVCP Major Update, several amendments to the land uses for these parcels were evaluated. The Twin Lakes Action Group requested that the land use designations for the parcels in question be changed from Low Density Residential (LR) or Public (PUB) to Open Space (OS). During this same process, the Boulder County Housing Authority and Boulder Valley School District requested the same parcels be changes to Mixed Density Residential (MXR). At the time staff recommended the land uses for these parcels change to Medium Density Residential (MR) with incorporated Environmental Preservation areas. Ultimately, the four bodies did not approve any land use changes.

5. Is there any change in circumstances, community needs or new information that would warrant the proposal be considered as part of this update?

No.

6. Are there enough available resources to evaluate the proposed change (city and county staffing and budget priorities)?

No. A considerable amount of work is needed by both city and county staff to evaluate the proposed changes to all three parcels.



**BOULDER VALLEY COMPREHENSIVE PLAN
2020 MIDTERM UPDATE:
REQUEST FOR REVISION**

1) Type of Amendment (check all that apply):

Land Use Map Amendment

Planning Areas Map Amendment

Service Area contractions or Minor Changes to the Service Area Boundary

Other Map Amendment

2) Please provide the following information

a. Brief description of the proposed amendment:

Change the Land Use Map of the parcel at 0 Kalua Road to Open Space, so that the parcel can be managed as part of a Greater Twin Lakes Open Space area, in concert with related requests for 6655 Twin Lakes road and 6500 Twin Lakes Road.

b. Brief reason or justification for the proposed amendment:

0 Kahlua Road consists of 6.08 acres of undeveloped land.

The property at 0 Kahlua Road is owned by Boulder Valley School District (BVSD). Adding the parcel to the Open Space system to enlarge and enhance the values of the existing Twin Lakes property is best use. In concert with the other two change requests being submitted by TLAG, this parcel satisfies ALL criteria for acquisition and incorporation into the County Open Space program. A Greater Twin Lakes Open Space, with the addition of these three parcels, would preserve an existing wildlife corridor connecting the existing Twin Lakes Open Space to undeveloped open space contiguous to these parcels at the southeast corner. Also, the land will serve as a community buffer and contains Prime Farmland (highest classification from USDA), federally protected wetlands, and trail connections. Designating and managing the property as part of a Greater Twin Lakes Open Space is the highest and best use for this property, is consistent with BVCP guidance and direction.

a. Brief description of location of proposed amendment (including address or approximate coordinates):

00 Kahlua road, Parcel # 146314300001

This parcel is located directly south of 6500 Twin Lakes Road, which is in turn directly south (across the road) of 6655 Twin Lakes Road, both of which are also proposed for open space designation and located directly south of and adjacent to the Twin Lakes Open Space.

b. Size of parcel: 6.08 acres _____



Land Use Amendment Application

Applicant:

Name: Twin Lakes Action Group, Dave Rechberger, Chair

Address: 8756 Skyland Drive, Niwot Colorado 80503

Phone: 303 818 4070

Owner:

Name: Boulder Valley School District

Address: 6500 Arapahoe Ave., Boulder CO 80303

Phone: Glen Segrue, 720-561-5794

Representative/Contact:

Name: Dave Rechberger, Twin lakes Action Group

Address: 8756 Skyland Drive, Niwot Colorado 80503

Phone: 303 818 4070

Does the applicant have a development application or some interest in a property that in any manner would be affected by this amendment proposal? (If yes, please explain):

No.

Land Use Change Narrative (O Kalua Road)

Brief description of proposed amendment:

Change the Land Use Map of the parcel at O Kalua Road to Open Space, so that the parcel can be managed as part of a Greater Twin Lakes Open Space area, in concert with related requests for 6655 Twin Lakes Road and 6500 Twin Lakes Road.

Brief reason for justification for the proposed amendment:

O Kahlua Road consists of 6.08 acres of undeveloped land.

The property at O Kahlua Road is owned by Boulder Valley School District (BVSD). Adding the parcel to the Open Space system to enlarge and enhance the values of the existing Twin Lakes property is best use. In concert with the other two change requests being submitted by TLAG, this parcel satisfies ALL criteria for acquisition and incorporation into the County Open Space program. A Greater Twin Lakes Open Space, with the addition of these three parcels, would preserve an existing wildlife corridor connecting the existing Twin Lakes Open Space to undeveloped open space contiguous to these parcels at the southeast corner. Also, the land will serve as a community buffer and contains Prime Farmland (highest classification from USDA), federally protected wetlands, and trail connections. Designating and managing the property as part of a Greater Twin Lakes Open Space is the highest and best use for this property, is consistent with BVCP guidance and direction.

Brief description of location of proposed amendment (including address or approximate coordinates):

O Kahlua Road, Parcel # 146314200001

This parcel is located directly south of 6500 Twin Lakes Road, which is in turn directly south (across the road) of 6655 Twin Lakes Road, both of which are also proposed for open space designation and located directly south of and adjacent to the Twin Lakes Open Space.

Size of Parcel:

6.08 acres

Applicant:

Twin Lakes Action Group, Dave Rechberger Chair
8756 Skyland Drive
Niwot Colorado 80503
303 818 4070

Owner:

Boulder Valley School District
6500 Arapahoe Avenue, Boulder CO 80303
Glen Segrue, 720-561-5794

Representative/Contact:

Dave Rechberger
8756 Skyland Drive
Niwot Colorado 80503
303 818 4070

Land Use Change Narrative (0 Kalua Road)

1) This proposal is intended to do the following:

1. Allow this 6.08-acre parcel to be added the County Open Space program.

In concert with 6655 and 6500 Twin Lakes Road, the property qualifies for open space according to the County's acquisition criteria:

Parks and Open Space staff strive to acquire land that meet these criteria:

- I. Preserving rural areas that provide community buffers including significant agricultural land.
- II. Land for passive recreation including land for public access and potential trail connections.
- III. Land with other significant resources (cultural, scenic, and natural), including natural landmarks, archaeological sites, historically significant land and buildings, scenic view corridors, significant plant communities, riparian corridors, wetlands, and wildlife habitat.

<https://www.bouldercounty.org/open-space/management/acquisitions/>

According to the County description of the existing Open Space:

In the 1960s, thanks to the nearby IBM plant and other commercial attractions, the Gunbarrel residential area grew up around the lakes. The lakes have been central to the Gunbarrel community from the beginning.

<https://www.bouldercounty.org/open-space/parks-and-trails/twin-lakes/>

As the community has grown, the need for additional open space to accommodate additional residents has grown with it. So has the need to better protect remaining natural values under siege from encroaching development -- has grown with it. Now is the time to protect this parcel and expand the existing Open Space. In fact, in a survey of 1348 visitors using Boulder County Open Space, 6% indicated that they would like to have more open space purchased/acquired and 14% (top response) would like to see more trails constructed¹. Additionally, this land use change request is in support of strategic goals articulated in the 2020 Strategic Vision by Boulder Parks and Open Space¹. The goals state:

- (1) To preserve 2,500 additional acres and associated water rights
- (2) Prioritize acquisitions that offer opportunities for important trail connections

¹ Boulder County Parks & Open Space, 2020 Strategic Vision, *Presented to BOCC* (July 12, 2016).

This request is submitted with parallel requests for the adjacent properties at 6655 Twin Lakes Road (9.97 acres), and 6500 Twin Lakes Road (3.97 acres). The two southern parcels are currently owned by Boulder Valley School District (the “BVSD parcels”). Thus -- including this 6.08 acre at 0 Kalua Road parcel -- the County, City, and community have a rare chance to expand Gunbarrel’s magnificent Twin Lakes Open Space by a total of 20.02 acres. All three proposed properties are currently publicly owned.

A Greater Twin Lakes Open Space would have many similarities to the Two Ponds National Wildlife Refuge² in Arvada. Two Ponds is an example of how relatively small parcels in urban or residential settings can be key components of open space programs incorporating natural and recreation values. Adding the 6655 and 6500 Twin Lakes Road and 0 Kalua Road parcels to the existing Twin Lakes Open Space (42 acres) would result in a Greater Twin Lakes Open Space that approximates the size of Two Ponds.

Governor Hickenlooper’s Colorado Beautiful initiative (announced July 15, 2015) is another excellent example of how a Greater Twin Lakes Open Space vision is compatible with state and federal policy efforts and initiatives, as well as the County Open Space acquisition criteria, the BVCP, and the Boulder County Comprehensive Plan (BCCP). The goal of Colorado Beautiful is that, within one generation, every Coloradan will live within a ten-minute walk of a park, trail or open space area. A Greater Twin Lakes Open Space will provide substantially more benefit and opportunity for Gunbarrel residents than the existing area. Additionally, the Longmont-Boulder Trail described below warrants consideration as a priority trail or connector project under Colorado Beautiful³.

SATISFYING ALL CRITERIA FOR OPEN SPACE ACQUISITIONS In the text that follows, the many ways in which the land satisfies the published criteria for open space acquisitions is detailed.

I. Preserving rural areas that provide community buffers including significant agricultural land and prevent proposed development of land adjacent to existent open space.

0 Kalua is suitable to be managed as part of a Greater Twin Lakes Open Space area. It is adjacent to 6500 Twin Lakes Road which is just south of 6655 Twin Lakes Road that is adjacent to the Twin Lakes Open Space. This land, owned by BVSD, was dedicated for community amenities.

The three Twin Lakes Parcels, including 0 Kalua, serve as a community buffer, by providing open space for Gunbarrel, breaking up contiguous developments, providing wildlife corridor, mitigating noise, providing a place for dark sky and a view shed, and as a hydrological buffer that includes protected wetlands. The adjacent Twin Lakes sit higher than the BCHA/BVSD properties and are a significant source of artificial recharge to the existing aquifer underneath the BCHA/BVSD properties. Finally, these buffers are important in preserving the rural residential character of the neighborhood.

² <http://www.fws.gov/refuges/profiles/index.cfm?id=61171>

³ https://cpw.state.co.us/Documents/Trails/Trails-Strategic-Plan-B_Colorado-The-Beautiful-and-Components.pdf

It is also important to note that these buffers are critically important in preservation of land, wildlife, wetlands, and homes in these times of rapid climate change. A recent article⁴ highlights a decline in native bird population in Boulder County. **“Boulder County did not lose a single vertebrate species in the 20th century... but we’re starting to lose species again for the first time since the 19th century,”** said Steve Jones, an environmental consultant and volunteer with the Boulder Nature Association, who has been conducting breeding bird and raptor surveys in Boulder County for 35 years. **“... we’re seeing some species disappear right now due to overdevelopment and loss of habitat.”**

The Twin Lakes properties provide an important community buffer, in the form of space for the residents as Gunbarrel does not have a community or town center. Since 2015, approximately 500 apartments⁵ have been added to the community of Gunbarrel. Amenities such as parks and open space have not been added to keep pace with the housing development. There are only three existing parks for the Gunbarrel community⁶ – one of which is at Heatherwood (empty field with no amenities), one is on wetlands (Eaton Park, one bench and one picnic table), and the last (Tom Watson Park) requires either driving or crossing a high-speed six-lane Diagonal Highway. Additionally, some of the open space indicated on the map for Gunbarrel is actually privately owned (Boulder Country Club, ~\$30,000 to join)⁴.

Importantly, any development at Twin Lakes would pave over U.S. Department of Agriculture (USDA)/National Resources Conservation Service (NRCS)-designated *Prime Farmland* and *Farmland of Statewide Importance*. The *Prime Farmland* classification is their highest, best farmland classification. *Farmland of Statewide Importance* is their second-highest farmland classification.

*Prime Farmland*⁷, as defined by the USDA, “...is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land. *Farmland of Statewide Importance*...generally, this land includes areas of soils that nearly meet the requirements for *Prime Farmland*...some areas may produce as high a yield as *Prime Farmland* if conditions are favorable.”



Prime Farmland is of major importance in meeting the Nation's short and long-range needs for food and fiber; however, the supply of high-quality farmland is limited. It is up to local governments to act responsibly to protect these lands with known *Prime* or *Statewide*

⁴ <https://www.coloradohometownweekly.com/2020/01/11/populations-of-native-bird-species-decline-in-the-face-of-development-indicate-further-environmental-degradation/>

⁵ Apex Apartments and Gunbarrel Center Apartments

⁶ <https://bouldercolorado.gov/planning/gunbarrel-subcommunity-fact-sheet>

⁷ https://efotg.sc.egov.usda.gov/references/public/CO/5a_Prime_Farmland_Definition.pdf

Importance classifications, by converting them to Open Space, thereby preserving them for future generations. The size of the land parcels is irrelevant, as local farmers have effectively utilized smaller, separate parcels for growing. Prime agricultural land is a non-renewable resource. Once developed, it's lost forever. *In fact, Boulder County has a history of leading the state in the conversion of agricultural lands to non-agricultural lands.*

Reports from the USDA/NRCS for 6655 Twin Lakes Rd (north parcel) and 6500 Twin Lakes Rd /0 Kalua Road (south parcel) yield these results:

North Parcel (BCHA) Farmland Classification⁸:

- Approx. 62% of the total acreage is *Prime Farmland* if irrigated (Irrigation can take many forms, such as drip lines, solar drip, and flood irrigation).
- Approx. 38% of the total acreage is *Farmland of Statewide Importance*.

South Parcel (BVSD) Farmland Classification²:

- Approx. 92% of the total acreage is *Prime Farmland* if irrigated.
- Approx. 8% of the total acreage is *Farmland of Statewide Importance*.

In a forward-thinking 1991 memorandum, the City of Boulder Department of Community Planning & Development wisely stated to the City Planning Board and the County Long Range Planning Commission, "Lands designated as having *National Agricultural Significance* should not be considered suitable for future urban development," and, "Lands designated as having *State Agricultural Significance* should not be considered suitable for future urban development."

The BCCP⁹ guiding principles state, "*Maintain the rural character and function of the unincorporated area of Boulder County by protecting environmental resources, agricultural uses, open spaces, vistas, and the distinction between urban and rural areas of the county.*"

II. Land for passive recreation including land for public access and potential trail connections.

The Twin Lakes Open Space is the most heavily used open space property in the County. In 2012, it received more than 103,000 user visits a year. The parcel under consideration could provide trail connections to both the north and the south¹⁰. New trail stretches and connections should be explored and considered with regard to 1) the proposed Greater Twin Lakes, and 2) the Longmont-to-Boulder or "Lo-Bo" Regional Trail, "a 12-mile trail system that runs through Gunbarrel, Niwot, and open space properties connecting the City of Boulder

⁸ <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

⁹ <https://www.bouldercounty.org/property-and-land/land-use/planning/boulder-county-comprehensive-plan/>

¹⁰ Boulder BCP Parks and Open Space Application, "Boulder Area Trails App"

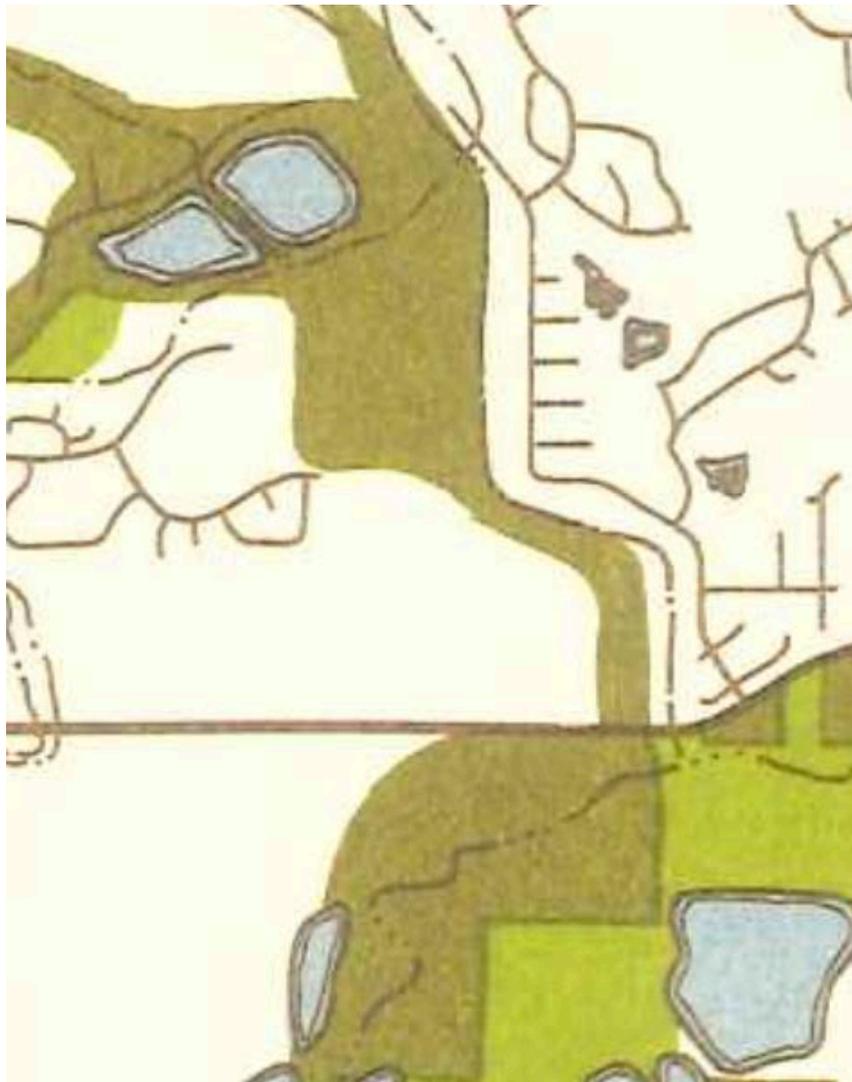
with the City of Longmont. This Trail is an increasingly important regional connector. A Greater Twin Lakes Open Space presents the opportunity to enhance the recreational opportunities, scenic values, and natural setting traversed by this regional trail. Additionally, TLAG is interested in providing more public access to the land via trails

Ila. Land with a dedication An open secret about the south field is that it's a subdivision dedication. This means that a developer gave the land to Boulder Valley School District (BVSD) for \$10 as part of the county requirements to build the subdivision. Colorado Revised Statute 30-28-133 and Boulder County **Land Use Code Article 7 says that dedicated lands can only be used for parks or schools, and they must be for the benefit and use of the subdivision residents.**

Highlights

- Dedicated lands should reasonably serve residents of the contributing subdivision
- South Twin Lakes field is dedicated for a school or recreational use
- 60% of school site was intended to be a children's park
- 1977 Boulder Valley Comprehensive Plan shows area as part of a 40-acre community park. Twin Lakes fields are all that remains of that vision.

1977 BVCP image showing plans for area to become a greenbelt.



The southern Twin Lakes field was given to the Boulder Valley School District and has a land-use designation of Public. In 1967, George and Everett Williams, the "founders of Gunbarrel," dedicated this land to serve the Gunbarrel Green residents, specifically for a school or recreational use. **The main purpose of dedicated land is to set aside land for essential schools and parks.**

1967 Subdivision Dedication.

BOULDER VALLEY PUBLIC SCHOOLS
SCHOOL DISTRICT NO. Re2, BOULDER COUNTY
P. O. BOX 11, BOULDER, COLORADO 80501
PHONE 442-6931
Planning Department
May 24, 1967

RECEIVED
MAY 25 '67
OF
DEVELOPMENT

Boulder County Planning Commission
Boulder County Court House
Boulder, Colorado

Attention Mr. Lynn Vandergrift, Acting Director

Gentlemen:

This is to inform you that the Boulder Valley School District Re 2 has received a Warranty Deed from Twin Lakes Investment Company for a ten acre tract to satisfy the understanding approved in 1963 by the County Planning Commission between the school district and East View Inc. with respect to the five per cent requirement of the Gunbarrel Green Subdivision and Development.

A copy of the recorded deed and exhibits will be sent to you for your files at a later date.

Thank you for your cooperation.

Sincerely,

John Morris
John Morris
School Planner

JTM:dc

cc: Gerald Caplan

III. Land with other significant resources (cultural, scenic, and natural), including natural landmarks, archaeological sites, historically significant land and buildings, scenic view corridors, significant plant communities, riparian corridors, wetlands, and wildlife habitat.

III(a) Conserve wildlife habitats. The parcel offers abundant wildlife habitat, which is otherwise shrinking within Gunbarrel and the vicinity of the existing Open Space. Boulder County describes the existing Twin Lakes Open Space as “a haven for wetland wildlife, a hidden gem in the heart of Gunbarrel area.” The region contains a wildlife corridor, which according to a wealth of research^{11,12}, should maintain a minimum width of 1000 ft. This is the current width of the existing corridor. An interview with an expert Dr. Paul Beier (Univ. of Arizona, conservation planning and wildlife ecology), on the subject can be found here:

<https://www.youtube.com/watch?v=pPIQlxjeJc>

Six Boulder County Wildlife Species of Special Concern live directly on the fields:

- Tiger salamanders
- Meadow voles
- Garter snakes
- Belted kingfisher
- Northern flicker
- Wood ducks

Eighteen other Species of Special Concern have been documented using the fields for foraging, such as:

- Northern harriers
- Bushtits
- Pine siskins
- Prairie falcons
- A variety of other birds.

Other wildlife, such as ground-nesting birds protected by the Migratory Bird Treaty Act, use this area. In summer 2016, a biologist hired by the Boulder County Housing Authority found a mallard’s nest and meadowlark’s nest with five babies in the fields.

Additionally, migratory birds of conservation concern use the region. These include¹³:

- Bald eagle
- Burrowing owl
- Ferruginous hawk
- Golden eagle

¹¹ P. Beier et al., “Best Management Practices for Wildlife Corridors,” (2008).
http://corridordesign.org/dl/docs/corridordesign.org_BMPs_for_Corridors.pdf

¹² Center for Biological Diversity

¹³ Blue Mountain Environmental Consulting Open Space Evaluation of 6655 and 6600 Twin Lakes Road (complete report appears at end of this packet)

- Lewis's woodpecker
- Loggerhead shrike
- Mountain plover
- Short-eared owl
- Swainson's hawk
- Williamson's sapsucker

The official description further describes habitat values and lists species as follows:

Wetland habitats, nestled within the surrounding Great Plains, support aquatic plant and animal life and serve to lure in large numbers of migrating bird species. With grasses, wildflowers and trees surrounding the wetlands, these areas are biologically diverse both in and out of the water.

A description of wildlife using the properties in question is listed below¹⁴.

Mammals

Coyote
 Eastern cottontail
 Fox squirrel
 Little brown bat
 Raccoon
 Red fox
 Striped skunk

Birds

American avocet
 American coot
 American crow
 American goldfinch
 American kestrel
 American robin
 American widgeon
 Belted kingfisher
 Canada goose
 Common grackle
 Common raven
 Downy woodpecker
 Black-billed magpie
 Black-capped chickadee
 Bullock's Oriole
 Double-crested cormorant
 Great blue heron
 Great Horned Owl

¹⁴ Twin Lakes Open Space webpage, <https://www.bouldercounty.org/open-space/parks-and-trails/twin-lakes/>

Killdeer
 Mallard
 Mourning dove
 Red-tailed hawk
 Red-winged blackbird
 Tree swallow
 Violet-green swallow
 Yellow-rumped warbler
 Yellow Warbler
 Amphibians & Reptiles
 Bullsnake
 Garter snake
 Snapping turtle

Additionally, local birders have been recording bird sightings for the past ten years on the Twin Lakes Open Space. One hundred and ninety-nine different types of birds have been spotted at the Twin Lakes Open Space¹⁵. The list follows:

Accipiter sp.	Common Yellowthroat	Nashville Warbler	Streptopelia sp.
American Avocet	Cooper's Hawk	Northern Cardinal	Swainson's Hawk
American Coot	Cordilleran Flycatcher	Northern Flicker	Swainson's Thrush
American Crow	crow/raven sp.	Northern Goshawk	Swallow sp.
American Goldfinch	dabbling duck sp.	Northern Harrier	Swamp Sparrow
American Kestrel	Dark-eyed Junco	Northern Parula	Tanager sp. (Piranga sp.)
American Redstart	Double-crested Cormorant	Northern Pintail	Teal sp.
American Robin	Downy Woodpecker	Northern Rough-winged Swallow	Tennessee Warbler
American Tree Sparrow	Duck sp.	Northern Saw-whet Owl	Townsend's Solitaire
American White Pelican	Dusky Flycatcher	Northern Shoveler	Townsend's Warbler
American Wigeon	Eastern Bluebird	Northern Shrike	Tree Swallow
Aythya sp.	Eastern Kingbird	Northern Waterthrush	Tree/Violet-green Swallow
Bald Eagle	Eastern Phoebe	Olive-sided Flycatcher	Turkey Vulture
Bank Swallow	Eastern Screech-Owl	Orange-crowned Warbler	Veery
Barn Swallow	Empidonax sp.	Orchard Oriole	Vesper Sparrow
Belted Kingfisher	Eurasian Collared-Dove	Osprey	Violet-green Swallow
Black Phoebe	European Starling	Ovenbird	Virginia's Warbler
Black-billed Magpie	Ferruginous Hawk	Pacific Wren	warbler sp. (Parulidae sp.)
Blackbird sp.	Franklin's Gull	Pacific/Winter Wren	Warbling Vireo
Black-capped Chickadee	Gadwall	Passerine sp.	Western Bluebird
Black-capped/Mountain Chickadee	Golden Eagle	Peep sp.	Western Grebe
Black-chinned Hummingbird	Gray Catbird	Peregrine Falcon	Western Kingbird
Black-crowned Night-Heron	Gray Flycatcher	Pewee sp. (Contopus sp.)	Western Meadowlark

¹⁵ <https://ebird.org/hotspot/L907071>

Black-headed Grosbeak	Great Blue Heron	Pied-billed Grebe	Western Sandpiper
Black-necked Stilt	Great Egret	Pigeon/dove sp.	Western Tanager
Blackpoll Warbler	Great Horned Owl	Piming Kuo	Western Wood-Pewee
Black-throated Gray Warbler	Greater Yellowlegs	Pine Siskin	Western/Eastern Wood-Pewee
Black-throated Green Warbler	Green Heron	Plumbeous Vireo	White-breasted Nuthatch
Blue Grosbeak	Green-tailed Towhee	Prairie Falcon	White-crowned Sparrow
Blue Jay	Green-winged Teal	Pygmy Nuthatch	White-faced Ibis
Blue-gray Gnatcatcher	Gull sp.	Red Crossbill	White-throated Sparrow
Blue-winged Teal	Hairy Woodpecker	Red-breasted Merganser	White-winged Dove
Bohemian Waxwing	Hammond's Flycatcher	Red-breasted Nuthatch	Willet
Bohemian/Cedar Waxwing	Hammond's/Dusky Flycatcher	Red-eyed Vireo	Wilson's Snipe
Brewer's Blackbird	Harris's Sparrow	Red-headed Woodpecker	Wilson's Warbler
Brewer's Sparrow	Hermit Thrush	Red-naped Sapsucker	Wood Duck
Broad-tailed Hummingbird	Herring Gull	Red-tailed Hawk	Worm-eating Warbler
Broad-winged Hawk	Hooded Warbler	Red-winged Blackbird	Wren sp.
Brown Creeper	Horned Grebe	Ring-billed Gull	Yellow Warbler
Brown Thrasher	Horned Lark	Ring-necked Duck	Yellow-breasted Chat
Brown-headed Cowbird	House Finch	Rock Pigeon	Yellow-rumped Warbler
Bufflehead	House Sparrow	Rock Wren	
Bullock's Oriole	House Wren	Rose-breasted Grosbeak	
Bushtit	Indigo Bunting	Rough-legged Hawk	
Buteo sp.	Killdeer	Ruby-crowned Kinglet	
Cackling Goose	Lark Latch	Ruby-throated/Black-chinned Hummingbird	
California Gull	Lark Sparrow	Rufous Hummingbird	
Calliope Hummingbird	Lazuli Bunting	Rusty/Brewer's Blackbird	
Canada Goose	Least Flycatcher	Sandhill Crane	
Canvasback	Least Sandpiper	Savannah Sparrow	
Cassin's Finch	Lesser Goldfinch	Say's Phoebe	
Catharus sp.	Lesser Scaup	Selasphorus sp.	
Cedar Waxwing	Lesser Yellowlegs	Sharp-shinned Hawk	
Chestnut-sided Warbler	Lincoln's Sparrow	Sharp-shinned/Cooper's Hawk	
Chipping Sparrow	Loggerhead Shrike	Short-billed/Long-billed Dowitcher	
Cinnamon Teal	Long-billed Dowitcher	Snow Goose	
Clay-colored Sparrow	Long-eared Owl	Snowy Egret	
Cliff Swallow	MacGillivray's Warbler	Solitary Sandpiper	
Common Goldeneye	Mallard	Song Sparrow	
Common Grackle	Marsh Wren	Spinus sp. (goldfinch sp.)	
Common Merganser	Merlin	Spizella sp.	
Common Nighthawk	Mountain Bluebird	Spotted Sandpiper	
Common Raven	Mountain Chickadee	Spotted Towhee	
Common Redpoll	Mourning Dove	Steller's Jay	

Most or all of these habitat values would carry over the three proposed open space parcels (6500 Twin Lakes Road, 6655 Twin Lakes Road, and 0 Kalua Road), and all of the listed species would use and benefit from adding the new acreage to the existing Open Space under more active management. The wildlife corridor extends from the Twin Lakes Open Space through the three parcels (6655 and 6500 Twin Lakes Road, and 0 Kalua Road) to the Johnson-Coen Trust, Boulder Creek, Sawhill Pond Wildlife Preserve¹⁶, Walden Pond Wildlife Habitat¹⁷ and other undeveloped parcels.

The property provides hunting habitat and prey for many riparian species and predators, such as coyotes, foxes, and eagles. Wildlife species and values are further described at pages 40-44 of the Twin Lakes Management Plan.

IIIb Protect riparian and scenic corridors

There are four federally designated wetlands on or adjacent to the Twin Lakes properties. These Waters of the United States provide homes to diverse species, trap floodwater, and remove nitrogen and other pollutants. According to the Twin Lakes Open Space Management Plan:

Remnants of native riparian and wetland ecosystems remain and artificial waterways create new habitat.

Wetlands and riparian areas provide food, denning and nesting sites, and respite from the hot sun or gusting winds. A diversity of flora and fauna are found in this ecosystem from water-dependent plants to migratory birds that use them for resting places.

<http://www.bouldercounty.org/doc/parks/twinlakesmplan.pdf> at 11.

<p>Ephemeral wetlands on the north field, March 2016</p>	<p>Eaton Park/Twin Lakes sign on the importance of wetlands</p>
	

¹⁶ <https://bouldercolorado.gov/osmp/sawhill-ponds-trailhead>

¹⁷ <https://www.bouldercounty.org/open-space/parks-and-trails/walden-ponds-wildlife-habitat/>

The Management Plan continues:

Wetland fringe, forested riparian, and upland grass communities comprise the vegetation surrounding Twin Lakes. These communities are heavily disturbed and the predominant vegetative covering is weedy species and pasture grasses.

This raises the potential for a restoration program in cooperation with local residents and community groups to take advantage of public-private partnerships to restore the larger landscape of a Greater Twin Lakes Open Space, along the lines of Two Ponds Refuge management.

Policy 3.06 of the Boulder Valley Comprehensive Plan states that “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.” Policy 3.28 of the BVCP states: “Surface and groundwater resources are part of an integrated environmental system that will be protected as a resource and managed to prevent their degradation and to protect and enhance aquatic, wetland and riparian ecosystems.”

Important facts about the Twin Lakes wetlands

- a. These wetlands help protect flood-prone homes from additional inundation. One acre of wetlands can store up to 1.5 million gallons of floodwater.
- b. Soils in the Twin Lakes parcels are saturated for long enough durations that they are federally listed as hydric soils, characteristic of soils in wetland areas.
- c. Mountain rush (*Juncus arcticus*), a wetland grass that signifies ephemeral wetlands, has been mapped in large swathes on both the north and south fields. Mountain rush is an important food source for birds.
- d. Muskrat, a species present at Twin Lakes Open Space, uses mountain rush for hut construction and food.
- e. Section 404 of the Clean Water Act protects ephemeral wetlands and wetland connectivity.
- f. The Boulder Parks & Recreation sign shown above talks about the cattails and rushes providing a safe environment for many animals. It also states: “Wetland habitats are extremely threatened. More than a quarter of all animals in Colorado depend on wetlands to survive.”
- g. The adjacent Twin Lakes sit higher than the BCHA/BVSD properties and are a significant source of artificial recharge to the existing aquifer underneath the BCHA/BVSD properties. Drainage systems in any new development will deplete flows to wetlands south of BVSD property, thereby drying them up.**

The Twin Lakes properties have a high water table. The federally designated wetlands nearby are fed by the groundwater traveling through these fields. Development of these fields will affect the flow of water to these wetlands. Development will also require extensive mitigation of the high groundwater, greatly diminishing the fields’ water-retention capacity. This displaced

water has to go somewhere. The engineering that would be required to mitigate and divert water from the development and existing surrounding structures would change the flow of water to the wetlands on the properties and to those nearby. If the wetlands get too little flow, they will dry out. If they get too much flow, they will scour out, increasing sediment load and promoting erosion. A National Academies of Sciences study found that it is almost impossible to replicate the natural charging of wetlands. Maintaining and protecting these wetlands is critical for mitigating flooding and for providing habitat for the many wildlife species at the Twin Lakes Open Space.

Scenic values will be enhanced by a Greater Twin Lakes property.

2. Foster public involvement and support public-private partnerships

Contrary to principles and commitments in the BVCP, BCCP, and Open Space policies, the public has not yet been engaged with regard to the fate of these parcels. The public at large, local residents, and community groups need to be heard.

TLAG is specifically interested in public-private partnerships that would address any concerns County agencies might have regarding future management of these parcels as open space. TLAG is also open to exploring means of assuming ownership of the properties proposed for open space. In addition, we will contact the Boulder Open Space Conservancy¹⁸ non-profit that is driving public partnerships, and has a memorandum of understanding with City of Boulder's Open Space & Mountain Parks (OSMP)¹⁹.

Open space acquisitions should encompass threatened properties with significant natural and recreational values in the midst of our communities, in this case, unincorporated Gunbarrel land adjacent to a Natural Ecosystem overlay on the BVCP map.. Open space properties near people are used every day by hundreds of visitors, and regularly by the majority of residents. No fossil fuels are used to access them by the vast majority of users. They provide convenient and vitally needed natural areas that provide vital ecosystem services on the one hand, and essential access to nature and the environment for Gunbarrel's 12,000-some residents on the other.

3. Guard against hydrologic and geologic hazards

Hydrologic and geologic hazards could be associated with development of this property, especially at densities exceeding existing land use designations. The area is known to have a high water table.

The Preliminary Hydrologic Analysis on BCHA Property by Gordon McCurry, Ph.D. (June 24, 2015) is discussed in the 2020 6655 Twin Lakes Road change request. These include potential hydrologic impacts to existing structures and properties; soil suitability concerns; and flooding potential associated with existing shallow groundwater.

¹⁸ <https://bosc.org/>

¹⁹ <https://bouldercolorado.gov/newsroom/announcing-public-private-partnership-with-boulder-open-space-conservancy>

4. Relationship of the proposed amendment to the goals, policies, elements, and amendment criteria of the Boulder Valley Comprehensive Plan.

Among the Core Values of the BVCP that would be furthered by the amendment are:

- Sustainability as a unifying framework to meet environmental, economic and social goals
- Open space preservation
- Great neighborhoods and public spaces
- Environmental stewardship and climate action
- Physical health and well being

The BVCP provides that:

2.04 Open Space Preservation The city and county will permanently preserve lands with open space values by purchasing or accepting donations of fee simple interests, conservation easements or development rights and other measures as appropriate and financially feasible. Open space values include use of land for urban shaping and preservation of natural areas, environmental and cultural resources, critical ecosystems, water resources, agricultural land, scenic vistas and land for passive recreational use.

Section 2.09 provides that “The city and county will foster the role of neighborhoods to establish community character, provide services needed on a day-to-day basis, foster community interaction, and plan for urban design and amenities.” This proposal is coming from the neighborhood with the intent of protecting and enhancing the community character.

Section 2.01 provides that “The unique community identity and sense of place that is enjoyed by residents of the Boulder Valley [. . .] will be respected by policy decision makers.”

Section 2.03 requires that “The city and county will, by implementing the Boulder Valley Comprehensive Plan, ensure that development will take place in an orderly fashion, take advantage of existing urban services, and avoid, insofar as possible, patterns of leapfrog, noncontiguous, scattered development within the Boulder Valley.”

Section 2.06 – Preservation of Rural Areas and Amenities - The city and county will attempt to preserve existing rural land use and character in and adjacent to the Boulder Valley where...vistas...and established rural residential areas exist.”

Section 2.09 – Neighborhoods as Building Blocks – The city and county will foster the role of neighborhoods to establish community character, provide services needed on a day-to-day basis, foster community interaction, and plan for urban design and amenities.”

Section 2.10 - Preservation and Support for Residential Neighborhoods – The city will work with neighborhoods to protect and enhance neighborhood character and livability [. . .] The city will also work with neighborhoods to identify areas for additional housing, libraries, recreation centers, parks, open space or small retail uses that could be integrated into and supportive of neighborhoods.”

Section 2.15 - Compatibility of Adjacent Land Uses - To avoid or minimize noise and visual conflicts between adjacent land uses that vary widely in use, intensity or other characteristics, the city will use tools such as interface zones, transitional areas, site and building design and cascading gradients of density in the design of subareas and zoning districts.

Section 2.36 provides for “provision of functional landscaping and open space; and the appropriate scale and massing of buildings related to neighborhood context.” Expanding open space will further these goals, and assure that appropriate scale and massing of buildings are consistent with the existing rural residential neighborhood context.

Section 3: Natural Environment, from the BVCP, has germane sections as follows:

Section 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 bioregions, airsheds and watersheds are considered and incorporated into planning.

Section 3.03 Native 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, acquisitions 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, significant natural communities and county and local species of concern (i.e., resources identified in the Boulder County Comprehensive Plan) will be emphasized. 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.

Section 3.04 Ecosystem Connections & Buffers - The city and county recognize the importance of preserving large habitat areas, especially of unfragmented habitat, in support of the biodiversity of their 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 (e.g., wildlife corridors) and buffers to support the natural movement of native organisms between ecosystems. Connected corridors of habitat may extend through or along the edges of the urban environment and

often serve as vital links between natural areas for both wildlife and humans. Connected corridors are often at the greatest risk of degradation and development, and those deemed to have high ecological value should be identified for planning and, where appropriate, for acquisition, preservation, restoration and/or management while balancing existing land uses and other needs of the community.

Section 3.05 Maintain & Restore Natural Ecological Processes & Natural Disturbances - Recognizing that natural 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 are maintained or replicated in the management of natural lands.

Section 3.06 Wetland & 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. Because they have historically been so scarce in the Front Range and because of continued degradation, the city and county will continue to develop and support programs to protect, enhance and educate the public about the value of wetlands and riparian areas in the Boulder Valley. The city will strive for no net loss of wetlands and riparian areas....

Section 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. These public lands may include areas for recreation and 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.

Section 3.10 Climate Change Mitigation & Adaptation & Resilience - The city and county are working to help mitigate climate change globally and recognize that climate change adaptation is an important area for consideration. Preserving large ecological reserves enhances the resilience of native ecosystems and reduces the loss of native biodiversity, ecological processes and ecosystems as the climate changes... Overall strategies may include: ... 3. Protect large reserves of open space land to support the long-term viability of native plants and animals;

Section 3.11 Urban Environmental Quality - To the extent possible, the city and county will seek to protect the environmental quality of areas under significant human and urban influence and will balance human needs and public safety with environmental protection.

Section 3.13 Water Conservation - The city and county will promote the conservation of water resources through water quality protection, public education, monitoring and policies that promote efficient water usage such as water-conserving landscaping.

Section 3.14 Management of Wildlife-Human Conflicts - The Boulder Valley sits within a wildland-urban interface, and the city and county recognize the intrinsic value of wildlife in both their urban and rural areas. The city and county 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....

Section 3.15 Soil Carbon Sequestration - The city and county recognize that soil carbon sequestration may have a range of potential benefits, including water retention, climate change mitigation, soil health and soil stabilization. Soil health is especially important for both the natural environment and agricultural lands.... For the natural environment, the capacity of native grasslands and forests to sequester carbon will be important in city and county soil carbon sequestration efforts. Native grasslands and forests will be maintained and protected following resource management plans....

Section 3.18 Hazardous Areas - Hazardous areas that present a 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.

Section 3.22 Floodplain Management - 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 ... The county's approach to flood management also includes: a. Efforts to preserve currently undeveloped areas in existing floodplains ...

Section 3.23 Non-Structural Approach to Flood Management - 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.

Section 3.24 Protection of High Hazard Areas - High hazard areas are the areas of the floodplain with the greatest risk to loss of life due to floodwater velocity.... To reduce risk and loss, riparian corridors, natural ecosystems, wildlife habitat and wetlands will be protected in these areas. Trails or other open recreational facilities may be feasible in certain areas.

Section 3.25 Larger Flooding Events - The city and county will seek to better understand the impact of larger flood events and evaluate context- appropriate, cost-effective policies and floodplain management strategies to address these risks.

Section 3.26 Protection of Water Quality - Water quality is a critical health, economic and aesthetic concern. The city and county have been protecting, maintaining and improving water quality and overall health within the Boulder Valley watersheds as a necessary component of existing ecosystems and as a critical resource for the human community.

Section 3.30 Surface & Groundwater - Surface and groundwater are part of an integrated environmental system that will be protected as a resource and managed to prevent their degradation and to protect and enhance aquatic, wetland and riparian ecosystems.

Other relevant sections from the BVCP include:

Section 4.02 Climate Adaptation Planning - The city and county will cooperatively develop and implement a climate change adaptation plan to identify current vulnerabilities, address economics of recovery and determine strategies to protect the community against the potential negative impacts associated with climate change.

Section 4.05 Clean Mobility - To reduce GHG emissions, the city and county will support the retirement of fossil-fuel based transportation. The city and county will continue to develop policies, incentives and programs that reduce vehicle miles traveled, replace fossil fuel- based transportation with clean energy- fueled transportation (e.g., with electric vehicles) and continue to plan a built environment and mix of land uses that reduce the need for people to drive.

Section 8.04 Addressing Community Deficiencies - The city and county will use community feedback in conjunction with robust data resources to identify barriers to development and provision of important basic human services and will work closely with community partners and non-profits to find solutions to critical deficiencies.

Section 8.07 Safety & Community Health - The city and county promote safety by fostering positive neighborhood and community relations, building a sense of community pride and involvement and promoting safe and attractive neighborhoods.

Section 8.08 Health & Well-Being - The city and county strive to ensure that the community continues to be a leader in promoting physical, mental and social well- being of community members, and will support recreational, cultural, educational and social opportunities.... Neighborhood and community design will encourage physical activity and healthy eating by establishing easy access to parks and trails....

Section 8.09 Resilience in Public Safety & Risk Prevention - The city and county will provide focused efforts around public safety, risk prevention and early intervention.... The city and county will prepare for, respond to and manage wildfire hazards by implementing wildland-urban interface regulations...

Section 8.10 Community Connectivity & Preparedness - The city and county will foster social and community connectivity and communications that promote well-being, deepen a sense of community and encourage civic participation and empowerment.

Section 8.16 Trail Functions & Locations - The city and county recognize that trails are an

important part of Boulder's community identity and serve to achieve accessibility goals and connect humans and the natural environment. Trails serve a variety of functions such as exercise, recreation, transportation, education and/ or environmental protection.... Trail and trailhead planning should minimize environmental impacts consistent with the comprehensive plan's Natural Environment policies and enhance recreational opportunities, non-motorized transportation and quality of life.

Section 8.17 Trails Network - The city and county recognize regional connectivity of parks, greenways, trails, open spaces, residential areas and employment centers is important to reduce traffic congestion, reduce parking demand, enhance opportunities for long-distance transportation and recreation experiences, increase accessibility, disperse use and crowding impacts on users, neighborhoods and ecosystems and reduce generation of greenhouse gases and other air pollutants.

Section 9.01 Support for Agriculture - The city and county encourage the preservation of working agricultural lands and sustainable production of food on them to the degree they provide cultural, environmental, economic and resilience benefits to the community. These uses are important for preserving the rural character and agriculture in Area III. The city and county will demonstrate and encourage the protection of significant agricultural areas and related water supplies and facilities, including the historic and existing ditch systems, through a variety of means, which may include public acquisition, land use planning and sale or lease of water for agricultural use...

Section 9.03 Sustainable Food Production & Agriculture Practices - The city and county will promote sustainable food production and agricultural practices on publicly- owned lands and will encourage them on private lands. Sustainable practices include food production methods that integrate ecological conservation objectives, enhance soil health, responsibly use water and quality protection....

Section 9.04 Soil Health & Soil Carbon Sequestration - The city and county will consider strategies to enhance soil health and will explore and evaluate strategies to sequester soil carbon on certain agricultural lands.

Section 10.01 High-Performing Government - The city and county strive for continuous improvement in stewardship and sustainability of financial, human, information and physical assets. In all business, the city and county seek to enhance and facilitate transparency, accuracy, efficiency, effectiveness and quality customer service. The city and county support strategic decision-making with timely, reliable and accurate data and analysis.

Section 10.02 Community Engagement - The city and county recognize that environmental, economic and social sustainability of the Boulder Valley are built upon full involvement of the community. The city and county support better decision-making and outcomes that are achieved by facilitating open and respectful dialogue and will actively and continually pursue innovative public participation and neighborhood involvement. Efforts will be made to: 1. Use

effective technologies and techniques for public outreach and input; 2. Remove barriers to participation; 3. Involve community members potentially affected by or interested in a decision as well as those not usually engaged in civic life; and 4. Represent the views or interests of those less able to actively participate in the public engagement process, especially vulnerable and traditionally under-represented populations. Therefore, the city and county support the right of all community members to contribute to governmental decisions through continual efforts to maintain and improve public communication and the open, transparent conduct of business. Emphasis will be placed on notification and engagement of the public in decisions involving large development proposals or major land use decisions that may have significant impacts and/ or benefits to the community.

Section 10.03 Communication Capacity for Resilience - The city and county recognize that engaged communities and residents are better prepared to support themselves in the event of a disruption and encourage community engagement in conjunction with risk education and preparedness. The city and county will continue to support ongoing, robust communication and outreach to communities and vulnerable residents to educate and prepare for disruption.

Section 10.04 Informed Community - The city and county commit to gathering and sharing information to support and encourage open, participatory government and an informed community. To encourage vibrant public discourse, the city and county strive to provide participants with the information they need to participate in a meaningful way. The city and county strive to ensure high-quality language services in order to communicate effectively with limited English-proficient residents.

Section 10.05 Support for Volunteerism - The city recognizes the value of community volunteers to help achieve the organization and community goals. The city supports volunteer programs that engage residents to improve their community and participate in addressing local issues.

Importantly, Twin Lakes Open Space is designated by an overlay on the Boulder Valley Natural Ecosystems Map in the BVCP. According to the BVCP:

to encourage environmental preservation, a Natural Ecosystem overlay is applied over Comprehensive Plan Land Use Designations throughout the Boulder Valley Planning Area. Natural ecosystems are defined as areas that support native plants and animals or possess important ecological, biological or geological values that represent the rich natural history of the Boulder Valley. The Natural Ecosystems overlay also identifies connections and buffers that are important for sustaining biological diversity and viable habitats for native species, for protecting the ecological health of certain natural systems, and to buffer potential impacts from adjacent land uses.

A Greater Twin Lakes Open Space will further these goals by providing connections and buffers for the wildlife and natural values in the existing Open Space. It will protect the ecological health of the riparian ecosystem from development threats, and buffer impacts

from incompatible land uses.

The Boulder County Comprehensive Plan also emphasizes the importance of Open Space:

1) **Parks and open space.** “Open space shall be used as a means of preserving the rural character of the unincorporated county and as a means of protecting from development those areas which have significant environmental, scenic or cultural value.”

<https://www.bouldercounty.org/property-and-land/land-use/planning/boulder-county-comprehensive-plan/>

The Twin Lakes Management Plan describes how the existing Open Space relates to the BCCP and BVCP at pages 38-39. Greater Twin Lakes would complement and supplement these goals and values by incorporating the additional 20.02 acres into the existing Open Space.

Goals in the Boulder County Comprehensive Plan of particular relevance to the Twin Lakes Open Space include:

Appendix 2: Boulder County Comprehensive Plan: Goals and Policies Goals

- Environmental Management

B.5 Wetlands, which are important to maintaining the overall balance of ecological systems, should be conserved.

B.9 Riparian ecosystems, which are important plant communities, wildlife habitat and movement corridors, shall be protected.

- Parks and Opens Space

C.1 Provision should be made for open space to protect and enhance the quality of life and enjoyment of the environment.

C.5 The private sector, non-county agencies, and other governmental jurisdictions should be encouraged to participate in open space preservation and trails development in Boulder County.

- Residential Goals

D.2 Quality residential areas, which function as integral neighborhood units with schools, parks and other similar facilities as centers, should be encouraged.

- Public Involvement

H.1 The county shall encourage public participation in the making of decisions by public and quasi-public bodies which significantly affect citizens.

Policies

Those policies in the Boulder County Comprehensive Plan (as amended, 1999) of particular relevance to the Twin Lakes Open Space include:

- Resource Management

OS 2.03 The county shall provide management plans and the means for the implementation of said plans for all open space areas that have been acquired by or dedicated to the county.

OS 2.03.01 The foremost management objectives of the individual open space lands shall follow directly from the purposes for which the land was acquired.

OS 2.03.02 Management of county open space lands shall consider the regional context of ecosystems and adjacent land uses.

OS 2.04 The county, through its Parks and Open Space Department, shall provide appropriate educational services for the public which increase public awareness of the county's irreplaceable and renewable resources and the management techniques appropriate for their protection, preservation, and conservation.

OS 2.05 The county, through its Weed Management Program, shall discourage the introduction of exotic or undesirable plants and shall work to eradicate existing infestations through the use of Integrated Weed Management throughout the county on private and public lands.

- Recreational Use

OS 4.03.01 Recreational use shall be passive, including but not limited to hiking, photography or nature studies, and, if specifically designated, bicycling, horseback riding, or fishing. Only limited development and maintenance of facilities will be provided.

- Trails

OS 6.01 Trails and trailheads shall be planned, designed, and constructed to avoid or minimize the degradation of natural and cultural resources, especially riparian areas and associated wildlife habitats.

OS 6.04 Trails shall provide for pedestrian, equestrian, bicycle, and/or other nonnotarized uses, where each is warranted. Incompatible uses shall be appropriately separated.

- Public Decision Making

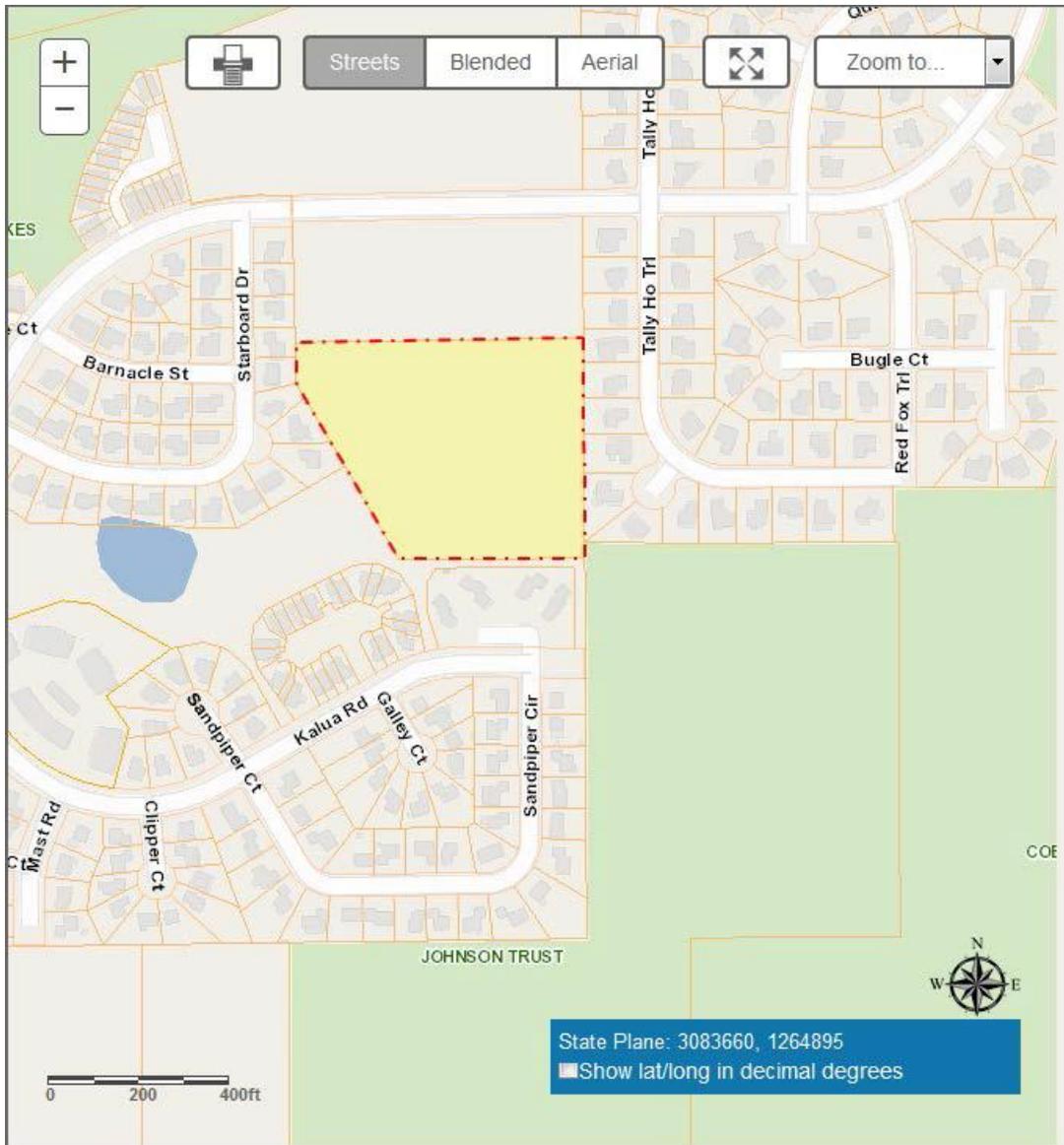
OS 8.03 In developing management plans for open space area, Parks and Open Space staff shall solicit public participation of interested individuals, community organizations, adjacent landowners and the Parks and Open Space Advisory Committee. Plans shall be reviewed by the Parks and Open Space Advisory Committee, including public comment, and recommended for adoption after public

hearing by the Board of County Commissioners.

These goals and policies largely speak for themselves. Integrating 0 Kalua Road with 6500 Twin Lakes Road and 6655 Twin Lakes Road into a Greater Twin Lakes Open Space would further the environmental management, parks and open space, and residential goals in the Plan. The proposed amendment offers opportunities to improve and enhance resource management, recreational use, and trails.

“Public Involvement” and “Public Decision Making” warrant special mention, as public participation has been severely lacking to date in decisions made and proposals developed by public bodies regarding the future use of these parcels and the overall community. This is contrary to specific direction.

Through this proposed amendment, TLAG is requesting the level of public participation that the County is required to offer: including public comment and a public hearing on the potential for these parcels to be added to the Open Space system



Location Map Showing Size and Context of 0 Kahlua Road

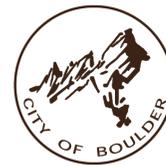






OUR LEGACY. OUR FUTURE.

BOULDER VALLEY COMPREHENSIVE PLAN



BOULDER VALLEY COMPREHENSIVE PLAN 2020 MIDTERM UPDATE: REQUEST FOR REVISION

1) Type of Amendment (check all that apply):

- Land Use Map Amendment
- Planning Areas Map Amendment
- Service Area contractions or Minor Changes to the Service Area Boundary
- Other Map Amendment

2) Please provide the following information

a. **Brief description of the proposed amendment:**

Change the Land Use Map of the parcel at 6500 Twin Lakes Rd. to Open Space, so that the parcel can be managed as part of a Greater Twin Lakes Open Space area, in concert with related requests for 6655 Twin Lakes Road and 0 Kalua Road.

b. **Brief reason or justification for the proposed amendment:**

6500 Twin Lakes Road consists of 3.97 acres of undeveloped land. The property at 0 Kahlua Road is owned by Boulder Valley School District (BVSD). Adding the parcel to the Open Space system to enlarge and enhance the values of the existing Twin Lakes property is best use.

In concert with the other two change requests being submitted by TLAG, this parcel satisfies ALL criteria for acquisition and incorporation into the County Open Space program. A Greater Twin Lakes Open Space, with the addition of these three parcels, would preserve an existing wildlife corridor connecting the existing Twin Lakes Open Space to undeveloped open space contiguous to these parcels at the southeast corner. Also, the land will serve as a community buffer and contains Prime Farmland (highest classification from USDA), federally protected wetlands, and trail connections. Designating and managing the property as part of a Greater Twin Lakes Open Space is the highest and best use for this property, is consistent with BVCP guidance and direction.

a. **Brief description of location of proposed amendment (including address or approximate coordinates):**

6500 Twin Lakes Road, Parcel # 146311300009

This parcel is located directly south of 6655 Twin Lakes Road, and north of 0 Kalua Road, each of which are also proposed for open space designation. 6655 Twin Lakes Road is adjacent to the Twin Lakes Open Space.

b. **Size of parcel:**

_____ 3.97 _____



Land Use Amendment Application

Applicant:

Name: Twin Lakes Action Group, Dave Rechberger, Chair

Address: 8756 Skyland Drive, Niwot Colorado 80503

Phone: 303 818 4070

Owner:

Name: Boulder Valley School District

Address: 6500 Arapahoe Ave., Boulder CO 80303

Phone: Glen Segrue, 720-561-5794

Representative/Contact:

Name: Dave Rechberger, Twin lakes Action Group

Address: 8756 Skyland Drive, Niwot Colorado 80503

Phone: 303 818 4070

Does the applicant have a development application or some interest in a property that in any manner would be affected by this amendment proposal? (If yes, please explain):

No.

Land Use Change Narrative (6500 Twin Lakes Road)

Brief description of proposed amendment:

Change the Land Use Map of the parcel at 6500 Twin Lakes Road to Open Space, so that the parcel can be managed as part of a Greater Twin Lakes Open Space area, in concert with related requests for 6655 Twin Lakes Road and O Kalua Road.

Brief reason for justification for the proposed amendment:

The parcel consists of 3.97 acres of undeveloped land.

The property is owned by Boulder Valley School District (BVSD). Adding the parcel to the Open Space system to enlarge and enhance the values of the existing Twin Lakes property is the best use.

In concert with the other two change requests being submitted by TLAG, this parcel satisfies ALL criteria for acquisition and incorporation into the County Open Space program. A Greater Twin Lakes Open Space, with the addition of these three parcels, would preserve an existing wildlife corridor connecting the existing Twin Lakes Open Space to undeveloped open space contiguous to these parcels at the southeast corner. Also, the land will serve as a community buffer and contains Prime Farmland (highest classification from USDA), federally protected wetlands, and trail connections. Designating and managing the property as part of a Greater Twin Lakes Open Space is the best use for this property and is consistent with BVCP guidance and direction.

Brief description of location of proposed amendment (including address or approximate coordinates):

6500 Twin Lakes Road, Parcel # 146311300009

This parcel is located south of 6655 Twin Lakes Road, and north of O Kalua Road, each of which are also proposed for open space designation. 6655 Twin Lakes Road is adjacent to Twin Lakes Open Space.

Size of Parcel:

3.97 acres

Applicant:

Twin Lakes Action Group, Dave Rechberger Chair
8756 Skyland Drive
Niwot Colorado 80503
303 818 4070

Owner:

Boulder Valley School District
6500 Arapahoe Avenue, Boulder CO 80303
Glen Segrue, 720-561-5794

Representative/Contact:

Dave Rechberger
8756 Skyland Drive
Niwot Colorado 80503
303 818 4070

Land Use Change Narrative (6500 Twin Lakes Road)

1) This proposal is intended to do the following:

1. Allow this 3.97-acre parcel to be added the County Open Space program.

In concert with 6655 Twin Lakes Road and 0 Kalua Road, the property qualifies for open space according to the County's acquisition criteria:

Parks and Open Space staff strive to acquire land that meet these criteria:

- I. Preserving rural areas that provide community buffers including significant agricultural land.
- II. Land for passive recreation including land for public access and potential trail connections.
- III. Land with other significant resources (cultural, scenic, and natural), including natural landmarks, archaeological sites, historically significant land and buildings, scenic view corridors, significant plant communities, riparian corridors, wetlands, and wildlife habitat.

<https://www.bouldercounty.org/open-space/management/acquisitions/>

According to the County description of the existing Open Space:

In the 1960s, thanks to the nearby IBM plant and other commercial attractions, the Gunbarrel residential area grew up around the lakes. The lakes have been central to the Gunbarrel community from the beginning.

<https://www.bouldercounty.org/open-space/parks-and-trails/twin-lakes/>

As the community has grown, the need for additional open space to accommodate additional residents has grown with it. So has the need to better protect remaining natural values under siege from encroaching development -- has grown with it. Now is the time to protect this parcel and expand the existing Open Space. In fact, in a survey of 1348 visitors using Boulder County Open Space, 6% indicated that they would like to have more open space purchased/acquired and 14% (top response) would like to see more trails constructed¹. Additionally, this land use change request is in support of strategic goals articulated in the 2020 Strategic Vision by Boulder Parks and Open Space¹. The goals state:

- (1) To preserve 2,500 additional acres and associated water rights
- (2) Prioritize acquisitions that offer opportunities for important trail connections

¹ Boulder County Parks & Open Space, 2020 Strategic Vision, *Presented to BOCC* (July 12, 2016).

This request is submitted with parallel requests for the adjacent properties at 6655 Twin Lakes Road (9.97 acres), and 0 Kalua Road (6.08 acres). The two southern parcels are currently owned by Boulder Valley School District (the “BVSD parcels”). Thus -- including this 3.97 acre at 6500 Twin Lakes Road parcel -- the County, City, and community have a rare chance to expand Gunbarrel’s magnificent Twin Lakes Open Space by a total of 20.02 acres. All three proposed properties are currently publicly owned.

A Greater Twin Lakes Open Space would have many similarities to the Two Ponds National Wildlife Refuge² in Arvada. Two Ponds is an example of how relatively small parcels in urban or residential settings can be key components of open space programs incorporating natural and recreation values. Adding the 6655 and 6500 Twin Lakes Road and 0 Kalua Road parcels to the existing Twin Lakes Open Space (42 acres) would result in a Greater Twin Lakes Open Space that approximates the size of Two Ponds.

Governor Hickenlooper’s Colorado Beautiful initiative (announced July 15, 2015) is another excellent example of how a Greater Twin Lakes Open Space vision is compatible with state and federal policy efforts and initiatives, as well as the County Open Space acquisition criteria, the BVCP, and the Boulder County Comprehensive Plan (BCCP). The goal of Colorado Beautiful is that, within one generation, every Coloradan will live within a ten-minute walk of a park, trail or open space area. A Greater Twin Lakes Open Space will provide substantially more benefit and opportunity for Gunbarrel residents than the existing area. Additionally, the Longmont-Boulder Trail described below warrants consideration as a priority trail or connector project under Colorado Beautiful³.

SATISFYING ALL CRITERIA FOR OPEN SPACE ACQUISITIONS In the text that follows, the many ways in which the land satisfies the published criteria for open space acquisitions is detailed.

I. Preserving rural areas that provide community buffers including significant agricultural land and prevent proposed development of land adjacent to existent open space.

6500 Twin Lakes Road is suitable to be managed as part of a Greater Twin Lakes Open Space area. It is adjacent to 0 Kalua Road, which is just south of 6655 Twin Lakes Road that is adjacent to the Twin Lakes Open Space. This land, owned by BVSD, was dedicated for community amenities.

The three Twin Lakes Parcels, including 6500 Twin Lakes Road, serve as a community buffer, by providing open space for Gunbarrel, breaking up contiguous developments, providing wildlife corridor, mitigating noise, providing a place for dark sky and a view shed, and as a hydrological buffer that includes protected wetlands. The adjacent Twin Lakes sit higher than the BCHA/BVSD properties and are a significant source of artificial recharge to the existing aquifer underneath the BCHA/BVSD properties. Finally, these buffers are important

² <http://www.fws.gov/refuges/profiles/index.cfm?id=61171>

³ https://cpw.state.co.us/Documents/Trails/Trails-Strategic-Plan-B_Colorado-The-Beautiful-and-Components.pdf

in preserving the rural residential character of the neighborhood.

It is also important to note that these buffers are critically important in preservation of land, wildlife, wetlands, and homes in these times of rapid climate change. A recent article⁴ highlights a decline in native bird population in Boulder County. “Boulder County did not lose a single vertebrate species in the 20th century... but we’re starting to lose species again for the first time since the 19th century,” said Steve Jones, an environmental consultant and volunteer with the Boulder Nature Association, who has been conducting breeding bird and raptor surveys in Boulder County for 35 years. “... **we’re seeing some species disappear right now due to overdevelopment and loss of habitat.**”

The Twin Lakes properties provide an important community buffer, in the form of space for the residents as Gunbarrel does not have a community or town center. Since 2015, approximately 500 apartments⁵ have been added to the community of Gunbarrel. Amenities such as parks and open space have not been added to keep pace with the housing development. There are only three existing parks for the Gunbarrel community⁶ – one of which is at Heatherwood (empty field with no amenities), one is on wetlands (Eaton Park, one bench and one picnic table), and the last (Tom Watson Park) requires either driving or crossing a high-speed six-lane Diagonal Highway. Additionally, some of the open space indicated on the map for Gunbarrel is actually privately owned (Boulder Country Club, ~\$30,000 to join)⁴.

Importantly, any development at Twin Lakes would pave over U.S. Department of Agriculture (USDA)/National Resources Conservation Service (NRCS)-designated *Prime Farmland* and *Farmland of Statewide Importance*. The *Prime Farmland* classification is their highest, best farmland classification. *Farmland of Statewide Importance* is their second-highest farmland classification.

*Prime Farmland*⁷, as defined by the USDA, “...is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land. *Farmland of Statewide Importance*...generally, this land includes areas of soils that nearly meet the requirements for *Prime Farmland*...some areas may produce as high a yield as *Prime Farmland* if conditions are favorable.”

Prime Farmland is of major importance in meeting the Nation's short and long-range needs for food and fiber; however, the supply of high-quality farmland is limited. It is up to local governments to act



⁴ <https://www.coloradohometownweekly.com/2020/01/11/populations-of-native-bird-species-decline-in-the-face-of-development-indicate-further-environmental-degradation/>

⁵ Apex Apartments and Gunbarrel Center Apartments

⁶ <https://bouldercolorado.gov/planning/gunbarrel-subcommunity-fact-sheet>

⁷ https://efotg.sc.egov.usda.gov/references/public/CO/5a_Prime_Farmland_Definition.pdf

responsibly to protect these lands with known *Prime* or *Statewide Importance* classifications, by converting them to Open Space, thereby preserving them for future generations. The size of the land parcels is irrelevant, as local farmers have effectively utilized smaller, separate parcels for growing. Prime agricultural land is a non-renewable resource. Once developed, it's lost forever. *In fact, Boulder County has a history of leading the state in the conversion of agricultural lands to non-agricultural lands.*

Reports from the USDA/NRCS for 6655 Twin Lakes Rd (north parcel) and 6500 Twin Lakes Rd /0 Kalua Road (south parcel) yield these results:

North Parcel (BCHA) Farmland Classification⁸:

- Approx. 62% of the total acreage is *Prime Farmland* if irrigated (Irrigation can take many forms, such as drip lines, solar drip, and flood irrigation).
- Approx. 38% of the total acreage is *Farmland of Statewide Importance*.

South Parcel (BVSD) Farmland Classification²:

- Approx. 92% of the total acreage is *Prime Farmland* if irrigated.
- Approx. 8% of the total acreage is *Farmland of Statewide Importance*.

In a forward-thinking 1991 memorandum, the City of Boulder Department of Community Planning & Development wisely stated to the City Planning Board and the County Long Range Planning Commission, "Lands designated as having *National Agricultural Significance* should not be considered suitable for future urban development," and, "Lands designated as having *State Agricultural Significance* should not be considered suitable for future urban development."

The BCCP⁹ guiding principles state, "*Maintain the rural character and function of the unincorporated area of Boulder County by protecting environmental resources, agricultural uses, open spaces, vistas, and the distinction between urban and rural areas of the county.*"

II. Land for passive recreation including land for public access and potential trail connections.

The Twin Lakes Open Space is the most heavily used open space property in the County. In 2012, it received more than 103,000 user visits a year. The parcel under consideration could provide trail connections to both the north and the south¹⁰. New trail stretches and connections should be explored and considered with regard to 1) the proposed Greater Twin Lakes, and 2) the Longmont-to-Boulder or "Lo-Bo" Regional Trail, "a 12-mile trail system that runs through Gunbarrel, Niwot, and open space properties connecting the City of Boulder

⁸ <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

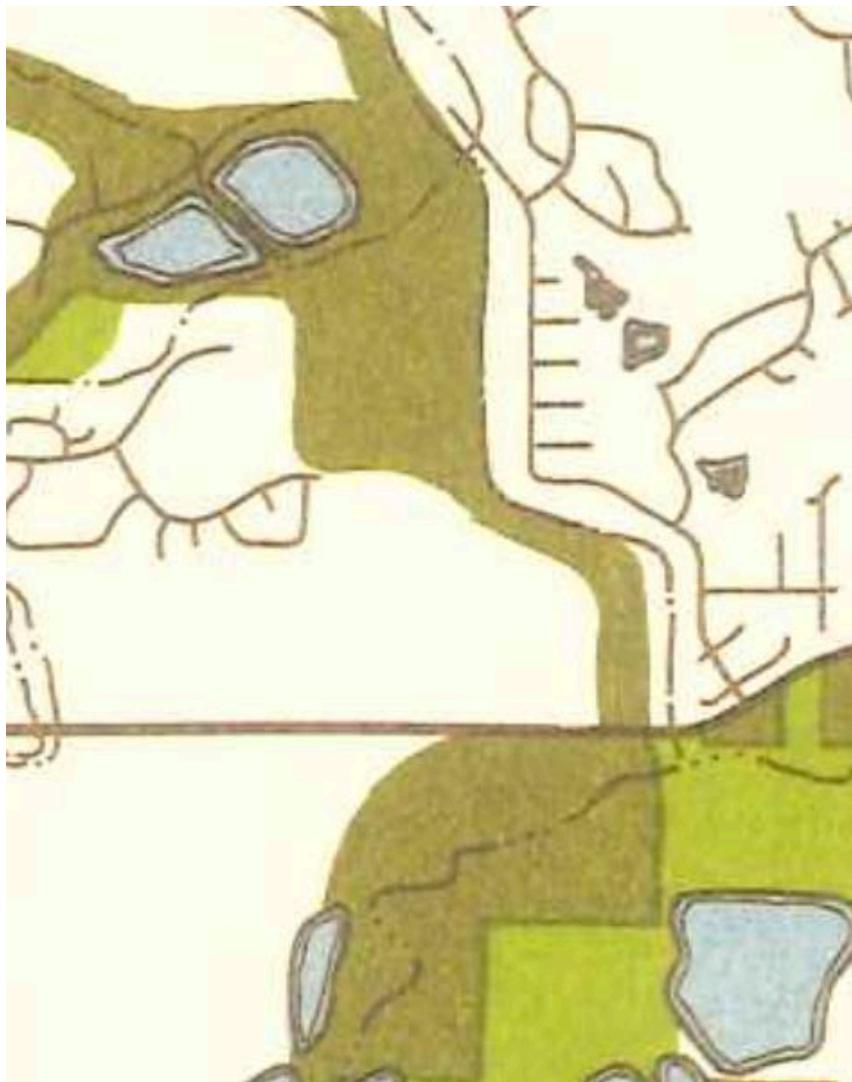
⁹ <https://www.bouldercounty.org/property-and-land/land-use/planning/boulder-county-comprehensive-plan/>

¹⁰ Boulder BCP Parks and Open Space Application, "Boulder Area Trails App"

with the City of Longmont. This Trail is an increasingly important regional connector. A Greater Twin Lakes Open Space presents the opportunity to enhance the recreational opportunities, scenic values, and natural setting traversed by this regional trail. Additionally, TLAG is interested in providing more public access via trails.

Ila. Land with a dedication An open secret about the south field is that it's a subdivision dedication. This means that a developer gave the land to Boulder Valley School District (BVSD) for \$10 as part of the county requirements to build the subdivision. Colorado Revised Statute 30-28-133 and Boulder County **Land Use Code Article 7 says that dedicated lands can only be used for parks or schools, and they must be for the benefit and use of the subdivision residents.**

1977 BVCP image showing plans for area to become a greenbelt.



Highlights

- Dedicated lands should reasonably serve residents of the contributing subdivision
- South Twin Lakes field is dedicated for a school or recreational use
- 60% of school site was intended to be a children's park
- 1977 Boulder Valley Comprehensive Plan shows area as part of a 40-acre community park. Twin Lakes fields are all that remains of that vision.

The southern Twin Lakes field was given to the Boulder Valley School District and has a land-use designation of Public. In 1967, George and Everett Williams, the "founders of Gunbarrel," dedicated this land to serve the Gunbarrel Green residents, specifically for a school or recreational use. **The main purpose of dedicated land is to set aside land for essential schools and parks.**

1967 Subdivision Dedication.

BOULDER VALLEY PUBLIC SCHOOLS
SCHOOL DISTRICT NO. Re2, BOULDER COUNTY
P. O. BOX 11, BOULDER, COLORADO 80301
PHONE 442-6931
Planning Department
May 24, 1967

RECEIVED
MAY 25 '67
OF
DEVELOPMENT

Boulder County Planning Commission
Boulder County Court House
Boulder, Colorado

Attention Mr. Lynn Vandergrift, Acting Director

Gentlemen:

This is to inform you that the Boulder Valley School District Re 2 has received a Warranty Deed from Twin Lakes Investment Company for a ten acre tract to satisfy the understanding approved in 1963 by the County Planning Commission between the school district and East View Inc. with respect to the five per cent requirement of the Gunbarrel Green Subdivision and Development.

A copy of the recorded deed and exhibits will be sent to you for your files at a later date.

Thank you for your cooperation.

Sincerely,


John Morris
School Planner

JTM:dc

cc: Gerald Caplan

III. Land with other significant resources (cultural, scenic, and natural), including natural landmarks, archaeological sites, historically significant land and buildings, scenic view corridors, significant plant communities, riparian corridors, wetlands, and wildlife habitat.

III(a) Conserve wildlife habitats.

The parcel offers abundant wildlife habitat, which is otherwise shrinking within Gunbarrel and the vicinity of the existing Open Space. Boulder County describes the existing Twin Lakes Open Space as “a haven for wetland wildlife, a hidden gem in the heart of Gunbarrel area.” The region contains a wildlife corridor, which according to a wealth of research^{11,12}, should maintain a minimum width of 1000 ft. This is the current width of the existing corridor. An interview with an expert Dr. Paul Beier (Univ. of Arizona, conservation planning and wildlife ecology), on the subject can be found here:

<https://www.youtube.com/watch?v=pPIQlxjejlC>

Six Boulder County Wildlife Species of Special Concern live directly on the fields:

- Tiger salamanders
- Meadow voles
- Garter snakes
- Belted kingfisher
- Northern flicker
- Wood ducks

Eighteen other Species of Special Concern have been documented using the fields for foraging, such as:

- Northern harriers
- Bushtits
- Pine siskins
- Prairie falcons
- A variety of other birds.

Other wildlife, such as ground-nesting birds protected by the Migratory Bird Treaty Act, use this area. In summer 2016, a biologist hired by the Boulder County Housing Authority found a mallard’s nest and meadowlark’s nest with five babies in the fields.

Additionally, migratory birds of conservation concern use the region. These include¹³:

- Bald eagle
- Burrowing owl
- Ferruginous hawk

¹¹ P. Beier et al., “Best Management Practices for Wildlife Corridors,” (2008).
http://corridordesign.org/dl/docs/corridordesign.org_BMPs_for_Corridors.pdf

¹² Center for Biological Diversity

¹³ Blue Mountain Environmental Consulting Open Space Evaluation of 6655 and 6600 Twin Lakes Road (complete report appears at end of this packet)

- Golden eagle
- Lewis's woodpecker
- Loggerhead shrike
- Mountain plover
- Short-eared owl
- Swainson's hawk
- Williamson's sapsucker

The official description further describes habitat values and lists species as follows:

Wetland habitats, nestled within the surrounding Great Plains, support aquatic plant and animal life and serve to lure in large numbers of migrating bird species. With grasses, wildflowers and trees surrounding the wetlands, these areas are biologically diverse both in and out of the water.

A description of wildlife using the properties in question is listed below¹⁴.

Mammals

Coyote
 Eastern cottontail
 Fox squirrel
 Little brown bat
 Raccoon
 Red fox
 Striped skunk

Birds

American avocet
 American coot
 American crow
 American goldfinch
 American kestrel
 American robin
 American widgeon
 Belted kingfisher
 Canada goose
 Common grackle
 Common raven
 Downy woodpecker
 Black-billed magpie
 Black-capped chickadee
 Bullock's Oriole
 Double-crested cormorant
 Great blue heron

¹⁴ Twin Lakes Open Space webpage, <https://www.bouldercounty.org/open-space/parks-and-trails/twin-lakes/>

Great Horned Owl
 Killdeer
 Mallard
 Mourning dove
 Red-tailed hawk
 Red-winged blackbird
 Tree swallow
 Violet-green swallow
 Yellow-rumped warbler
 Yellow Warbler
 Amphibians & Reptiles
 Bullsnake
 Garter snake
 Snapping turtle

Additionally, local birders have been recording bird sightings for the past ten years on the Twin Lakes Open Space. One hundred and ninety-nine different types of birds have been spotted at the Twin Lakes Open Space¹⁵. The list follows:

Accipiter sp.	Common Yellowthroat	Nashville Warbler	Streptopelia sp.
American Avocet	Cooper's Hawk	Northern Cardinal	Swainson's Hawk
American Coot	Cordilleran Flycatcher	Northern Flicker	Swainson's Thrush
American Crow	crow/raven sp.	Northern Goshawk	Swallow sp.
American Goldfinch	dabbling duck sp.	Northern Harrier	Swamp Sparrow
American Kestrel	Dark-eyed Junco	Northern Parula	Tanager sp. (Piranga sp.)
American Redstart	Double-crested Cormorant	Northern Pintail	Teal sp.
American Robin	Downy Woodpecker	Northern Rough-winged Swallow	Tennessee Warbler
American Tree Sparrow	Duck sp.	Northern Saw-whet Owl	Townsend's Solitaire
American White Pelican	Dusky Flycatcher	Northern Shoveler	Townsend's Warbler
American Wigeon	Eastern Bluebird	Northern Shrike	Tree Swallow
Aythya sp.	Eastern Kingbird	Northern Waterthrush	Tree/Violet-green Swallow
Bald Eagle	Eastern Phoebe	Olive-sided Flycatcher	Turkey Vulture
Bank Swallow	Eastern Screech-Owl	Orange-crowned Warbler	Veery
Barn Swallow	Empidonax sp.	Orchard Oriole	Vesper Sparrow
Belted Kingfisher	Eurasian Collared-Dove	Osprey	Violet-green Swallow
Black Phoebe	European Starling	Ovenbird	Virginia's Warbler
Black-billed Magpie	Ferruginous Hawk	Pacific Wren	warbler sp. (Parulidae sp.)
Blackbird sp.	Franklin's Gull	Pacific/Winter Wren	Warbling Vireo
Black-capped Chickadee	Gadwall	Passerine sp.	Western Bluebird
Black-capped/Mountain Chickadee	Golden Eagle	Peep sp.	Western Grebe
Black-chinned Hummingbird	Gray Catbird	Peregrine Falcon	Western Kingbird
Black-crowned Night-	Gray Flycatcher	Pewee sp. (Contopus sp.)	Western Meadowlark

¹⁵ <https://ebird.org/hotspot/L907071>

Heron			
Black-headed Grosbeak	Great Blue Heron	Pied-billed Grebe	Western Sandpiper
Black-necked Stilt	Great Egret	Pigeon/dove sp.	Western Tanager
Blackpoll Warbler	Great Horned Owl	Piming Kuo	Western Wood-Pewee
Black-throated Gray Warbler	Greater Yellowlegs	Pine Siskin	Western/Eastern Wood-Pewee
Black-throated Green Warbler	Green Heron	Plumbeous Vireo	White-breasted Nuthatch
Blue Grosbeak	Green-tailed Towhee	Prairie Falcon	White-crowned Sparrow
Blue Jay	Green-winged Teal	Pygmy Nuthatch	White-faced Ibis
Blue-gray Gnatcatcher	Gull sp.	Red Crossbill	White-throated Sparrow
Blue-winged Teal	Hairy Woodpecker	Red-breasted Merganser	White-winged Dove
Bohemian Waxwing	Hammond's Flycatcher	Red-breasted Nuthatch	Willet
Bohemian/Cedar Waxwing	Hammond's/Dusky Flycatcher	Red-eyed Vireo	Wilson's Snipe
Brewer's Blackbird	Harris's Sparrow	Red-headed Woodpecker	Wilson's Warbler
Brewer's Sparrow	Hermit Thrush	Red-naped Sapsucker	Wood Duck
Broad-tailed Hummingbird	Herring Gull	Red-tailed Hawk	Worm-eating Warbler
Broad-winged Hawk	Hooded Warbler	Red-winged Blackbird	Wren sp.
Brown Creeper	Horned Grebe	Ring-billed Gull	Yellow Warbler
Brown Thrasher	Horned Lark	Ring-necked Duck	Yellow-breasted Chat
Brown-headed Cowbird	House Finch	Rock Pigeon	Yellow-rumped Warbler
Bufflehead	House Sparrow	Rock Wren	
Bullock's Oriole	House Wren	Rose-breasted Grosbeak	
Bushtit	Indigo Bunting	Rough-legged Hawk	
Buteo sp.	Killdeer	Ruby-crowned Kinglet	
Cackling Goose	Lark Latch	Ruby-throated/Black-chinned Hummingbird	
California Gull	Lark Sparrow	Rufous Hummingbird	
Calliope Hummingbird	Lazuli Bunting	Rusty/Brewer's Blackbird	
Canada Goose	Least Flycatcher	Sandhill Crane	
Canvasback	Least Sandpiper	Savannah Sparrow	
Cassin's Finch	Lesser Goldfinch	Say's Phoebe	
Catharus sp.	Lesser Scaup	Selasphorus sp.	
Cedar Waxwing	Lesser Yellowlegs	Sharp-shinned Hawk	
Chestnut-sided Warbler	Lincoln's Sparrow	Sharp-shinned/Cooper's Hawk	
Chipping Sparrow	Loggerhead Shrike	Short-billed/Long-billed Dowitcher	
Cinnamon Teal	Long-billed Dowitcher	Snow Goose	
Clay-colored Sparrow	Long-eared Owl	Snowy Egret	
Cliff Swallow	MacGillivray's Warbler	Solitary Sandpiper	
Common Goldeneye	Mallard	Song Sparrow	
Common Grackle	Marsh Wren	Spinus sp. (goldfinch sp.)	
Common Merganser	Merlin	Spizella sp.	
Common Nighthawk	Mountain Bluebird	Spotted Sandpiper	
Common Raven	Mountain Chickadee	Spotted Towhee	
Common Redpoll	Mourning Dove	Steller's Jay	

Most or all of these habitat values would carry over the three proposed open space parcels (6500 Twin Lakes Road, 6655 Twin Lakes Road, and 0 Kalua Road), and all of the listed species would use and benefit from adding the new acreage to the existing Open Space under more active management. The wildlife corridor extends from the Twin Lakes Open Space through the three parcels (6655 and 6500 Twin Lakes Road, and 0 Kalua Road) to the Johnson-Coen Trust, Boulder Creek, Sawhill Pond Wildlife Preserve¹⁶, Walden Pond Wildlife Habitat¹⁷ and other undeveloped parcels.

The property provides hunting habitat and prey for many riparian species and predators, such as coyotes, foxes, and eagles. Wildlife species and values are further described at pages 40-44 of the Twin Lakes Management Plan.

IIIb Protect riparian and scenic corridors

There are four federally designated wetlands on or adjacent to the Twin Lakes properties. These Waters of the United States provide homes to diverse species, trap floodwater, and remove nitrogen and other pollutants. According to the Twin Lakes Open Space Management Plan:

Remnants of native riparian and wetland ecosystems remain and artificial waterways create new habitat.

Wetlands and riparian areas provide food, denning and nesting sites, and respite from the hot sun or gusting winds. A diversity of flora and fauna are found in this ecosystem from water-dependent plants to migratory birds that use them for resting places.

<http://www.bouldercounty.org/doc/parks/twinlakesmplan.pdf> at 11.

Ephemeral wetlands on the north field, March 2016



Eaton Park/Twin Lakes sign on the importance of wetlands



¹⁶ <https://bouldercolorado.gov/osmp/sawhill-ponds-trailhead>

¹⁷ <https://www.bouldercounty.org/open-space/parks-and-trails/walden-ponds-wildlife-habitat/>

The Management Plan continues:

Wetland fringe, forested riparian, and upland grass communities comprise the vegetation surrounding Twin Lakes. These communities are heavily disturbed and the predominant vegetative covering is weedy species and pasture grasses.

This raises the potential for a restoration program in cooperation with local residents and community groups to take advantage of public-private partnerships to restore the larger landscape of a Greater Twin Lakes Open Space, along the lines of Two Ponds Refuge management.

Policy 3.06 of the Boulder Valley Comprehensive Plan states that “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.” Policy 3.28 of the BVCP states: “Surface and groundwater resources are part of an integrated environmental system that will be protected as a resource and managed to prevent their degradation and to protect and enhance aquatic, wetland and riparian ecosystems.”

Important facts about the Twin Lakes wetlands

- a. These wetlands help protect flood-prone homes from additional inundation. One acre of wetlands can store up to 1.5 million gallons of floodwater.
- b. Soils in the Twin Lakes parcels are saturated for long enough durations that they are federally listed as hydric soils, characteristic of soils in wetland areas.
- c. Mountain rush (*Juncus arcticus*), a wetland grass that signifies ephemeral wetlands, has been mapped in large swathes on both the north and south fields. Mountain rush is an important food source for birds.
- d. Muskrat, a species present at Twin Lakes Open Space, uses mountain rush for hut construction and food.
- e. Section 404 of the Clean Water Act protects ephemeral wetlands and wetland connectivity.
- f. The Boulder Parks & Recreation sign shown above talks about the cattails and rushes providing a safe environment for many animals. It also states: “Wetland habitats are extremely threatened. More than a quarter of all animals in Colorado depend on wetlands to survive.
- g. The adjacent Twin Lakes sit higher than the BCHA/BVSD properties and are a significant source of artificial recharge to the existing aquifer underneath the BCHA/BVSD properties. Drainage systems in any new development will deplete flows to wetlands south of BVSD property, thereby drying them up.**

The Twin Lakes properties have a high water table. The federally designated wetlands nearby are fed by the groundwater traveling through these fields. Development of these fields will affect the flow of water to these wetlands. Development will also require extensive mitigation of the high groundwater, greatly diminishing the fields’ water-retention capacity. This displaced

water has to go somewhere. The engineering that would be required to mitigate and divert water from the development and existing surrounding structures would change the flow of water to the wetlands on the properties and to those nearby. If the wetlands get too little flow, they will dry out. If they get too much flow, they will scour out, increasing sediment load and promoting erosion. A National Academies of Sciences study found that it is almost impossible to replicate the natural charging of wetlands. Maintaining and protecting these wetlands is critical for mitigating flooding and for providing habitat for the many wildlife species at the Twin Lakes Open Space.

Scenic values will be enhanced by a Greater Twin Lakes property.

2. Foster public involvement and support public-private partnerships

Contrary to principles and commitments in the BVCP, BCCP, and Open Space policies, the public has not yet been engaged with regard to the fate of these parcels. The public at large, local residents, and community groups need to be heard.

TLAG is specifically interested in public-private partnerships that would address any concerns County agencies might have regarding future management of these parcels as open space. TLAG is also open to exploring means of assuming ownership of the properties proposed for open space. In addition, we will contact the Boulder Open Space Conservancy¹⁸ non-profit that is driving public partnerships, and has a memorandum of understanding with City of Boulder's Open Space & Mountain Parks (OSMP)¹⁹.

Open space acquisitions should encompass threatened properties with significant natural and recreational values in the midst of our communities, in this case, unincorporated Gunbarrel land adjacent to a Natural Ecosystem overlay on the BVCP map. Open space properties near people are used every day by hundreds of visitors, and regularly by the majority of residents. No fossil fuels are used to access them by the vast majority of users. They provide convenient and vitally needed natural areas that provide vital ecosystem services on the one hand, and essential access to nature and the environment for Gunbarrel's 12,000-some residents on the other.

3. Guard against hydrologic and geologic hazards

Hydrologic and geologic hazards could be associated with development of this property, especially at densities exceeding existing land use designations. The area is known to have a high water table.

The Preliminary Hydrologic Analysis on BCHA Property by Gordon McCurry, Ph.D. (June 24, 2015) is discussed in the 6655 Twin Lakes Road change request. These include potential hydrologic impacts to existing structures and properties; soil suitability concerns; and flooding potential associated with existing shallow groundwater.

¹⁸ <https://bosc.org/>

¹⁹ <https://bouldercolorado.gov/newsroom/announcing-public-private-partnership-with-boulder-open-space-conservancy>

4. Relationship of the proposed amendment to the goals, policies, elements, and amendment criteria of the Boulder Valley Comprehensive Plan.

Among the Core Values of the BVCP that would be furthered by the amendment are:

- Sustainability as a unifying framework to meet environmental, economic and social goals
- Open space preservation
- Great neighborhoods and public spaces
- Environmental stewardship and climate action
- Physical health and well being

The BVCP provides that:

2.04 Open Space Preservation The city and county will permanently preserve lands with open space values by purchasing or accepting donations of fee simple interests, conservation easements or development rights and other measures as appropriate and financially feasible. Open space values include use of land for urban shaping and preservation of natural areas, environmental and cultural resources, critical ecosystems, water resources, agricultural land, scenic vistas and land for passive recreational use.

Section 2.09 provides that “The city and county will foster the role of neighborhoods to establish community character, provide services needed on a day-to-day basis, foster community interaction, and plan for urban design and amenities.” This proposal is coming from the neighborhood with the intent of protecting and enhancing the community character.

Section 2.01 provides that “The unique community identity and sense of place that is enjoyed by residents of the Boulder Valley [. . .] will be respected by policy decision makers.”

Section 2.03 requires that “The city and county will, by implementing the Boulder Valley Comprehensive Plan, ensure that development will take place in an orderly fashion, take advantage of existing urban services, and avoid, insofar as possible, patterns of leapfrog, noncontiguous, scattered development within the Boulder Valley.”

Section 2.06 – Preservation of Rural Areas and Amenities - The city and county will attempt to preserve existing rural land use and character in and adjacent to the Boulder Valley where...vistas...and established rural residential areas exist.”

Section 2.09 – Neighborhoods as Building Blocks – The city and county will foster the role of neighborhoods to establish community character, provide services needed on a day-to-day basis, foster community interaction, and plan for urban design and

amenities.”

Section 2.10 - Preservation and Support for Residential Neighborhoods – The city will work with neighborhoods to protect and enhance neighborhood character and livability [. . .] The city will also work with neighborhoods to identify areas for additional housing, libraries, recreation centers, parks, open space or small retail uses that could be integrated into and supportive of neighborhoods.”

Section 2.15 - Compatibility of Adjacent Land Uses - To avoid or minimize noise and visual conflicts between adjacent land uses that vary widely in use, intensity or other characteristics, the city will use tools such as interface zones, transitional areas, site and building design and cascading gradients of density in the design of subareas and zoning districts.

Section 2.36 provides for “provision of functional landscaping and open space; and the appropriate scale and massing of buildings related to neighborhood context.” Expanding open space will further these goals, and assure that appropriate scale and massing of buildings are consistent with the existing rural residential neighborhood context.

Section 3: Natural Environment, from the BVCP, has germane sections as follows:

Section 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 bioregions, airsheds and watersheds are considered and incorporated into planning.

Section 3.03 Native 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, acquisitions 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, significant natural communities and county and local species of concern (i.e., resources identified in the Boulder County Comprehensive Plan) will be emphasized. 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.

Section 3.04 Ecosystem Connections & Buffers - The city and county recognize the importance of preserving large habitat areas, especially of unfragmented habitat, in support of the biodiversity of their 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 (e.g., wildlife corridors) and buffers to support the natural movement of native organisms between ecosystems. Connected

corridors of habitat may extend through or along the edges of the urban environment and often serve as vital links between natural areas for both wildlife and humans. Connected corridors are often at the greatest risk of degradation and development, and those deemed to have high ecological value should be identified for planning and, where appropriate, for acquisition, preservation, restoration and/or management while balancing existing land uses and other needs of the community.

Section 3.05 Maintain & Restore Natural Ecological Processes & Natural Disturbances - Recognizing that natural 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 are maintained or replicated in the management of natural lands.

Section 3.06 Wetland & 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. Because they have historically been so scarce in the Front Range and because of continued degradation, the city and county will continue to develop and support programs to protect, enhance and educate the public about the value of wetlands and riparian areas in the Boulder Valley. The city will strive for no net loss of wetlands and riparian areas....

Section 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. These public lands may include areas for recreation and 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.

Section 3.10 Climate Change Mitigation & Adaptation & Resilience - The city and county are working to help mitigate climate change globally and recognize that climate change adaptation is an important area for consideration. Preserving large ecological reserves enhances the resilience of native ecosystems and reduces the loss of native biodiversity, ecological processes and ecosystems as the climate changes... Overall strategies may include: ... 3. Protect large reserves of open space land to support the long-term viability of native plants and animals;

Section 3.11 Urban Environmental Quality - To the extent possible, the city and county will seek to protect the environmental quality of areas under significant human and urban influence and will balance human needs and public safety with environmental protection.

Section 3.13 Water Conservation - The city and county will promote the conservation of water resources through water quality protection, public education, monitoring and policies that

promote efficient water usage such as water-conserving landscaping.

Section 3.14 Management of Wildlife-Human Conflicts - The Boulder Valley sits within a wildland-urban interface, and the city and county recognize the intrinsic value of wildlife in both their urban and rural areas. The city and county 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....

Section 3.15 Soil Carbon Sequestration - The city and county recognize that soil carbon sequestration may have a range of potential benefits, including water retention, climate change mitigation, soil health and soil stabilization. Soil health is especially important for both the natural environment and agricultural lands.... For the natural environment, the capacity of native grasslands and forests to sequester carbon will be important in city and county soil carbon sequestration efforts. Native grasslands and forests will be maintained and protected following resource management plans....

Section 3.18 Hazardous Areas - Hazardous areas that present a 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.

Section 3.22 Floodplain Management - 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 ... The county's approach to flood management also includes: a. Efforts to preserve currently undeveloped areas in existing floodplains ...

Section 3.23 Non-Structural Approach to Flood Management - 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.

Section 3.24 Protection of High Hazard Areas - High hazard areas are the areas of the floodplain with the greatest risk to loss of life due to floodwater velocity.... To reduce risk and loss, riparian corridors, natural ecosystems, wildlife habitat and wetlands will be protected in these areas. Trails or other open recreational facilities may be feasible in certain areas.

Section 3.25 Larger Flooding Events - The city and county will seek to better understand the impact of larger flood events and evaluate context- appropriate, cost-effective policies and floodplain management strategies to address these risks.

Section 3.26 Protection of Water Quality - Water quality is a critical health, economic and aesthetic concern. The city and county have been protecting, maintaining and improving water quality and overall health within the Boulder Valley watersheds as a necessary component of

existing ecosystems and as a critical resource for the human community.

Section 3.30 Surface & Groundwater - Surface and groundwater are part of an integrated environmental system that will be protected as a resource and managed to prevent their degradation and to protect and enhance aquatic, wetland and riparian ecosystems.

Other relevant sections from the BVCP include:

Section 4.02 Climate Adaptation Planning - The city and county will cooperatively develop and implement a climate change adaptation plan to identify current vulnerabilities, address economics of recovery and determine strategies to protect the community against the potential negative impacts associated with climate change.

Section 4.05 Clean Mobility - To reduce GHG emissions, the city and county will support the retirement of fossil-fuel based transportation. The city and county will continue to develop policies, incentives and programs that reduce vehicle miles traveled, replace fossil fuel- based transportation with clean energy- fueled transportation (e.g., with electric vehicles) and continue to plan a built environment and mix of land uses that reduce the need for people to drive.

Section 8.04 Addressing Community Deficiencies - The city and county will use community feedback in conjunction with robust data resources to identify barriers to development and provision of important basic human services and will work closely with community partners and non-profits to find solutions to critical deficiencies.

Section 8.07 Safety & Community Health - The city and county promote safety by fostering positive neighborhood and community relations, building a sense of community pride and involvement and promoting safe and attractive neighborhoods.

Section 8.08 Health & Well-Being - The city and county strive to ensure that the community continues to be a leader in promoting physical, mental and social well- being of community members, and will support recreational, cultural, educational and social opportunities.... Neighborhood and community design will encourage physical activity and healthy eating by establishing easy access to parks and trails....

Section 8.09 Resilience in Public Safety & Risk Prevention - The city and county will provide focused efforts around public safety, risk prevention and early intervention.... The city and county will prepare for, respond to and manage wildfire hazards by implementing wildland-urban interface regulations...

Section 8.10 Community Connectivity & Preparedness - The city and county will foster social and community connectivity and communications that promote well-being, deepen a sense of community and encourage civic participation and empowerment.

Section 8.16 Trail Functions & Locations - The city and county recognize that trails are an important part of Boulder's community identity and serve to achieve accessibility goals and connect humans and the natural environment. Trails serve a variety of functions such as exercise, recreation, transportation, education and/ or environmental protection.... Trail and trailhead planning should minimize environmental impacts consistent with the comprehensive plan's Natural Environment policies and enhance recreational opportunities, non-motorized transportation and quality of life.

Section 8.17 Trails Network - The city and county recognize regional connectivity of parks, greenways, trails, open spaces, residential areas and employment centers is important to reduce traffic congestion, reduce parking demand, enhance opportunities for long-distance transportation and recreation experiences, increase accessibility, disperse use and crowding impacts on users, neighborhoods and ecosystems and reduce generation of greenhouse gases and other air pollutants.

Section 9.01 Support for Agriculture - The city and county encourage the preservation of working agricultural lands and sustainable production of food on them to the degree they provide cultural, environmental, economic and resilience benefits to the community. These uses are important for preserving the rural character and agriculture in Area III. The city and county will demonstrate and encourage the protection of significant agricultural areas and related water supplies and facilities, including the historic and existing ditch systems, through a variety of means, which may include public acquisition, land use planning and sale or lease of water for agricultural use...

Section 9.03 Sustainable Food Production & Agriculture Practices - The city and county will promote sustainable food production and agricultural practices on publicly- owned lands and will encourage them on private lands. Sustainable practices include food production methods that integrate ecological conservation objectives, enhance soil health, responsibly use water and quality protection....

Section 9.04 Soil Health & Soil Carbon Sequestration - The city and county will consider strategies to enhance soil health and will explore and evaluate strategies to sequester soil carbon on certain agricultural lands.

Section 10.01 High-Performing Government - The city and county strive for continuous improvement in stewardship and sustainability of financial, human, information and physical assets. In all business, the city and county seek to enhance and facilitate transparency, accuracy, efficiency, effectiveness and quality customer service. The city and county support strategic decision-making with timely, reliable and accurate data and analysis.

Section 10.02 Community Engagement - The city and county recognize that environmental, economic and social sustainability of the Boulder Valley are built upon full involvement of the community. The city and county support better decision-making and outcomes that are achieved by facilitating open and respectful dialogue and will actively and continually pursue

innovative public participation and neighborhood involvement. Efforts will be made to: 1. Use effective technologies and techniques for public outreach and input; 2. Remove barriers to participation; 3. Involve community members potentially affected by or interested in a decision as well as those not usually engaged in civic life; and 4. Represent the views or interests of those less able to actively participate in the public engagement process, especially vulnerable and traditionally under-represented populations. Therefore, the city and county support the right of all community members to contribute to governmental decisions through continual efforts to maintain and improve public communication and the open, transparent conduct of business. Emphasis will be placed on notification and engagement of the public in decisions involving large development proposals or major land use decisions that may have significant impacts and/ or benefits to the community.

Section 10.03 Communication Capacity for Resilience - The city and county recognize that engaged communities and residents are better prepared to support themselves in the event of a disruption and encourage community engagement in conjunction with risk education and preparedness. The city and county will continue to support ongoing, robust communication and outreach to communities and vulnerable residents to educate and prepare for disruption.

Section 10.04 Informed Community - The city and county commit to gathering and sharing information to support and encourage open, participatory government and an informed community. To encourage vibrant public discourse, the city and county strive to provide participants with the information they need to participate in a meaningful way. The city and county strive to ensure high-quality language services in order to communicate effectively with limited English-proficient residents.

Section 10.05 Support for Volunteerism - The city recognizes the value of community volunteers to help achieve the organization and community goals. The city supports volunteer programs that engage residents to improve their community and participate in addressing local issues.

Importantly, Twin Lakes Open Space is designated by an overlay on the Boulder Valley Natural Ecosystems Map in the BVCP. According to the BVCP:

to encourage environmental preservation, a Natural Ecosystem overlay is applied over Comprehensive Plan Land Use Designations throughout the Boulder Valley Planning Area. Natural ecosystems are defined as areas that support native plants and animals or possess important ecological, biological or geological values that represent the rich natural history of the Boulder Valley. The Natural Ecosystems overlay also identifies connections and buffers that are important for sustaining biological diversity and viable habitats for native species, for protecting the ecological health of certain natural systems, and to buffer potential impacts from adjacent land uses.

A Greater Twin Lakes Open Space will further these goals by providing connections and buffers for the wildlife and natural values in the existing Open Space. It will protect the

ecological health of the riparian ecosystem from development threats, and buffer impacts from incompatible land uses.

The Boulder County Comprehensive Plan also emphasizes the importance of Open Space:

1) **Parks and open space.** “Open space shall be used as a means of preserving the rural character of the unincorporated county and as a means of protecting from development those areas which have significant environmental, scenic or cultural value.”

<https://www.bouldercounty.org/property-and-land/land-use/planning/boulder-county-comprehensive-plan/>

The Twin Lakes Management Plan describes how the existing Open Space relates to the BCCP and BVCP at pages 38-39. Greater Twin Lakes would complement and supplement these goals and values by incorporating the additional 20.02 acres into the existing Open Space.

Goals in the Boulder County Comprehensive Plan of particular relevance to the Twin Lakes Open Space include:

Appendix 2: Boulder County Comprehensive Plan: Goals and Policies Goals

- Environmental Management

B.5 Wetlands, which are important to maintaining the overall balance of ecological systems, should be conserved.

B.9 Riparian ecosystems, which are important plant communities, wildlife habitat and movement corridors, shall be protected.

- Parks and Opens Space

C.1 Provision should be made for open space to protect and enhance the quality of life and enjoyment of the environment.

C.5 The private sector, non-county agencies, and other governmental jurisdictions should be encouraged to participate in open space preservation and trails development in Boulder County.

- Residential Goals

D.2 Quality residential areas, which function as integral neighborhood units with schools, parks and other similar facilities as centers, should be encouraged.

- Public Involvement

H.1 The county shall encourage public participation in the making of decisions by public and quasi-public bodies which significantly affect citizens.

Policies

Those policies in the Boulder County Comprehensive Plan (as amended, 1999) of particular relevance to the Twin Lakes Open Space include:

- Resource Management

OS 2.03 The county shall provide management plans and the means for the implementation of said plans for all open space areas that have been acquired by or dedicated to the county.

OS 2.03.01 The foremost management objectives of the individual open space lands shall follow directly from the purposes for which the land was acquired.

OS 2.03.02 Management of county open space lands shall consider the regional context of ecosystems and adjacent land uses.

OS 2.04 The county, through its Parks and Open Space Department, shall provide appropriate educational services for the public which increase public awareness of the county's irreplaceable and renewable resources and the management techniques appropriate for their protection, preservation, and conservation.

OS 2.05 The county, through its Weed Management Program, shall discourage the introduction of exotic or undesirable plants and shall work to eradicate existing infestations through the use of Integrated Weed Management throughout the county on private and public lands.

- Recreational Use

OS 4.03.01 Recreational use shall be passive, including but not limited to hiking, photography or nature studies, and, if specifically designated, bicycling, horseback riding, or fishing. Only limited development and maintenance of facilities will be provided.

- Trails

OS 6.01 Trails and trailheads shall be planned, designed, and constructed to avoid or minimize the degradation of natural and cultural resources, especially riparian areas and associated wildlife habitats.

OS 6.04 Trails shall provide for pedestrian, equestrian, bicycle, and/or other nonmotorized uses, where each is warranted. Incompatible uses shall be appropriately separated.

- Public Decision Making

OS 8.03 In developing management plans for open space area, Parks and Open Space staff shall solicit public participation of interested individuals, community organizations, adjacent landowners and the Parks and Open Space Advisory

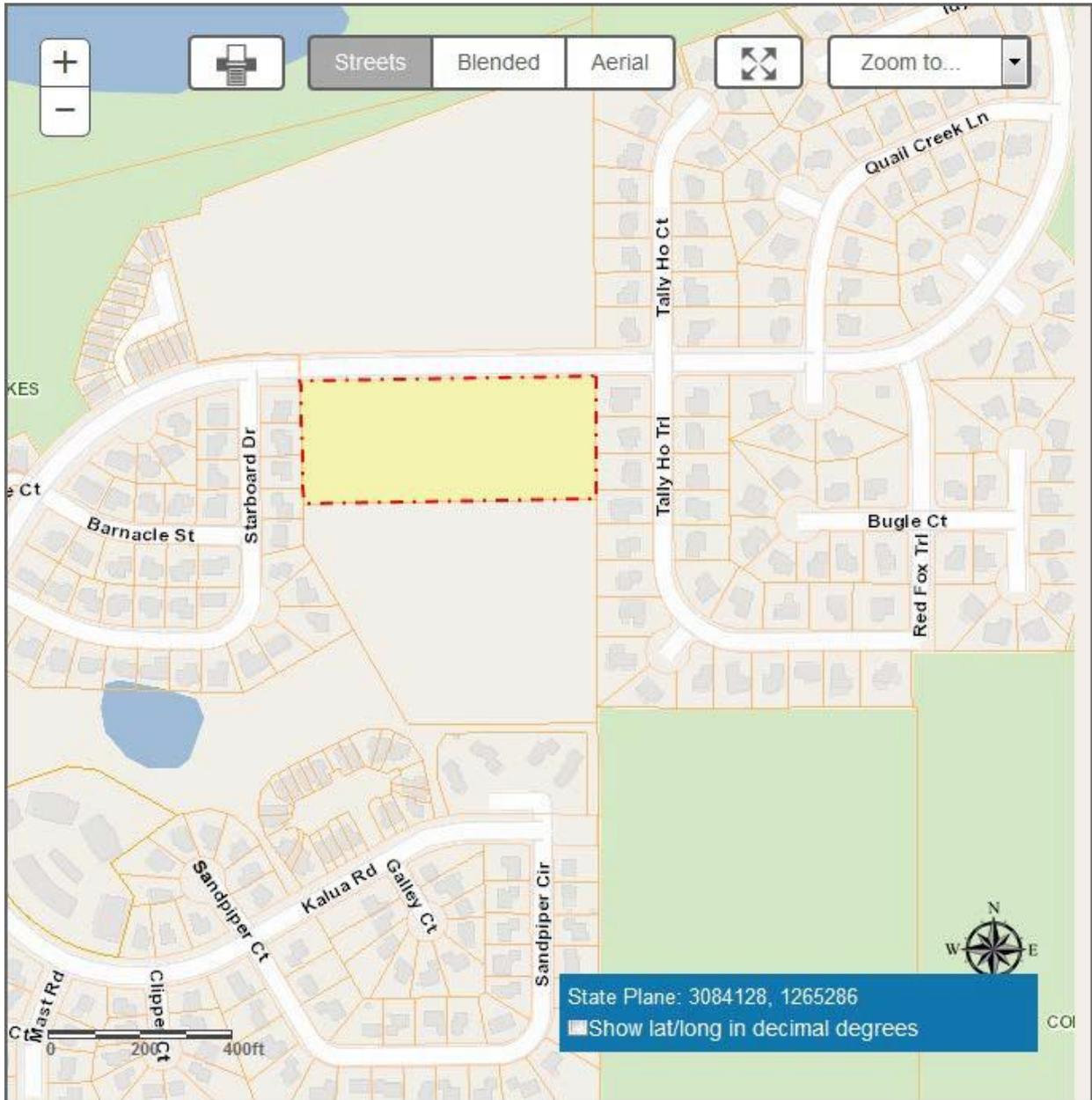
Committee. Plans shall be reviewed by the Parks and Open Space Advisory Committee, including public comment, and recommended for adoption after public hearing by the Board of County Commissioners.

These goals and policies largely speak for themselves. Integrating 0 Kalua Road with 6500 Twin Lakes Road and 6655 Twin Lakes Road into a Greater Twin Lakes Open Space would further the environmental management, parks and open space, and residential goals in the Plan. The proposed amendment offers opportunities to improve and enhance resource management, recreational use, and trails.

“Public Involvement” and “Public Decision Making” warrant special mention, as public participation has been severely lacking to date in decisions made and proposals developed by public bodies regarding the future use of these parcels and the overall community. This is contrary to specific direction.

Through this proposed amendment, TLAG is requesting the level of public participation that the County is required to offer: including public comment and a public hearing on the potential for these parcels to be added to the Open Space system

Location map showing size and context of the area proposed for amendment





OUR LEGACY. OUR FUTURE.

BOULDER VALLEY COMPREHENSIVE PLAN



BOULDER VALLEY COMPREHENSIVE PLAN 2020 MIDTERM UPDATE: REQUEST FOR REVISION

1) Type of Amendment (check all that apply):

Land Use Map Amendment

Planning Areas Map Amendment

Service Area contractions or Minor Changes to the Service Area Boundary

Other Map Amendment

2) Please provide the following information

a. Brief description of the proposed amendment:

Change the Land Use Map of the parcel at 6655 Twin Lakes Rd. to Open Space, so that the parcel can be managed as part of a Greater Twin Lakes Open Space area, in concert with related requests for 6500 Twin Lakes Road and O Kalua Road.

b. Brief reason or justification for the proposed amendment:

6655 Twin Lakes Road consists of 9.97 acres of undeveloped land, otherwise described as 10 acres. The parcel is owned by the Boulder County Housing Authority (BCHA). Adding the parcel to the Open Space system to enlarge and enhance the values of the existing Twin Lakes property is best use consistent with the BVCP goals, objectives and vision. In concert with the other two change requests being submitted by TLAG, this parcel satisfies ALL criteria for acquisition and incorporation into the County Open Space program. A Greater Twin Lakes Open Space, with the addition of these three parcels, would preserve an existing wildlife corridor connecting the existing Twin Lakes Open Space to undeveloped open space contiguous to these parcels at the southeast corner. Also, the land will serve as a community buffer and contains Prime Farmland (highest classification from USDA), federally protected wetlands, and trail connections. Designating and managing the property as part of a Greater Twin Lakes Open Space is the highest and best use for this property, is consistent with BVCP guidance and direction.

a. Brief description of location of proposed amendment (including address or approximate coordinates):

6655 Twin Lakes Road (unincorporated), Parcel # 146311300011
This parcel is located directly south of the Twin Lakes Open Space, which is owned and managed by Boulder County Open Space Department.

b. Size of parcel: _____ 9.97 acres _____



**OUR LEGACY.
OUR FUTURE.**

BOULDER VALLEY COMPREHENSIVE PLAN



Land Use Amendment Application

Applicant:

Name: Twin Lakes Action Group, Dave Rechberger, Chair

Address: 8756 Skyland Drive, Niwot Colorado 80503

Phone: 303 818 4070

Owner:

Name: Boulder County Housing Authority

Address: 3460 Broadway
2525 113th St, Suite 204
Boulder CO 80304

Phone: Norrie Boyd, 303) 441-1506

Representative/Contact:

Name: Dave Rechberger, Twin lakes Action Group

Address: 8756 Skyland Drive, Niwot Colorado 80503

Phone: 303 818 4070

Does the applicant have a development application or some interest in a property that in any manner would be affected by this amendment proposal? (If yes, please explain):

No.

Land Use Change Narrative (6655 Twin Lakes Road)

Brief description of proposed amendment:

Change the Land Use Map of the parcel at 6655 Twin Lakes Road to Open Space, so that the parcel can be managed as part of a Greater Twin Lakes Open Space area, in concert with related requests for 6500 Twin Lakes Road and O Kalua Road.

Brief reason for justification for the proposed amendment:

6655 consists of 9.97 acres of undeveloped land, otherwise described as 10 acres.

The parcel is owned by the Boulder County Housing Authority (BCHA). Adding the parcel to the Open Space system to enlarge and enhance the values of the existing Twin Lakes property is the best use consistent with the BVCP goals, objectives, and vision. In concert with the other two change requests being submitted by TLAG, this parcel satisfies ALL criteria for acquisition and incorporation into the County Open Space program. A Greater Twin Lakes Open Space, with the addition of these three parcels, would preserve an existing wildlife corridor connecting the existing Twin Lakes Open Space to undeveloped open space contiguous to these parcels at the southeast corner. Also, the land will serve as a community buffer and contains Prime Farmland (highest classification from USDA), federally protected wetlands, and trail connections. Designating and managing the property as part of a Greater Twin Lakes Open Space is the best use for this property and is consistent with BVCP guidance and direction.

Brief description of location of proposed amendment (including address or approximate coordinates):

6655 Twin Lakes Road (unincorporated), Parcel # 146311300011

The parcel is located directly south of Twin Lakes Open Space, which is owned and managed by Boulder County Open Space Department.

Size of Parcel:

9.97 acres

Applicant:

Twin Lakes Action Group, Dave Rechberger Chair
8756 Skyland Drive
Niwot Colorado 80503
303 818 4070

Owner:

Boulder County Housing Authority
3460 Broadway
2525 13th St, Suite 204
Boulder CO 80304
Norrie Boyd, (303) 441-1506

Representative/Contact:

Dave Rechberger
8756 Skyland Drive
Niwot Colorado 80503
303 818 4070

Land Use Change Narrative (6655 Twin Lakes Road)

1) This proposal is intended to do the following:

1. Allow this 9.97-acre parcel to be added the County Open Space program.

In concert with 6500 Twin Lakes Road and 0 Kalua Road, the property qualifies for open space according to the County's acquisition criteria:

Parks and Open Space staff strive to acquire land that meet these criteria:

- I. Preserving rural areas that provide community buffers including significant agricultural land.
- II. Land for passive recreation including land for public access and potential trail connections.
- III. Land with other significant resources (cultural, scenic, and natural), including natural landmarks, archaeological sites, historically significant land and buildings, scenic view corridors, significant plant communities, riparian corridors, wetlands, and wildlife habitat.

<https://www.bouldercounty.org/open-space/management/acquisitions/>

According to the County description of the existing Open Space:

In the 1960s, thanks to the nearby IBM plant and other commercial attractions, the Gunbarrel residential area grew up around the lakes. The lakes have been central to the Gunbarrel community from the beginning.

<https://www.bouldercounty.org/open-space/parks-and-trails/twin-lakes/>

As the community has grown, the need for additional open space to accommodate additional residents has grown with it. So has the need to better protect remaining natural values under siege from encroaching development -- has grown with it. Now is the time to protect this parcel and expand the existing Open Space. In fact, in a survey of 1348 visitors using Boulder County Open Space, 6% indicated that they would like to have more open space purchased/acquired and 14% (top response) would like to see more trails constructed¹. Additionally, this land use change request is in support of strategic goals articulated in the 2020 Strategic Vision by Boulder Parks and Open Space¹. The goals state:

- (1) To preserve 2,500 additional acres and associated water rights

¹ Boulder County Parks & Open Space, 2020 Strategic Vision, *Presented to BOCC* (July 12, 2016).

(2) Prioritize acquisitions that offer opportunities for important trail connections
This request is submitted with parallel requests for the adjacent properties at 6500 Twin Lakes Road (3.97 acres), and 0 Kalua Road (6.08 acres). The two southern parcels are currently owned by Boulder Valley School District (the “BVSD parcels”). Thus -- including this 9.97 acre at 6655 Twin Lakes Road parcel -- the County, City, and community have a rare chance to expand Gunbarrel’s magnificent Twin Lakes Open Space by a total of 20.02 acres. All three proposed properties are currently publicly owned.

A Greater Twin Lakes Open Space would have many similarities to the Two Ponds National Wildlife Refuge in Arvada². Two Ponds is an example of how relatively small parcels in urban or residential settings can be key components of open space programs incorporating natural and recreation values. Adding the 6655 and 6500 Twin Lakes Road and 0 Kalua Road parcels to the existing Twin Lakes Open Space (42 acres) would result in a Greater Twin Lakes Open Space that approximates the size of Two Ponds.

Governor Hickenlooper’s Colorado Beautiful initiative (announced July 15, 2015) is another excellent example of how a Greater Twin Lakes Open Space vision is compatible with state and federal policy efforts and initiatives, as well as the County Open Space acquisition criteria, the BVCP, and the Boulder County Comprehensive Plan (BCCP). The goal of Colorado Beautiful is that, within one generation, every Coloradan will live within a ten-minute walk of a park, trail or open space area. A Greater Twin Lakes Open Space will provide substantially more benefit and opportunity for Gunbarrel residents than the existing area. Additionally, the Longmont-Boulder Trail described below warrants consideration as a priority trail or connector project under Colorado Beautiful³.

SATISFYING ALL CRITERIA FOR OPEN SPACE ACQUISITIONS In the text that follows, the many ways in which the land satisfies the published criteria for open space acquisitions is detailed.

I. Preserving rural areas that provide community buffers including significant agricultural land and prevent proposed development of land adjacent to existent open space.

6655 Twin Lakes Road is suitable to be managed as part of a Greater Twin Lakes Open Space area. It is contiguous to the southern boundary of the existing Twin Lakes Open Space and adjacent to 0 Kalua and 6500 Twin Lakes Road, that borders Twin Lakes Road on the southern side. This land is owned by the Boulder County Housing Authority.

The three Twin Lakes Parcels, including 6655 Twin Lakes Road, serve as a community buffer, by providing open space for Gunbarrel, breaking up contiguous developments, providing wildlife corridor, mitigating noise, providing a place for dark sky and a view shed, and as a hydrological buffer that includes protected wetlands. The adjacent Twin Lakes sit higher than the BCHA/BVSD properties and are a significant source of artificial recharge to the existing aquifer underneath the BCHA/BVSD properties. Finally, these buffers are important

² <http://www.fws.gov/refuges/profiles/index.cfm?id=61171>

³ https://cpw.state.co.us/Documents/Trails/Trails-Strategic-Plan-B_Colorado-The-Beautiful-and-Components.pdf

in preserving the rural residential character of the neighborhood.

It is also important to note that these buffers are critically important in preservation of land, wildlife, wetlands, and homes in these times of rapid climate change. A recent article⁴ highlights a decline in native bird population in Boulder County. “Boulder County did not lose a single vertebrate species in the 20th century... but we’re starting to lose species again for the first time since the 19th century,” said Steve Jones, an environmental consultant and volunteer with the Boulder Nature Association, who has been conducting breeding bird and raptor surveys in Boulder County for 35 years. “... **we’re seeing some species disappear right now due to overdevelopment and loss of habitat.**”

The Twin Lakes properties provide an important community buffer, in the form of space for the residents as Gunbarrel does not have a community or town center. Since 2015, approximately 500 apartments⁵ have been added to the community of Gunbarrel. Amenities such as parks and open space have not been added to keep pace with the housing development. There are only three existing parks for the Gunbarrel community⁶ – one of which is at Heatherwood (empty field with no amenities), one is on wetlands (Eaton Park, one bench and one picnic table), and the last (Tom Watson Park) requires either driving or crossing a high-speed six-lane Diagonal Highway. Additionally, some of the open space indicated on the map for Gunbarrel is actually privately owned (Boulder Country Club, ~\$30,000 to join)⁴.

Importantly, any development at Twin Lakes would pave over U.S. Department of Agriculture (USDA)/National Resources Conservation Service (NRCS)-designated *Prime Farmland* and *Farmland of Statewide Importance*. The *Prime Farmland* classification is their highest, best farmland classification. *Farmland of Statewide Importance* is their second-highest farmland classification.

*Prime Farmland*⁷, as defined by the USDA, “...is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land. *Farmland of Statewide Importance*...generally, this land includes areas of soils that nearly meet the requirements for *Prime Farmland*...some areas may produce as high a yield as *Prime Farmland* if conditions are favorable.”

Prime Farmland is of major importance in meeting the Nation's short and long-range needs for food and fiber; however, the supply of high-quality farmland is limited. It is up to local governments to act



⁴ <https://www.coloradohometownweekly.com/2020/01/11/populations-of-native-bird-species-decline-in-the-face-of-development-indicate-further-environmental-degradation/>

⁵ Apex Apartments and Gunbarrel Center Apartments

⁶ <https://bouldercolorado.gov/planning/gunbarrel-subcommunity-fact-sheet>

⁷ https://efotg.sc.egov.usda.gov/references/public/CO/5a_Prime_Farmland_Definition.pdf

responsibly to protect these lands with known *Prime* or *Statewide Importance* classifications, by converting them to Open Space, thereby preserving them for future generations. The size of the land parcels is irrelevant, as local farmers have effectively utilized smaller, separate parcels for growing. Prime agricultural land is a non-renewable resource. Once developed, it's lost forever. *In fact, Boulder County has a history of leading the state in the conversion of agricultural lands to non-agricultural lands.*

Reports from the USDA/NRCS for 6655 Twin Lakes Rd (north parcel) and 6500 Twin Lakes Rd /0 Kalua Road (south parcel) yield these results:

North Parcel (BCHA) Farmland Classification⁸:

- Approx. 62% of the total acreage is *Prime Farmland* if irrigated (Irrigation can take many forms, such as drip lines, solar drip, and flood irrigation).
- Approx. 38% of the total acreage is *Farmland of Statewide Importance*.

South Parcel (BVSD) Farmland Classification²:

- Approx. 92% of the total acreage is *Prime Farmland* if irrigated.
- Approx. 8% of the total acreage is *Farmland of Statewide Importance*.

In a forward-thinking 1991 memorandum, the City of Boulder Department of Community Planning & Development wisely stated to the City Planning Board and the County Long Range Planning Commission, "Lands designated as having *National Agricultural Significance* should not be considered suitable for future urban development," and, "Lands designated as having *State Agricultural Significance* should not be considered suitable for future urban development."

The BCCP⁹ guiding principles state, "*Maintain the rural character and function of the unincorporated area of Boulder County by protecting environmental resources, agricultural uses, open spaces, vistas, and the distinction between urban and rural areas of the county.*"

II. Land for passive recreation including land for public access and potential trail connections.

The Twin Lakes Open Space is the most heavily used open space property in the County. In 2012, it received more than 103,000 user visits a year. The parcel under consideration could provide trail connections to both the north and the south¹⁰. New trail stretches and connections should be explored and considered with regard to 1) the proposed Greater Twin Lakes, and 2) the Longmont-to-Boulder or "Lo-Bo" Regional Trail, "a 12-mile trail system that

⁸ <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

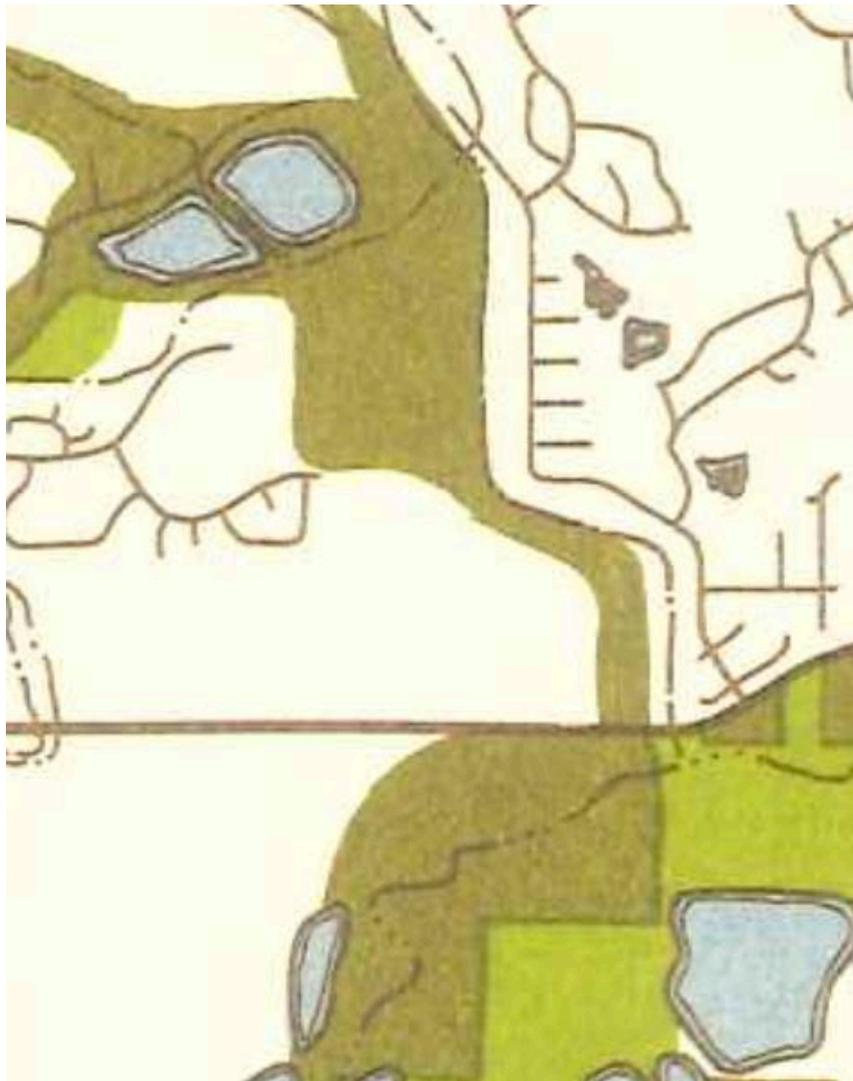
⁹ <https://www.bouldercounty.org/property-and-land/land-use/planning/boulder-county-comprehensive-plan/>

¹⁰ Boulder BCP Parks and Open Space Application, "Boulder Area Trails App"

runs through Gunbarrel, Niwot, and open space properties connecting the City of Boulder with the City of Longmont. This Trail is an increasingly important regional connector. A Greater Twin Lakes Open Space presents the opportunity to enhance the recreational opportunities, scenic values, and natural setting traversed by this regional trail. Additionally, TLAG is interested in providing more public access via trails.

Ila. Land for a community park

1977 BVCP image showing plans for area to become a greenbelt.



Highlights

- 1977 Boulder Valley Comprehensive Plan shows area as part of a 40-acre community park. Twin Lakes fields are all that remains of that vision.

III. Land with other significant resources (cultural, scenic, and natural), including natural landmarks, archaeological sites, historically significant land and buildings, scenic view corridors, significant plant communities, riparian corridors, wetlands, and wildlife habitat.

III(a) Conserve wildlife habitats.

The parcel offers abundant wildlife habitat, which is otherwise shrinking within Gunbarrel and the vicinity of the existing Open Space. Boulder County describes the existing Twin Lakes Open Space as “a haven for wetland wildlife, a hidden gem in the heart of Gunbarrel area.” The region contains a wildlife corridor, which according to a wealth of research^{11,12}, should maintain a minimum width of 1000 ft. This is the current width of the existing corridor. An interview with an expert Dr. Paul Beier (Univ. of Arizona, conservation planning and wildlife ecology), on the subject can be found here:

<https://www.youtube.com/watch?v=pPIQlxjejlC>

Six Boulder County Wildlife Species of Special Concern live directly on the fields:

- Tiger salamanders
- Meadow voles
- Garter snakes
- Belted kingfisher
- Northern flicker
- Wood ducks

Eighteen other Species of Special Concern have been documented using the fields for foraging, such as:

- Northern harriers
- Bushtits
- Pine siskins
- Prairie falcons
- A variety of other birds.

Other wildlife, such as ground-nesting birds protected by the Migratory Bird Treaty Act, use this area. In summer 2016, a biologist hired by the Boulder County Housing Authority found a mallard’s nest and meadowlark’s nest with five babies in the fields.

Additionally, migratory birds of conservation concern use the region. These include¹³:

- Bald eagle

¹¹ P. Beier et al., “Best Management Practices for Wildlife Corridors,” (2008).
http://corridordesign.org/dl/docs/corridordesign.org_BMPs_for_Corridors.pdf

¹² Center for Biological Diversity

¹³ Blue Mountain Environmental Consulting Open Space Evaluation of 6655 and 6600 Twin Lakes Road (complete report appears at end of this packet)

- Burrowing owl
- Ferruginous hawk
- Golden eagle
- Lewis's woodpecker
- Loggerhead shrike
- Mountain plover
- Short-eared owl
- Swainson's hawk
- Williamson's sapsucker

The official description further describes habitat values and lists species as follows:

Wetland habitats, nestled within the surrounding Great Plains, support aquatic plant and animal life and serve to lure in large numbers of migrating bird species. With grasses, wildflowers and trees surrounding the wetlands, these areas are biologically diverse both in and out of the water.

A description of wildlife using the properties in question is listed below¹⁴.

Mammals

Coyote
 Eastern cottontail
 Fox squirrel
 Little brown bat
 Raccoon
 Red fox
 Striped skunk

Birds

American avocet
 American coot
 American crow
 American goldfinch
 American kestrel
 American robin
 American widgeon
 Belted kingfisher
 Canada goose
 Common grackle
 Common raven
 Downy woodpecker
 Black-billed magpie
 Black-capped chickadee
 Bullock's Oriole
 Double-crested cormorant

¹⁴ Twin Lakes Open Space webpage, <https://www.bouldercounty.org/open-space/parks-and-trails/twin-lakes/>

Great blue heron
 Great Horned Owl
 Killdeer
 Mallard
 Mourning dove
 Red-tailed hawk
 Red-winged blackbird
 Tree swallow
 Violet-green swallow
 Yellow-rumped warbler
 Yellow Warbler
 Amphibians & Reptiles
 Bullsnake
 Garter snake
 Snapping turtle

Additionally, local birders have been recording bird sightings for the past ten years on the Twin Lakes Open Space. One hundred and ninety-nine different types of birds have been spotted at the Twin Lakes Open Space¹⁵. The list follows:

Accipiter sp.	Common Yellowthroat	Nashville Warbler	Streptopelia sp.
American Avocet	Cooper's Hawk	Northern Cardinal	Swainson's Hawk
American Coot	Cordilleran Flycatcher	Northern Flicker	Swainson's Thrush
American Crow	crow/raven sp.	Northern Goshawk	Swallow sp.
American Goldfinch	dabbling duck sp.	Northern Harrier	Swamp Sparrow
American Kestrel	Dark-eyed Junco	Northern Parula	Tanager sp. (Piranga sp.)
American Redstart	Double-crested Cormorant	Northern Pintail	Teal sp.
American Robin	Downy Woodpecker	Northern Rough-winged Swallow	Tennessee Warbler
American Tree Sparrow	Duck sp.	Northern Saw-whet Owl	Townsend's Solitaire
American White Pelican	Dusky Flycatcher	Northern Shoveler	Townsend's Warbler
American Wigeon	Eastern Bluebird	Northern Shrike	Tree Swallow
Aythya sp.	Eastern Kingbird	Northern Waterthrush	Tree/Violet-green Swallow
Bald Eagle	Eastern Phoebe	Olive-sided Flycatcher	Turkey Vulture
Bank Swallow	Eastern Screech-Owl	Orange-crowned Warbler	Veery
Barn Swallow	Empidonax sp.	Orchard Oriole	Vesper Sparrow
Belted Kingfisher	Eurasian Collared-Dove	Osprey	Violet-green Swallow
Black Phoebe	European Starling	Ovenbird	Virginia's Warbler
Black-billed Magpie	Ferruginous Hawk	Pacific Wren	warbler sp. (Parulidae sp.)
Blackbird sp.	Franklin's Gull	Pacific/Winter Wren	Warbling Vireo
Black-capped Chickadee	Gadwall	Passerine sp.	Western Bluebird
Black-capped/Mountain Chickadee	Golden Eagle	Peep sp.	Western Grebe
Black-chinned	Gray Catbird	Peregrine Falcon	Western Kingbird

¹⁵ <https://ebird.org/hotspot/L907071>

Hummingbird			
Black-crowned Night-Heron	Gray Flycatcher	Pewee sp. (Contopus sp.)	Western Meadowlark
Black-headed Grosbeak	Great Blue Heron	Pied-billed Grebe	Western Sandpiper
Black-necked Stilt	Great Egret	Pigeon/dove sp.	Western Tanager
Blackpoll Warbler	Great Horned Owl	Piming Kuo	Western Wood-Pewee
Black-throated Gray Warbler	Greater Yellowlegs	Pine Siskin	Western/Eastern Wood-Pewee
Black-throated Green Warbler	Green Heron	Plumbeous Vireo	White-breasted Nuthatch
Blue Grosbeak	Green-tailed Towhee	Prairie Falcon	White-crowned Sparrow
Blue Jay	Green-winged Teal	Pygmy Nuthatch	White-faced Ibis
Blue-gray Gnatcatcher	Gull sp.	Red Crossbill	White-throated Sparrow
Blue-winged Teal	Hairy Woodpecker	Red-breasted Merganser	White-winged Dove
Bohemian Waxwing	Hammond's Flycatcher	Red-breasted Nuthatch	Willet
Bohemian/Cedar Waxwing	Hammond's/Dusky Flycatcher	Red-eyed Vireo	Wilson's Snipe
Brewer's Blackbird	Harris's Sparrow	Red-headed Woodpecker	Wilson's Warbler
Brewer's Sparrow	Hermit Thrush	Red-naped Sapsucker	Wood Duck
Broad-tailed Hummingbird	Herring Gull	Red-tailed Hawk	Worm-eating Warbler
Broad-winged Hawk	Hooded Warbler	Red-winged Blackbird	Wren sp.
Brown Creeper	Horned Grebe	Ring-billed Gull	Yellow Warbler
Brown Thrasher	Horned Lark	Ring-necked Duck	Yellow-breasted Chat
Brown-headed Cowbird	House Finch	Rock Pigeon	Yellow-rumped Warbler
Bufflehead	House Sparrow	Rock Wren	
Bullock's Oriole	House Wren	Rose-breasted Grosbeak	
Bushtit	Indigo Bunting	Rough-legged Hawk	
Buteo sp.	Killdeer	Ruby-crowned Kinglet	
Cackling Goose	Lark Latch	Ruby-throated/Black-chinned Hummingbird	
California Gull	Lark Sparrow	Rufous Hummingbird	
Calliope Hummingbird	Lazuli Bunting	Rusty/Brewer's Blackbird	
Canada Goose	Least Flycatcher	Sandhill Crane	
Canvasback	Least Sandpiper	Savannah Sparrow	
Cassin's Finch	Lesser Goldfinch	Say's Phoebe	
Catharus sp.	Lesser Scaup	Selasphorus sp.	
Cedar Waxwing	Lesser Yellowlegs	Sharp-shinned Hawk	
Chestnut-sided Warbler	Lincoln's Sparrow	Sharp-shinned/Cooper's Hawk	
Chipping Sparrow	Loggerhead Shrike	Short-billed/Long-billed Dowitcher	
Cinnamon Teal	Long-billed Dowitcher	Snow Goose	
Clay-colored Sparrow	Long-eared Owl	Snowy Egret	
Cliff Swallow	MacGillivray's Warbler	Solitary Sandpiper	
Common Goldeneye	Mallard	Song Sparrow	
Common Grackle	Marsh Wren	Spinus sp. (goldfinch sp.)	
Common Merganser	Merlin	Spizella sp.	
Common Nighthawk	Mountain Bluebird	Spotted Sandpiper	

Common Raven	Mountain Chickadee	Spotted Towhee	
Common Redpoll	Mourning Dove	Steller's Jay	

Most or all of these habitat values would carry over the three proposed open space parcels (6500 Twin Lakes Road, 6655 Twin Lakes Road, and 0 Kalua Road), and all of the listed species would use and benefit from adding the new acreage to the existing Open Space under more active management. The wildlife corridor extends from the Twin Lakes Open Space through the three parcels (6655 and 6500 Twin Lakes Road, and 0 Kalua Road) to the Johnson-Coen Trust, Boulder Creek, Sawhill Pond Wildlife Preserve¹⁶, Walden Pond Wildlife Habitat¹⁷ and other undeveloped parcels.

The property provides hunting habitat and prey for many riparian species and predators, such as coyotes, foxes, and eagles. Wildlife species and values are further described at pages 40-44 of the Twin Lakes Management Plan.

IIIb Protect riparian and scenic corridors

There are four federally designated wetlands on or adjacent to the Twin Lakes properties. These Waters of the United States provide homes to diverse species, trap floodwater, and remove nitrogen and other pollutants. According to the Twin Lakes Open Space Management Plan:

Remnants of native riparian and wetland ecosystems remain and artificial waterways create new habitat.

Wetlands and riparian areas provide food, denning and nesting sites, and respite from the hot sun or gusting winds. A diversity of flora and fauna are found in this ecosystem from

Ephemeral wetlands on the north field, March 2016



Eaton Park/Twin Lakes sign on the importance of wetlands



¹⁶ <https://bouldercolorado.gov/osmp/sawhill-ponds-trailhead>

¹⁷ <https://www.bouldercounty.org/open-space/parks-and-trails/walden-ponds-wildlife-habitat/>

water- dependent plants to migratory birds that use them for resting places.

<http://www.bouldercounty.org/doc/parks/twinlakesmplan.pdf> at 11.

The Management Plan continues:

Wetland fringe, forested riparian, and upland grass communities comprise the vegetation surrounding Twin Lakes. These communities are heavily disturbed and the predominant vegetative covering is weedy species and pasture grasses.

This raises the potential for a restoration program in cooperation with local residents and community groups to take advantage of public-private partnerships to restore the larger landscape of a Greater Twin Lakes Open Space, along the lines of Two Ponds Refuge management.

Policy 3.06 of the Boulder Valley Comprehensive Plan states that “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.” Policy 3.28 of the BVCP states: “Surface and groundwater resources are part of an integrated environmental system that will be protected as a resource and managed to prevent their degradation and to protect and enhance aquatic, wetland and riparian ecosystems.”

Important facts about the Twin Lakes wetlands

- a. These wetlands help protect flood-prone homes from additional inundation. One acre of wetlands can store up to 1.5 million gallons of floodwater.
- b. Soils in the Twin Lakes parcels are saturated for long enough durations that they are federally listed as hydric soils, characteristic of soils in wetland areas.
- c. Mountain rush (*Juncus arcticus*), a wetland grass that signifies ephemeral wetlands, has been mapped in large swathes on both the north and south fields. Mountain rush is an important food source for birds.
- d. Muskrat, a species present at Twin Lakes Open Space, use mountain rush for hut construction and food.
- e. Section 404 of the Clean Water Act protects ephemeral wetlands and wetland connectivity.
- f. The Boulder Parks & Recreation sign shown below talks about the cattails and rushes providing a safe environment for many animals. It also states: “Wetland habitats are extremely threatened. More than a quarter of all animals in Colorado depend on wetlands to survive.
- g. The adjacent Twin Lakes sit higher than the BCHA/BVSD properties and are a significant source of artificial recharge to the existing aquifer underneath the BCHA/BVSD properties. Drainage systems in any new development will deplete flows to wetlands south of BVSD property, thereby drying them up.

The Twin Lakes properties have a high water table. The federally designated wetlands nearby

are fed by the groundwater traveling through these fields. Development of these fields will affect the flow of water to these wetlands. Development will also require extensive mitigation of the high groundwater, greatly diminishing the fields' water-retention capacity. This displaced water has to go somewhere. The engineering that would be required to mitigate and divert water from the development and existing surrounding structures would change the flow of water to the wetlands on the properties and to those nearby. If the wetlands get too little flow, they will dry out. If they get too much flow, they will scour out, increasing sediment load and promoting erosion. A National Academies of Sciences study found that it is almost impossible to replicate the natural charging of wetlands. Maintaining and protecting these wetlands is critical for mitigating flooding and for providing habitat for the many wildlife species at the Twin Lakes Open Space.

Scenic values will be enhanced by a Greater Twin Lakes property.

2. Foster public involvement and support public-private partnerships

Contrary to principles and commitments in the BVCP, BCCP, and Open Space policies, the public has not yet been engaged with regard to the fate of these parcels. The public at large, local residents, and community groups need to be heard.

TLAG is specifically interested in public-private partnerships that would address any concerns County agencies might have regarding future management of these parcels as open space. TLAG is also open to exploring means of assuming ownership of the properties proposed for open space. In addition, we will contact the Boulder Open Space Conservancy¹⁸ non-profit that is driving public partnerships, and has a memorandum of understanding with City of Boulder's Open Space & Mountain Parks (OSMP)¹⁹. Open space acquisitions should encompass threatened properties with significant natural and recreational values in the midst of our communities, in this case, unincorporated Gunbarrel land adjacent to a designated Natural Ecosystem overlay on the BVCP map. Open space properties near people are used every day by hundreds of visitors, and regularly by the majority of residents. No fossil fuels are used to access them by the vast majority of users. They provide convenient and vitally needed natural areas that provide vital ecosystem services on the one hand, and essential access to nature and the environment for Gunbarrel's 12,000-some residents on the other.

3. Guard against hydrologic and geologic hazards

Hydrologic and geologic hazards could be associated with development of this property, especially at densities exceeding existing land use designations. The area is known to have a high water table.

The Preliminary Hydrologic Analysis on BCHA Property by Gordon McCurry, Ph.D. (June 24, 2015) is discussed in the 2020 6655 Twin Lakes Road change request. These include potential hydrologic impacts to existing structures and properties; soil suitability concerns; and flooding potential associated with existing shallow groundwater.

¹⁸ <https://bosc.org/>

¹⁹ <https://bouldercolorado.gov/newsroom/announcing-public-private-partnership-with-boulder-open-space-conservancy>

4. Relationship of the proposed amendment to the goals, policies, elements, and amendment criteria of the Boulder Valley Comprehensive Plan.

Among the Core Values of the BVCP that would be furthered by the amendment are:

- Sustainability as a unifying framework to meet environmental, economic and social goals
- Open space preservation
- Great neighborhoods and public spaces
- Environmental stewardship and climate action
- Physical health and well being

The BVCP provides that:

Section 2.04 Open Space Preservation - The city and county will permanently preserve lands with open space values by purchasing or accepting donations of fee simple interests, conservation easements or development rights and other measures as appropriate and financially feasible. Open space values include use of land for urban shaping and preservation of natural areas, environmental and cultural resources, critical ecosystems, water resources, agricultural land, scenic vistas and land for passive recreational use.

Section 2.09 provides that “The city and county will foster the role of neighborhoods to establish community character, provide services needed on a day-to-day basis, foster community interaction, and plan for urban design and amenities.” This proposal is coming from the neighborhood with the intent of protecting and enhancing the community character.

Section 2.01 provides that “The unique community identity and sense of place that is enjoyed by residents of the Boulder Valley [. . .] will be respected by policy decision makers.”

Section 2.03 requires that “The city and county will, by implementing the Boulder Valley Comprehensive Plan, ensure that development will take place in an orderly fashion, take advantage of existing urban services, and avoid, insofar as possible, patterns of leapfrog, noncontiguous, scattered development within the Boulder Valley.”

Section 2.06 – Preservation of Rural Areas and Amenities - The city and county will attempt to preserve existing rural land use and character in and adjacent to the Boulder Valley where...vistas...and established rural residential areas exist.”

Section 2.09 – Neighborhoods as Building Blocks – The city and county will foster the role of neighborhoods to establish community character, provide services needed on a

day-to-day basis, foster community interaction, and plan for urban design and amenities.”

Section 2.10 - Preservation and Support for Residential Neighborhoods – The city will work with neighborhoods to protect and enhance neighborhood character and livability [. . .] The city will also work with neighborhoods to identify areas for additional housing, libraries, recreation centers, parks, open space or small retail uses that could be integrated into and supportive of neighborhoods.”

Section 2.15 - Compatibility of Adjacent Land Uses - To avoid or minimize noise and visual conflicts between adjacent land uses that vary widely in use, intensity or other characteristics, the city will use tools such as interface zones, transitional areas, site and building design and cascading gradients of density in the design of subareas and zoning districts.

Section 2.36 provides for “provision of functional landscaping and open space; and the appropriate scale and massing of buildings related to neighborhood context.” Expanding open space will further these goals, and assure that appropriate scale and massing of buildings are consistent with the existing rural residential neighborhood context.

Section 3: Natural Environment, from the BVCP, has germane sections as follows:

Section 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 bioregions, airsheds and watersheds are considered and incorporated into planning.

Section 3.03 Native 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, acquisitions 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, significant natural communities and county and local species of concern (i.e., resources identified in the Boulder County Comprehensive Plan) will be emphasized. 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.

Section 3.04 Ecosystem Connections & Buffers - The city and county recognize the importance of preserving large habitat areas, especially of unfragmented habitat, in support of the biodiversity of their 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 (e.g., wildlife corridors) and buffers to support the natural movement of native organisms between ecosystems. Connected

corridors of habitat may extend through or along the edges of the urban environment and often serve as vital links between natural areas for both wildlife and humans. Connected corridors are often at the greatest risk of degradation and development, and those deemed to have high ecological value should be identified for planning and, where appropriate, for acquisition, preservation, restoration and/or management while balancing existing land uses and other needs of the community.

Section 3.05 Maintain & Restore Natural Ecological Processes & Natural Disturbances - Recognizing that natural 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 are maintained or replicated in the management of natural lands.

Section 3.06 Wetland & 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. Because they have historically been so scarce in the Front Range and because of continued degradation, the city and county will continue to develop and support programs to protect, enhance and educate the public about the value of wetlands and riparian areas in the Boulder Valley. The city will strive for no net loss of wetlands and riparian areas....

Section 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. These public lands may include areas for recreation and 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.

Section 3.10 Climate Change Mitigation & Adaptation & Resilience - The city and county are working to help mitigate climate change globally and recognize that climate change adaptation is an important area for consideration. Preserving large ecological reserves enhances the resilience of native ecosystems and reduces the loss of native biodiversity, ecological processes and ecosystems as the climate changes... Overall strategies may include: ... 3.

Protect large reserves of open space land to support the long-term viability of native plants and animals;

Section 3.11 Urban Environmental Quality - To the extent possible, the city and county will seek to protect the environmental quality of areas under significant human and urban influence and will balance human needs and public safety with environmental protection.

Section 3.13 Water Conservation - The city and county will promote the conservation of

water resources through water quality protection, public education, monitoring and policies that promote efficient water usage such as water-conserving landscaping.

Section 3.14 Management of Wildlife-Human Conflicts - The Boulder Valley sits within a wildland-urban interface, and the city and county recognize the intrinsic value of wildlife in both their urban and rural areas. The city and county 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....

Section 3.15 Soil Carbon Sequestration - The city and county recognize that soil carbon sequestration may have a range of potential benefits, including water retention, climate change mitigation, soil health and soil stabilization. Soil health is especially important for both the natural environment and agricultural lands.... For the natural environment, the capacity of native grasslands and forests to sequester carbon will be important in city and county soil carbon sequestration efforts. Native grasslands and forests will be maintained and protected following resource management plans....

Section 3.18 Hazardous Areas - Hazardous areas that present a 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.

Section 3.22 Floodplain Management - 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 ... The county's approach to flood management also includes: a. Efforts to preserve currently undeveloped areas in existing floodplains ...

Section 3.23 Non-Structural Approach to Flood Management - 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.

Section 3.24 Protection of High Hazard Areas - High hazard areas are the areas of the floodplain with the greatest risk to loss of life due to floodwater velocity.... To reduce risk and loss, riparian corridors, natural ecosystems, wildlife habitat and wetlands will be protected in these areas. Trails or other open recreational facilities may be feasible in certain areas.

Section 3.25 Larger Flooding Events - The city and county will seek to better understand the impact of larger flood events and evaluate context- appropriate, cost-effective policies and floodplain management strategies to address these risks.

Section 3.26 Protection of Water Quality - Water quality is a critical health, economic and

aesthetic concern. The city and county have been protecting, maintaining and improving water quality and overall health within the Boulder Valley watersheds as a necessary component of existing ecosystems and as a critical resource for the human community.

Section 3.30 Surface & Groundwater - Surface and groundwater are part of an integrated environmental system that will be protected as a resource and managed to prevent their degradation and to protect and enhance aquatic, wetland and riparian ecosystems.

Other relevant sections from the BVCP include:

Section 4.02 Climate Adaptation Planning - The city and county will cooperatively develop and implement a climate change adaptation plan to identify current vulnerabilities, address economics of recovery and determine strategies to protect the community against the potential negative impacts associated with climate change.

Section 4.05 Clean Mobility - To reduce GHG emissions, the city and county will support the retirement of fossil-fuel based transportation. The city and county will continue to develop policies, incentives and programs that reduce vehicle miles traveled, replace fossil fuel- based transportation with clean energy- fueled transportation (e.g., with electric vehicles) and continue to plan a built environment and mix of land uses that reduce the need for people to drive.

Section 8.04 Addressing Community Deficiencies - The city and county will use community feedback in conjunction with robust data resources to identify barriers to development and provision of important basic human services and will work closely with community partners and non-profits to find solutions to critical deficiencies.

Section 8.07 Safety & Community Health - The city and county promote safety by fostering positive neighborhood and community relations, building a sense of community pride and involvement and promoting safe and attractive neighborhoods.

Section 8.08 Health & Well-Being - The city and county strive to ensure that the community continues to be a leader in promoting physical, mental and social well- being of community members, and will support recreational, cultural, educational and social opportunities.... Neighborhood and community design will encourage physical activity and healthy eating by establishing easy access to parks and trails....

Section 8.09 Resilience in Public Safety & Risk Prevention - The city and county will provide focused efforts around public safety, risk prevention and early intervention.... The city and county will prepare for, respond to and manage wildfire hazards by implementing wildland-urban interface regulations...

Section 8.10 Community Connectivity & Preparedness - The city and county will foster social and community connectivity and communications that promote well-being, deepen a sense of

community and encourage civic participation and empowerment.

Section 8.16 Trail Functions & Locations - The city and county recognize that trails are an important part of Boulder's community identity and serve to achieve accessibility goals and connect humans and the natural environment. Trails serve a variety of functions such as exercise, recreation, transportation, education and/ or environmental protection.... Trail and trailhead planning should minimize environmental impacts consistent with the comprehensive plan's Natural Environment policies and enhance recreational opportunities, non-motorized transportation and quality of life.

Section 8.17 Trails Network - The city and county recognize regional connectivity of parks, greenways, trails, open spaces, residential areas and employment centers is important to reduce traffic congestion, reduce parking demand, enhance opportunities for long-distance transportation and recreation experiences, increase accessibility, disperse use and crowding impacts on users, neighborhoods and ecosystems and reduce generation of greenhouse gases and other air pollutants.

Section 9.01 Support for Agriculture - The city and county encourage the preservation of working agricultural lands and sustainable production of food on them to the degree they provide cultural, environmental, economic and resilience benefits to the community. These uses are important for preserving the rural character and agriculture in Area III. The city and county will demonstrate and encourage the protection of significant agricultural areas and related water supplies and facilities, including the historic and existing ditch systems, through a variety of means, which may include public acquisition, land use planning and sale or lease of water for agricultural use...

Section 9.03 Sustainable Food Production & Agriculture Practices - The city and county will promote sustainable food production and agricultural practices on publicly- owned lands and will encourage them on private lands. Sustainable practices include food production methods that integrate ecological conservation objectives, enhance soil health, responsibly use water and quality protection....

Section 9.04 Soil Health & Soil Carbon Sequestration - The city and county will consider strategies to enhance soil health and will explore and evaluate strategies to sequester soil carbon on certain agricultural lands.

Section 10.01 High-Performing Government - The city and county strive for continuous improvement in stewardship and sustainability of financial, human, information and physical assets. In all business, the city and county seek to enhance and facilitate transparency, accuracy, efficiency, effectiveness and quality customer service. The city and county support strategic decision-making with timely, reliable and accurate data and analysis.

Section 10.02 Community Engagement - The city and county recognize that environmental, economic and social sustainability of the Boulder Valley are built upon full involvement of the

community. The city and county support better decision-making and outcomes that are achieved by facilitating open and respectful dialogue and will actively and continually pursue innovative public participation and neighborhood involvement. Efforts will be made to: 1. Use effective technologies and techniques for public outreach and input; 2. Remove barriers to participation; 3. Involve community members potentially affected by or interested in a decision as well as those not usually engaged in civic life; and 4. Represent the views or interests of those less able to actively participate in the public engagement process, especially vulnerable and traditionally under-represented populations. Therefore, the city and county support the right of all community members to contribute to governmental decisions through continual efforts to maintain and improve public communication and the open, transparent conduct of business. Emphasis will be placed on notification and engagement of the public in decisions involving large development proposals or major land use decisions that may have significant impacts and/ or benefits to the community.

Section 10.03 Communication Capacity for Resilience - The city and county recognize that engaged communities and residents are better prepared to support themselves in the event of a disruption and encourage community engagement in conjunction with risk education and preparedness. The city and county will continue to support ongoing, robust communication and outreach to communities and vulnerable residents to educate and prepare for disruption.

Section 10.04 Informed Community - The city and county commit to gathering and sharing information to support and encourage open, participatory government and an informed community. To encourage vibrant public discourse, the city and county strive to provide participants with the information they need to participate in a meaningful way. The city and county strive to ensure high-quality language services in order to communicate effectively with limited English-proficient residents.

Section 10.05 Support for Volunteerism - The city recognizes the value of community volunteers to help achieve the organization and community goals. The city supports volunteer programs that engage residents to improve their community and participate in addressing local issues.

Importantly, Twin Lakes Open Space is designated by an overlap on the Boulder Valley Natural Ecosystems Map in the BVCP. According to the BVCP:

to encourage environmental preservation, a Natural Ecosystem overlay is applied over Comprehensive Plan Land Use Designations throughout the Boulder Valley Planning Area. Natural ecosystems are defined as areas that support native plants and animals or possess important ecological, biological or geological values that represent the rich natural history of the Boulder Valley. The Natural Ecosystems overlay also identifies connections and buffers that are important for sustaining biological diversity and viable habitats for native species, for protecting the ecological health of certain natural systems, and to buffer potential impacts from adjacent land uses.

A Greater Twin Lakes Open Space will further these goals by providing connections and buffers for the wildlife and natural values in the existing Open Space. It will protect the ecological health of the riparian ecosystem from development threats, and buffer impacts from incompatible land uses.

The Boulder County Comprehensive Plan also emphasizes the importance of Open Space:

1) **Parks and open space.** “Open space shall be used as a means of preserving the rural character of the unincorporated county and as a means of protecting from development those areas which have significant environmental, scenic or cultural value.”

<https://www.bouldercounty.org/property-and-land/land-use/planning/boulder-county-comprehensive-plan/>

The Twin Lakes Management Plan describes how the existing Open Space relates to the BCCP and BVCP at pages 38-39. Greater Twin Lakes would complement and supplement these goals and values by incorporating the additional 20.02 acres into the existing Open Space.

Goals in the Boulder County Comprehensive Plan of particular relevance to the Twin Lakes Open Space include:

Appendix 2: Boulder County Comprehensive Plan: Goals and Policies Goals

- Environmental Management

B.5 Wetlands, which are important to maintaining the overall balance of ecological systems, should be conserved.

B.9 Riparian ecosystems, which are important plant communities, wildlife habitat and movement corridors, shall be protected.

- Parks and Opens Space

C.1 Provision should be made for open space to protect and enhance the quality of life and enjoyment of the environment.

C.5 The private sector, non-county agencies, and other governmental jurisdictions should be encouraged to participate in open space preservation and trails development in Boulder County.

- Residential Goals

D.2 Quality residential areas, which function as integral neighborhood units with schools, parks and other similar facilities as centers, should be encouraged.

- Public Involvement

H.1 The county shall encourage public participation in the making of decisions by public and quasi-public bodies which significantly affect citizens.

Policies

Those policies in the Boulder County Comprehensive Plan (as amended, 1999) of particular relevance to the Twin Lakes Open Space include:

- Resource Management

OS 2.03 The county shall provide management plans and the means for the implementation of said plans for all open space areas that have been acquired by or dedicated to the county.

OS 2.03.01 The foremost management objectives of the individual open space lands shall follow directly from the purposes for which the land was acquired.

OS 2.03.02 Management of county open space lands shall consider the regional context of ecosystems and adjacent land uses.

OS 2.04 The county, through its Parks and Open Space Department, shall provide appropriate educational services for the public which increase public awareness of the county's irreplaceable and renewable resources and the management techniques appropriate for their protection, preservation, and conservation.

OS 2.05 The county, through its Weed Management Program, shall discourage the introduction of exotic or undesirable plants and shall work to eradicate existing infestations through the use of Integrated Weed Management throughout the county on private and public lands.

- Recreational Use

OS 4.03.01 Recreational use shall be passive, including but not limited to hiking, photography or nature studies, and, if specifically designated, bicycling, horseback riding, or fishing. Only limited development and maintenance of facilities will be provided.

- Trails

OS 6.01 Trails and trailheads shall be planned, designed, and constructed to avoid or minimize the degradation of natural and cultural resources, especially riparian areas and associated wildlife habitats.

OS 6.04 Trails shall provide for pedestrian, equestrian, bicycle, and/or other nonmotorized uses, where each is warranted. Incompatible uses shall be appropriately separated.

- Public Decision Making

OS 8.03 In developing management plans for open space area, Parks and Open Space

staff shall solicit public participation of interested individuals, community organizations, adjacent landowners and the Parks and Open Space Advisory Committee. Plans shall be reviewed by the Parks and Open Space Advisory Committee, including public comment, and recommended for adoption after public hearing by the Board of County Commissioners.

These goals and policies largely speak for themselves. Integrating O Kalua Road with 6500 Twin Lakes Road and 6655 Twin Lakes Road into a Greater Twin Lakes Open Space would further the environmental management, parks and open space, and residential goals in the Plan. The proposed amendment offers opportunities to improve and enhance resource management, recreational use, and trails.

“Public Involvement” and “Public Decision Making” warrant special mention, as public participation has been severely lacking to date in decisions made and proposals developed by public bodies regarding the future use of these parcels and the overall community. This is contrary to specific direction.

Through this proposed amendment, TLAG is requesting the level of public participation that the County is required to offer: including public comment and a public hearing on the potential for these parcels to be added to the Open Space system.

Maps & Exhibits to Change Request & Narrative

Map 1	6655 Twin Lakes Road Topo
Map 2	6655 Twin Lakes Road Street View
Map 3	Boulder County Main Map (broader context)
Map 4	Twin Lakes Open Space Boulder County Map
Map 5	Great-Horned Owl and Habitat
Exhibit 1	Preliminary Hydrologic Analysis on BCHA Property by Gordon McCurry, Ph.D. (June 24, 2015)

6655 Twin Lakes Road Topo 1

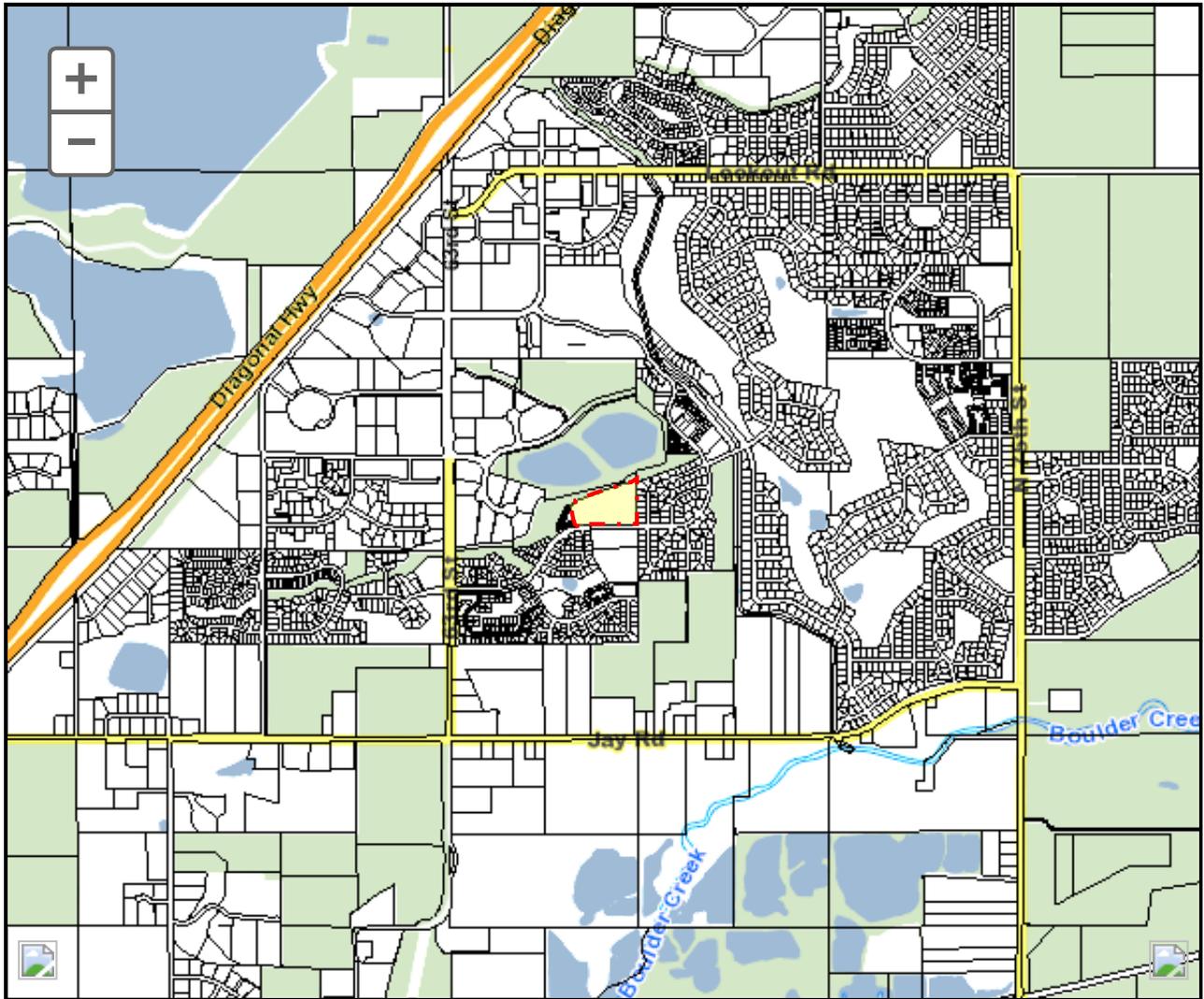


05/01/2011

Boulder County Main Map



Boulder County Main Map





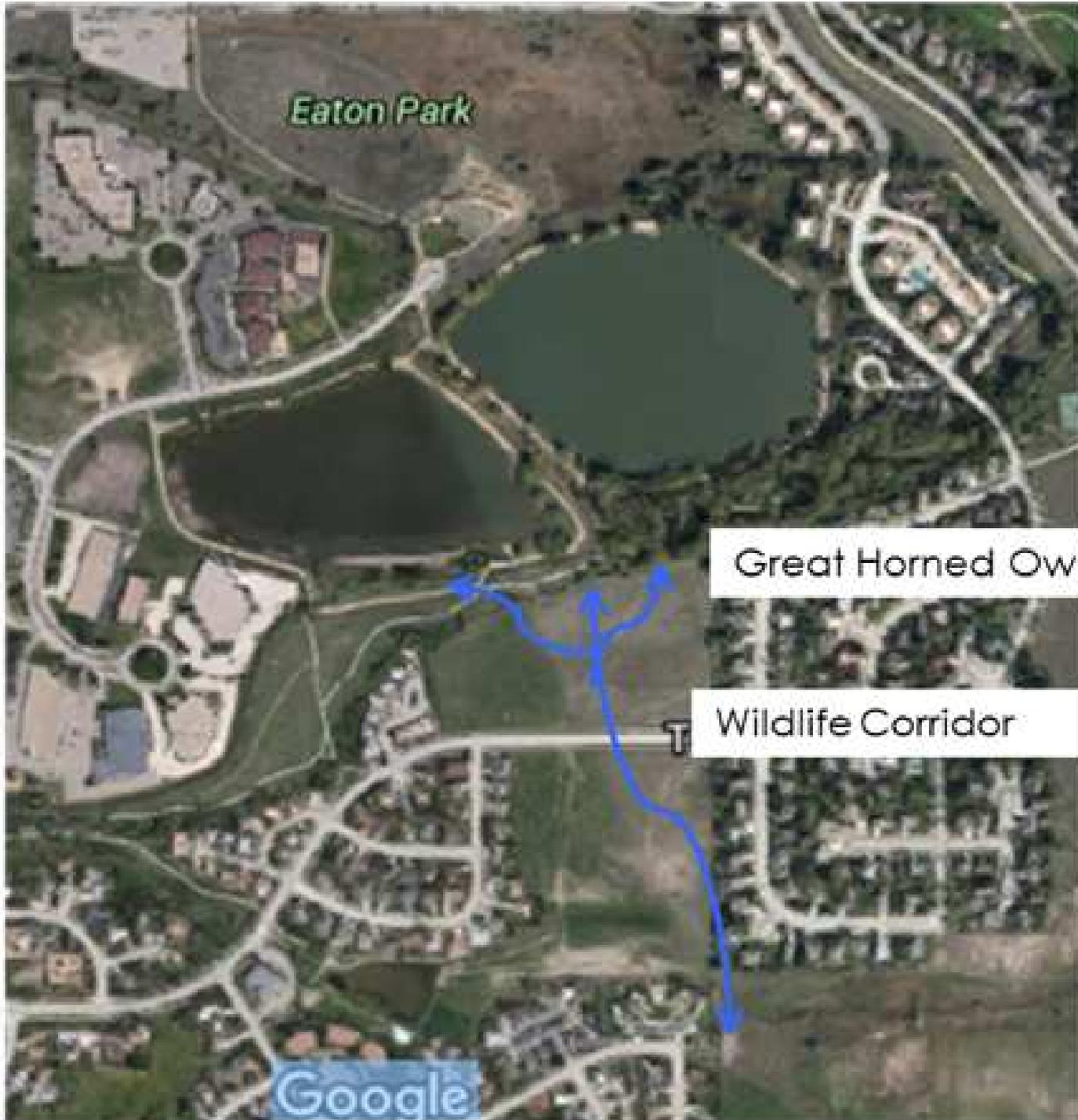
Wildlife Values

-  Twin Lakes Open Space
-  Best Wildlife Values
-  2nd Best Wildlife Values
-  3rd Best Wildlife Values



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Eaton Park

Great Horned Owls

Wildlife Corridor

Google

Twin Lakes

Open Space



- PARKING
- FISHING
Boats, Bellyboats, &
Wading Are Prohibited.

- MULTIPLE USE TRAIL
Pets Must Be On A Leash
- WEST LAKE TRAIL
Multiple Use Trail,
Pets May Be Off Leash

- PAVED ROAD
- FENCELINE



Memorandum

To: Mr. David Rechberger, Twin Lakes Action Group
From: Gordon McCurry, Ph.D.
Date: June 24, 2015
Subject: Preliminary Hydrologic Analysis of the BCHA Property at 6655 Twin Lakes Road

The Boulder County Housing Authority (BCHA) purchased a 10-acre parcel located at 6655 Twin Lakes Road in May 2013 with the goal of developing this undeveloped land to provide affordable housing. Residents of the surrounding community are concerned that developing this land could lead to an increase in basement flooding problems in this high-groundwater area. This memorandum presents my preliminary analysis of the hydrology of the subject property and surrounding areas, and provides recommendations on how to reduce flooding-related impacts related to developing the BCHA property.

Site Environmental Setting

The BCHA property is located northeast of the City of Boulder in unincorporated Boulder County in the south-central portion of Section 11 of Township 1 North, Range 70 West. The land is undeveloped with a native grass cover (Figure 1). The property ranges in elevation from approximately 5175 to 5160 feet and slopes gently to the southeast towards Boulder Creek. The northern edge of the BCHA property corresponds approximately to the surface water drainage divide separating the Dry Creek drainage to the north and a portion of the Boulder Creek drainage to the south, within which the property lies. South of the property are several small intermittent eastward-flowing streams that drain into Boulder Creek. Soils in the area consist of clay loam and clay, defined by the USDA Natural Resources Conservation Service as Nunn B and Longmont B soils (NRCS, 2015). The BCHA property contains about equal areas of both soil types (Figure 2). Underlying the soils is the Pierre Shale, a regionally extensive and low-permeability bedrock layer (USDA, 1975). Borehole logs from wells drilled in the vicinity of the BCHA property and the Twin Lakes neighborhood indicate that the depth to bedrock is approximately 10 to 15 feet below ground surface. A shallow aquifer exists within the soils that overlie the shale bedrock.

Hydrology Near the BCHA Property

Several man-made features exist in the area that dominates the hydrology of the BCHA and surrounding properties. North of the property are two lakes and three regional irrigation ditches. The West and East lakes are part of a 42-acre County Open Space Twin Lakes property. The lakes have been in use since 1910 to store water used for agricultural purposes (BCPOS, 2004). Portions of both lakes are adjacent to the northern edge of the BCHA property. The West and East lakes cover areas of approximately 16 and 11 acres, respectively, and have a combined storage capacity of 218 acre-feet (approximately 71 million gallons). The embankments for the

lakes consist of compacted earth fill (GEI Consultants, 2014). Wetlands exist around the lakes as a result of seepage through the lake bed and berms, creating shallow groundwater conditions (BCPOS, 2004).

In 2014 the Boulder and Left Hand Ditch Company sponsored a study of potential impacts of dam breaches of two of its reservoirs (GEI Consultants, 2014). One of these reservoirs is referred to in this report as the East Lake of the Twin Lakes open space. The impoundment for the East Lake has a State dam safety rating indicating there could be significant property damage if there is a dam failure (BCPOS, 2004). A hypothetical breach of the East Lake's dam was modeled and inundation maps were generated. The dam for this lake, Davis No. 1 Dam, is constructed as a dike that rings the eastern portion of the lake. Failure scenarios were modeled for both a northern and a southern dam breach. The southern breach scenario was felt to be smaller in magnitude than the northern breach. A portion of the hypothetical southern breach would discharge to the southeast, across the eastern portion of the BCHA property and through the neighborhoods southeast of the East Lake as water flows to Boulder Creek (GEI Consultants, 2014). The modeled southern breach had a peak flow of 600 cfs, roughly equivalent to high spring-time flows of Boulder Creek through town. Maximum flow depths to the southeast were modeled to be approximately one foot (Figure 3).

Located between the two lakes and the BCHA property are the North Boulder Farmer's Ditch, the Boulder and Left Hand Ditch, and the Boulder and White Rock Ditch. The former two ditches merge beginning west of 63rd Street and then the resulting two ditches run parallel to each other, traversing south of the West and East lakes and continuing to the east (Boulder County, 2000). The Boulder and Left Hand Ditch Irrigation Company retains the right to use the West and East lakes for storage purposes (BCPOS, 2004). Over the past 20 years an average of approximately 145 acre-feet per year has flowed through the ditches to supply the lakes. Like most ditches, these are unlined and likely leak a portion of their water to the underlying soils and shallow groundwater system, supporting the wetlands vegetation and lush growth around them.

Another hydrologic feature of note for the Twin Lakes community is the Boulder Supply Canal. This is a large-capacity canal located west of the Boulder Country Club neighborhood, adjacent to Carter Court and Carter Trail that define the west side of that neighborhood. The Boulder Supply Canal allows excess water in Boulder Reservoir to discharge to Boulder Creek (DWR, 2005). Although concrete-lined, it was built in 1955 and so it is likely that some leakage occurs through joints, cracks and areas of degraded concrete whenever it is in use.

Within and south of the residential areas south of Twin Lakes Road is a small lake and an intermittent stream that includes several areas containing wetlands-type vegetation. These water features also provide water to the underlying shallow aquifer system. The wetlands are an indication of shallow groundwater conditions in this portion of the residential area south of the BCHA property.

Hydraulic Limitations in the Vicinity of the BCHA Property

Twin Lakes, two irrigation ditches, and to a lesser extent a supply canal are all located hydraulically upgradient of and in close proximity of the BCHA property and surrounding residential areas. Collectively these provide ample sources of water to feed the area's shallow groundwater system. The water table of the shallow groundwater system is located relatively close to the land surface as shown by the commonly-occurring wetlands present in the area. The shallow depth to bedrock helps support and maintain the shallow aquifer. In addition, many homes in the Twin Lakes neighborhoods have sump pumps which are further evidence of shallow groundwater.

The USDA Natural Resources Conservation Service has compiled soils data and developed an interactive web-based graphical database that allows the user to examine the suitability of a given area to a set of potential uses (NRCS, 2015). The suitability analyses are based on geotechnical and engineering properties of the soils. The soils beneath the BCHA property (Figure 2) were evaluated as part of this preliminary hydrologic analysis as to their suitability for the construction of dwellings. Dwellings are defined by the NRCS as single-family houses of three stories or less. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of approximately 7 feet. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper.

Each soil type is assigned a suitability rating based on the limitations posed by individual soil properties. Two sets of criterion are applicable to dwellings: (1) properties that affect the ability of the soil to support a load without movement and (2) properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (inferred from the Unified Soil Classification System classification of the soil). The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Ratings indicate the extent to which the soils are limited by each of the applicable soil properties that affect the specified use, in this case the construction of dwellings. Numeric ratings are provided and indicate the severity or degree with which a given soil property contributes to the overall suitability rating. An assigned rating of "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected. An assigned rating of "Somewhat limited"

indicates that the soil has features that are moderately unfavorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. An assigned rating of "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected (NRCS, 2015).

The suitability of soils for accommodating dwellings on and near the BCHA property was found to be somewhat limited to very limited for dwellings with basements (Figure 4). The main reasons were due to flooding potential and shallow depth to groundwater, and the shrink-swell potential of the soils. The flooding potential and shallow depth to groundwater are expected outcomes given the number and proximity of water sources in the immediate vicinity. The shrink-swell potential is associated with the shrinking of soil when dry and the swelling when wet – a common feature of many clay-rich soils. Shrinking and swelling of soil can damage roads, dams, building foundations, and other structures (NRCS, 2015). The suitability to accommodate dwellings without basements on and near the BCHA property was found to be very limited, for the same reasons.

To minimize the impacts from flooding potential, shallow groundwater and shrink-swell of the site soils, dwellings built on the BCHA property may require additional design components. These may include addition foundation footers, exterior tile drains around the foundations, sump pumps in basements and crawl spaces, setbacks for landscaping, and gutter downspouts that extend beyond a critical setback distance from the dwellings.

Hydrologic Concerns Associated with Development of the BCHA Property

The preceding discussion suggests potential limitations associated with constructing dwellings on the BCHA property and offers general guidelines to mitigate those limitations. However, it does not address potential hydrologic impacts to adjacent residential buildings associated with development of the property. The key impacts are:

- higher risk of basement flooding,
- increases in the frequency and/or volume required to be pumped from homes with existing sump pump systems, and
- the need for homes to install and operate sump pump systems that historically have not had to do so.

The causes of these potential impacts relate to constructing dwellings, dwelling foundations and foundation footers, and even the sump or drain systems that might be installed for the new homes. Dwellings typically are constructed so that the soil beneath the building foundation supports some of the weight of the building, with the remaining load supported by foundation

footers. The weight of a structure compresses the underlying soil. Sand- and gravel-rich soils have very little compressibility but the clay-rich soils beneath the BCHA property are likely to have a relatively high compression potential. In the northern portion of the BCHA property where shallow depth to groundwater is more likely due to the nearby lakes and irrigation ditches, it is possible that compressed soils could extend below the water table. If this were to occur, the groundwater previously occupying those pore spaces in the soil would be displaced and would migrate elsewhere. Depending on the density of building construction and how close those buildings were to existing residences, at least some of the displaced groundwater would migrate toward the existing residences with a resulting rise in the water table and increased risk of basement flooding. Deep foundation footers or foundations that extended to the underlying bedrock would similarly displace existing groundwater.

In addition, sump or drain systems that might be installed in new dwellings could also pose an addition hydrologic risk to nearby homes. It is common for water extracted from sump/drain systems to be discharged into nearby gutters or storm drains. Depending on how the storm drain system for the new dwellings is designed, the extracted water may end up infiltrating along the edges of the BCHA property which would lead to higher groundwater conditions for the adjacent residences.

An additional hydrologic concern associated with development of the BCHA property, which one hopes never occurs, is the impact of a dam breach of the East or West lakes on the Twin Lakes property. The hydraulic analyses conducted for the East Lake indicates a portion of the discharge from a hypothetical southern breach would traverse the east side of the BCHA property. Should homes be constructed in that area, their presence would divert the flows caused by the breach and, based on the inundation analyses, most of that diverted water would be routed to the neighborhood to the east. No analysis was performed for a breach of the West Lake, but it is reasonable to assume that newly built dwellings on the BCHA property would also divert some of the released lake water into adjacent neighborhoods.

Conclusions

Before any dwellings are built on the BCHA property the developer must take into account the shallow groundwater conditions that likely exist in the region so that existing homes are not adversely affected. Any homes that are built should be designed to overcome the limitations posed by flooding potential, shallow depth to water, and shrink-swell conditions of the soil. Installing wells on the property and instrumenting them to characterize the depth to groundwater in the shallow aquifer, over the course of at least one year, and performing geotechnical testing on soils are both necessary to better characterize the hydraulic properties and gain a better understanding of potential impacts to adjacent residences.

References

BCPOS, 2004. Twin Lakes Open Space Draft Resource Evaluation & management Plan. Boulder County Parks and Open Space.

Boulder County, 2005. Boulder County Ditch and Reservoir Map. Prepared by Boulder County, Colorado. September.

DWR, 2005. Task 5 – Key Structure Operating Memorandum for City of Boulder. Submitted to the Colorado Division of Water Resources, as part of the South Platte Decision Support System.

GEI Consultants, 2014. Hayden Reservoir Dam and Davis Dam No. 1 Dam Breach Inundation Mapping Report. GEI Consultants Inc, submitted to Boulder and Left Hand Ditch Company.

NRCS, 2015. Web-based soil survey database. Accessed June 2015
<http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

USDA, 1975. Soil Survey of Boulder County Area, Colorado. United States Department of Agriculture, Soil Conservation Service.



Figure 1. View looking northwest at the BCHA property from Twin Lakes Road.



Figure 2. Soils in the vicinity of the BCHA property.

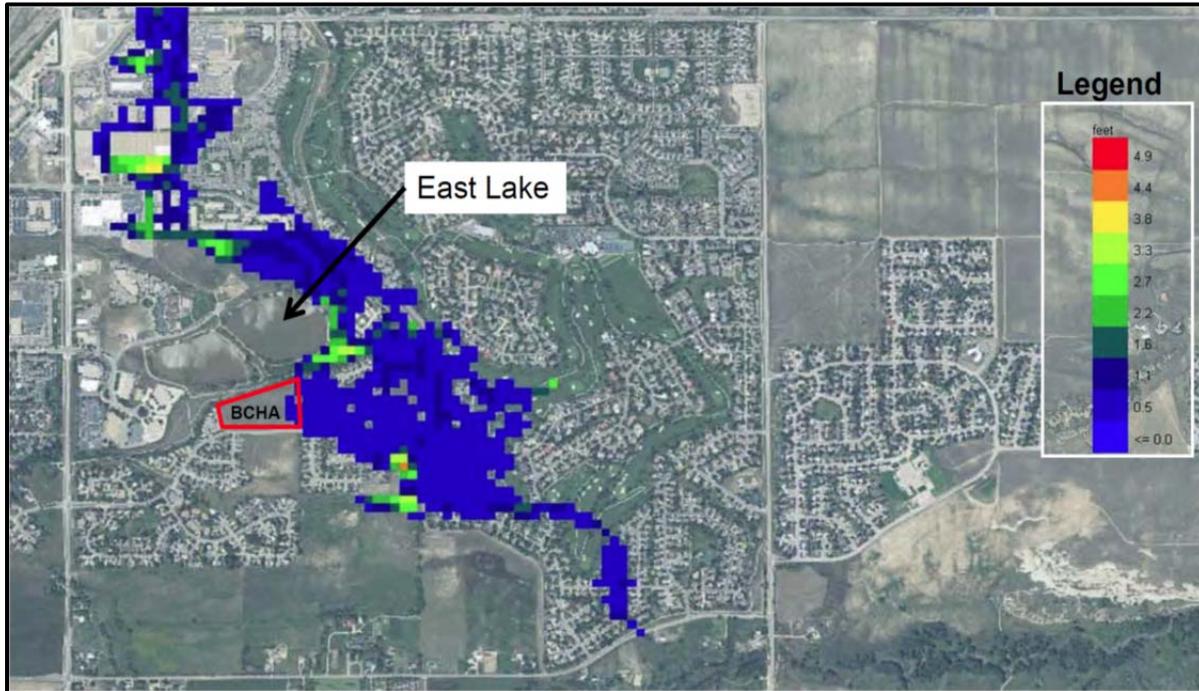


Figure 3. Inundation area and maximum flow depths for a dam breach of the East Lake.

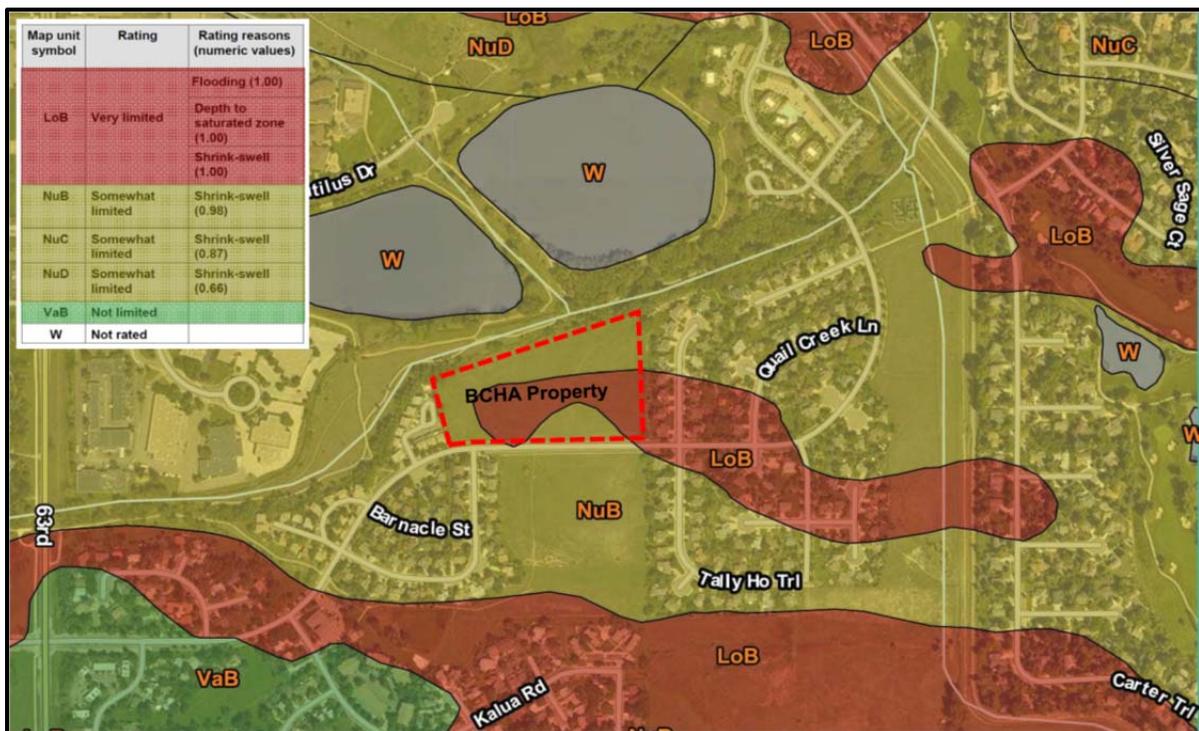


Figure 4. Limitations for construction of dwellings with basements.

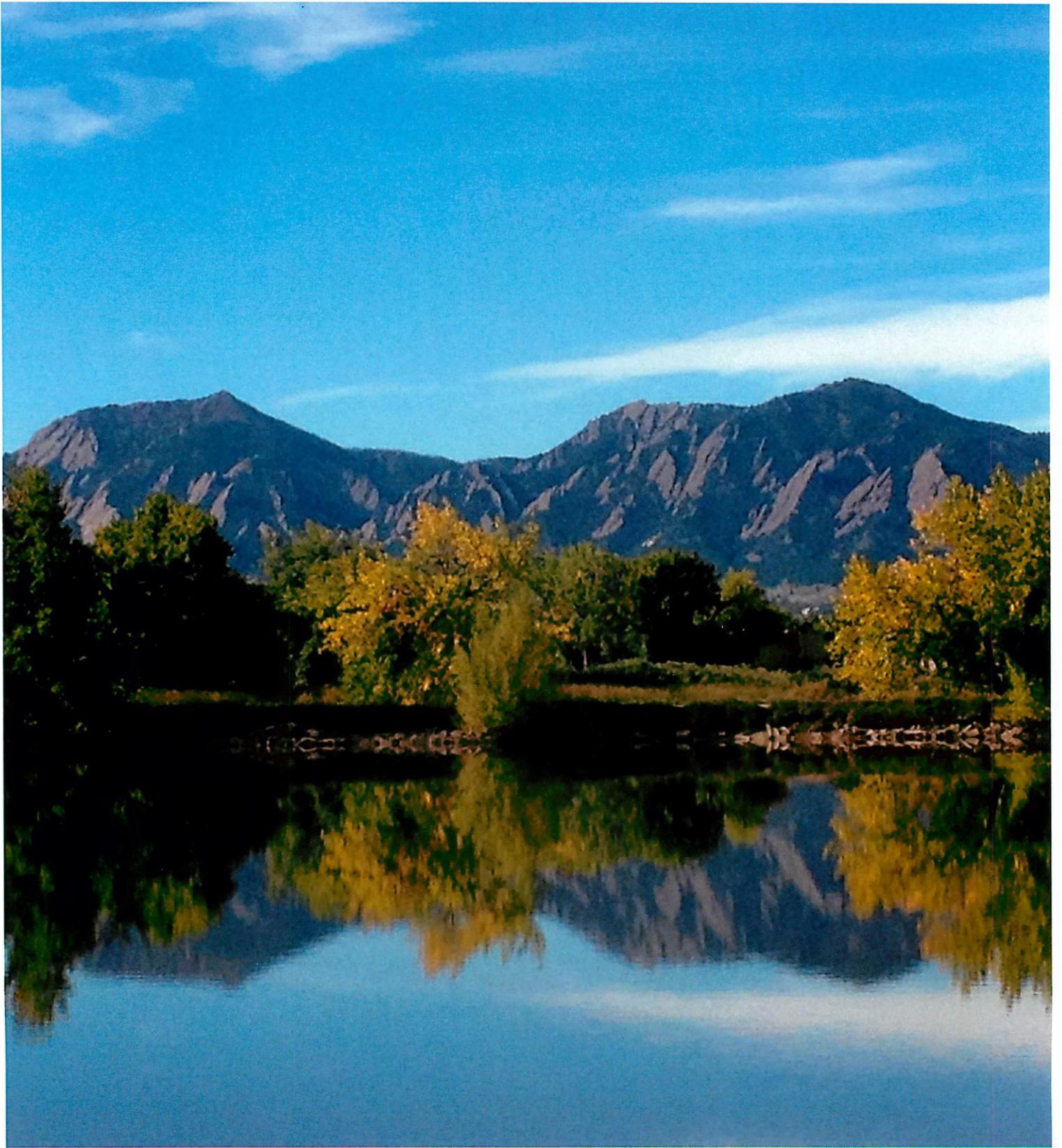
Open Space Assessment for the Twin Lakes Fields



Great Blue Heron standing on the north field. Credit : Cliff Grassmick

March 2020

by the Twin Lakes Action Group



TLAG

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With great thanks to the
1,600 TLAG members
who made this report
possible.

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Twin Lakes Action Group



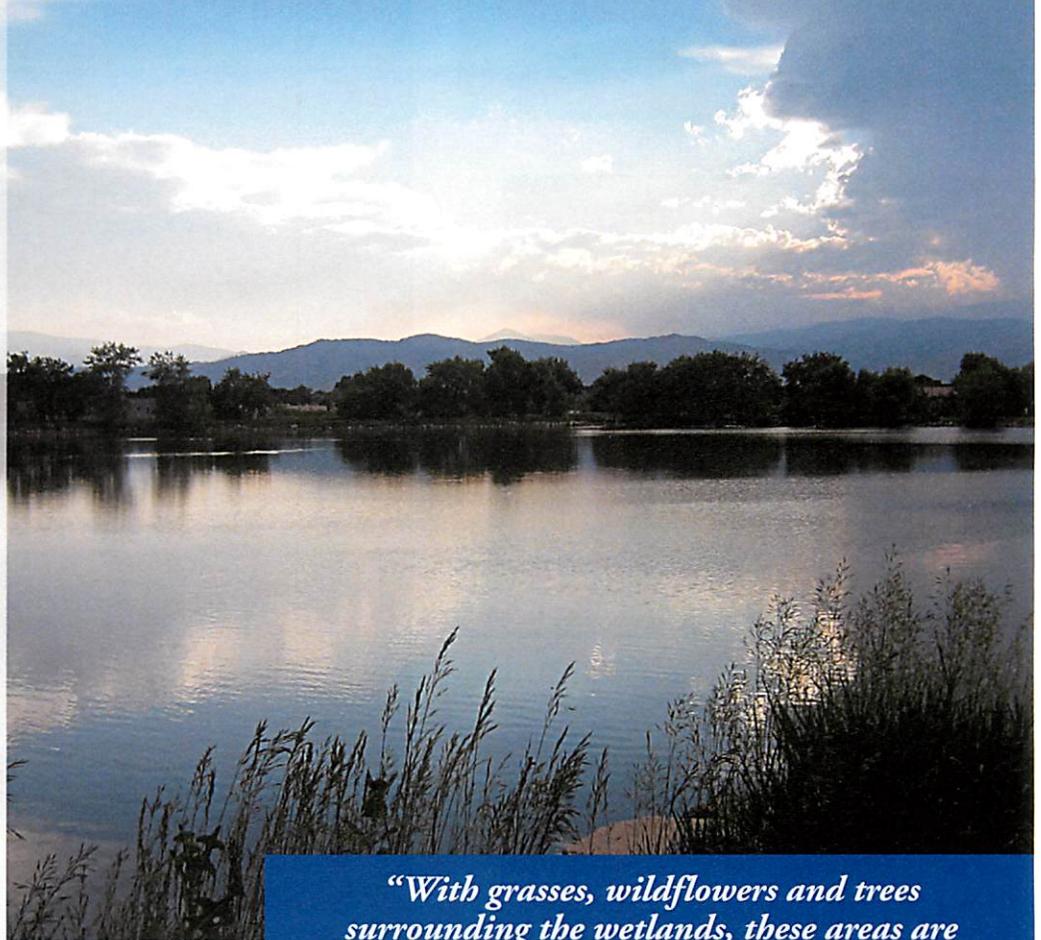
Protect now for tomorrow's future.

Wildlife Habitat

Boulder County Wildlife Species of Special Concern Living at or Using the Twin Lakes Area

Based on the Boulder County Comprehensive Plan Environmental Resources Element

- These species are “present infrequently or in small numbers; are undergoing a significant regional, national or global decline; or are limited to specific, small or vulnerable habitats.” The BCCP states these species “**warrant protection in order to prevent the loss of habitat or populations.**”
- **BVCP 3.03 Natural Ecosystems:** “The protection and enhancement of biological diversity and habitat for federal endangered and threatened species and state, **county and local species of concern will be emphasized.** 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.



“With grasses, wildflowers and trees surrounding the wetlands, these areas are biologically diverse both in and out of the water.”

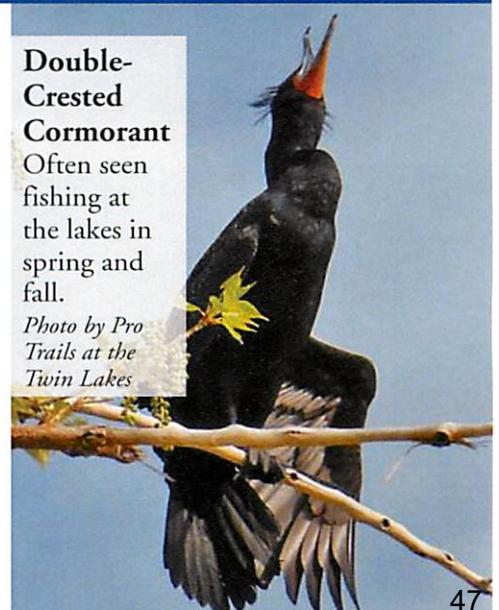
– bouldercounty.org



Great Blue Heron
Seen here on the north Twin Lakes field. Herons use this area year-round. “Great Blue Heron are sensitive to the loss of nest site trees or excessive site encroachment,” says the BCCP.
Photo by Cliff Grassmick at the Twin Lakes

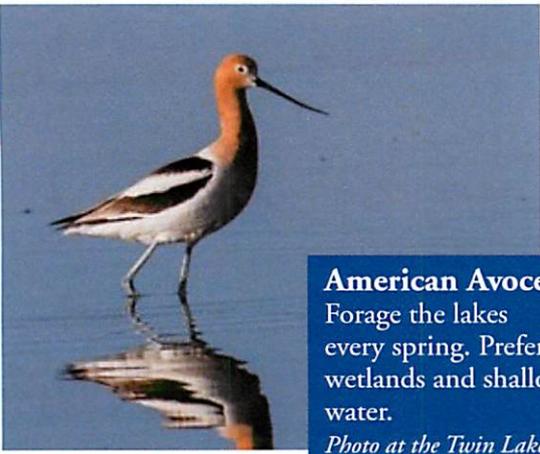


Meadow Vole
Live in the fields. Often seen.
USGS photo



Double-Crested Cormorant
Often seen fishing at the lakes in spring and fall.
Photo by Pro Trails at the Twin Lakes

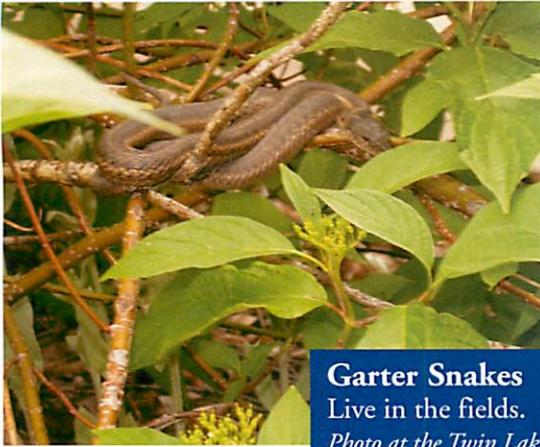
Species Living at



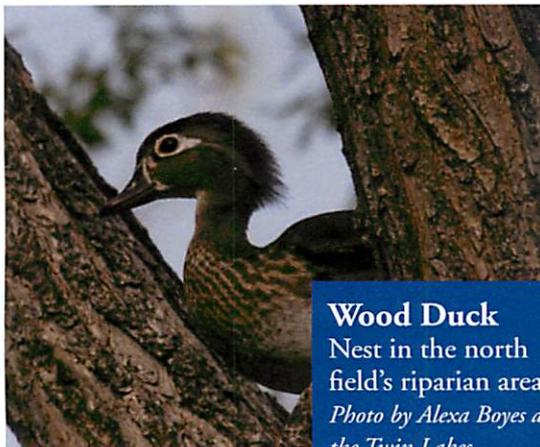
American Avocet
Forage the lakes every spring. Prefer wetlands and shallow water.
Photo at the Twin Lakes



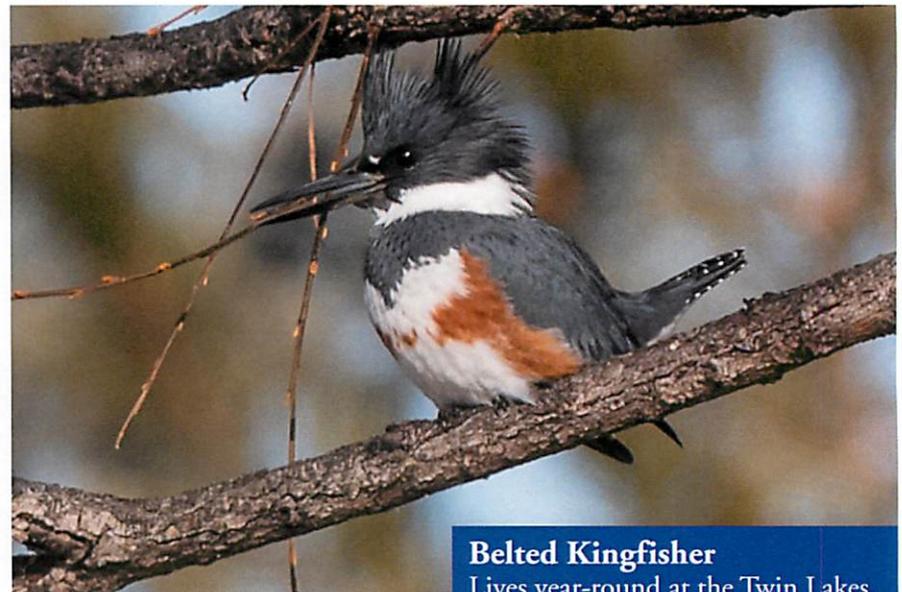
Bald Eagle
Immature bald eagle often perch on the trees while foraging.
Photo by Neal Zaun at the Twin Lakes



Garter Snakes
Live in the fields.
Photo at the Twin Lakes



Wood Duck
Nest in the north field's riparian area.
Photo by Alexa Boyes at the Twin Lakes



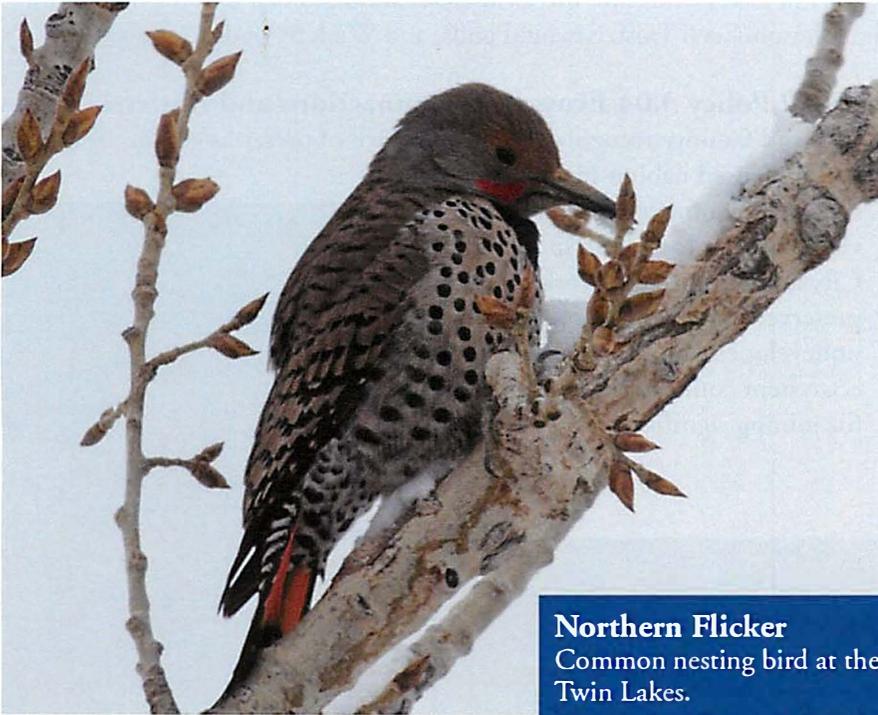
Belted Kingfisher
Lives year-round at the Twin Lakes.
Photo by Kevin Rutherford at the Twin Lakes



American Mink
Inhabit a den near the East Lake.
Photo by FWS

- Brewer's Sparrow** – Seen at May migration.
- Bushtit** – Forages in family groups at the Lakes.
- Cedar Waxwing** – Flocks of 100+ may be seen here in the winter.
- Willow Flycatcher** – At the Twin Lakes in May.
- Ferruginous Hawk** – January to March sightings.
- Great Egret** – Feed at the Lakes during fall migration.
- Long-Eared Owl** – Spotted in August 2014.
- Olive Sided Flycatcher** – Seen at spring migration.

or Using the Twin Lakes Area



Northern Flicker

Common nesting bird at the Twin Lakes.

Photo by Steve Frye at the Twin Lakes

Northern Harrier

Forages on the Twin Lakes fields.

Photo by Steve Frye at the Twin Lakes



Boulder County Land Use Code Article 7-1700

“‘Significant habitat’ means an area or property which contains a Species of Special County Concern, or which has a high potential to serve as significant habitat for such Species based on the ecological, biological, or physical characteristics of the property as well as on the property’s proximity or relationship to other known locations of the Species or to other significant habitat for the Species.”



Lazuli Bunting

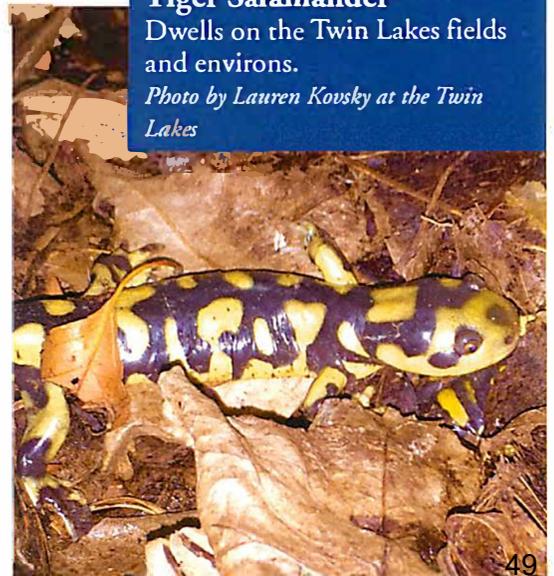
Rare but does forage on the north field.

Photo at the Twin Lakes

Tiger Salamander

Dwells on the Twin Lakes fields and environs.

Photo by Lauren Kovsky at the Twin Lakes



Pine Siskin – Forage on north side of north field.

Plumbeous Vireo – Usually seen in May.

Prairie Falcon – Spotted at the Twin Lakes in winter.

Ring-necked Duck– Appear at spring/fall migration.

Rock Wren – Forage near north field in the spring.

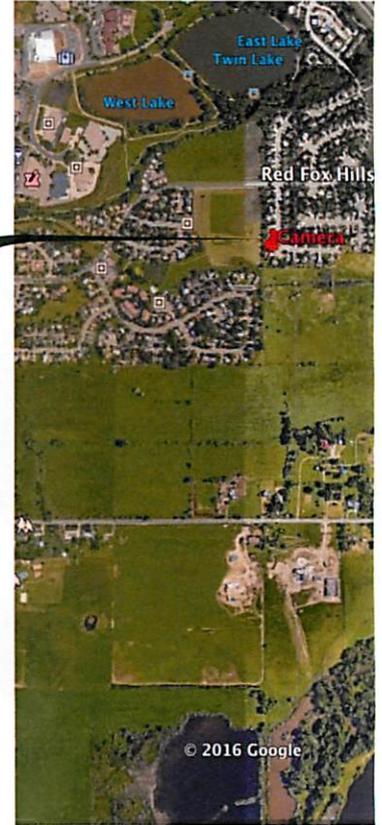
Rough-legged Hawk – Typically seen in January.

Wilson’s Warbler – Large groups forage at the Twin Lakes in the autumn; smaller groups come in the spring.

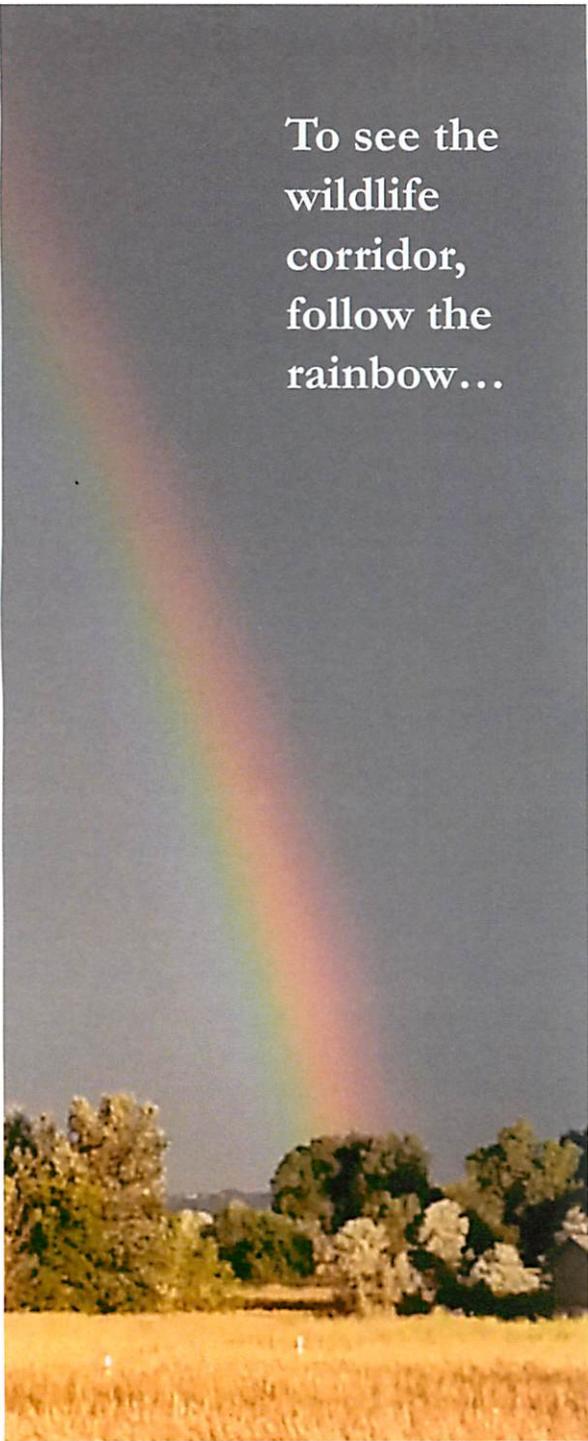
Ecosystem Connections

The Twin Lakes fields link the Twin Lakes and Eaton Park to the north with the Johnson/Coen Trust, Sawhill Ponds, and Walden Ponds to the south.

➤ **BVCP Policy 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 undeveloped lands critical for providing ecosystem connections and buffers for joining significant ecosystems.”



Aerial view of corridor’s 100-foot wide constriction point. Corridor immediately widens on both sides. Red pin marks wildlife camera location.



To see the wildlife corridor, follow the rainbow...

The south Twin Lakes field looking south through the corridor and onto the Johnson/Coen Trust, with Sawhill Ponds and Walden Ponds beyond, marked by the rainbow.



Wildlife that Use the Corridor

A wildlife camera and naturalists have documented that this connection is heavily trafficked by many species, including deer, coyotes, birds, raccoons, skunks, foxes, and, even this summer, a moose. For healthy ecosystems and to minimize human-animal interactions, we need to preserve this corridor. A report by the Center for Biological Diversity says that, as a rule of thumb, wildlife corridors should be 1,000 feet wide on average or more.

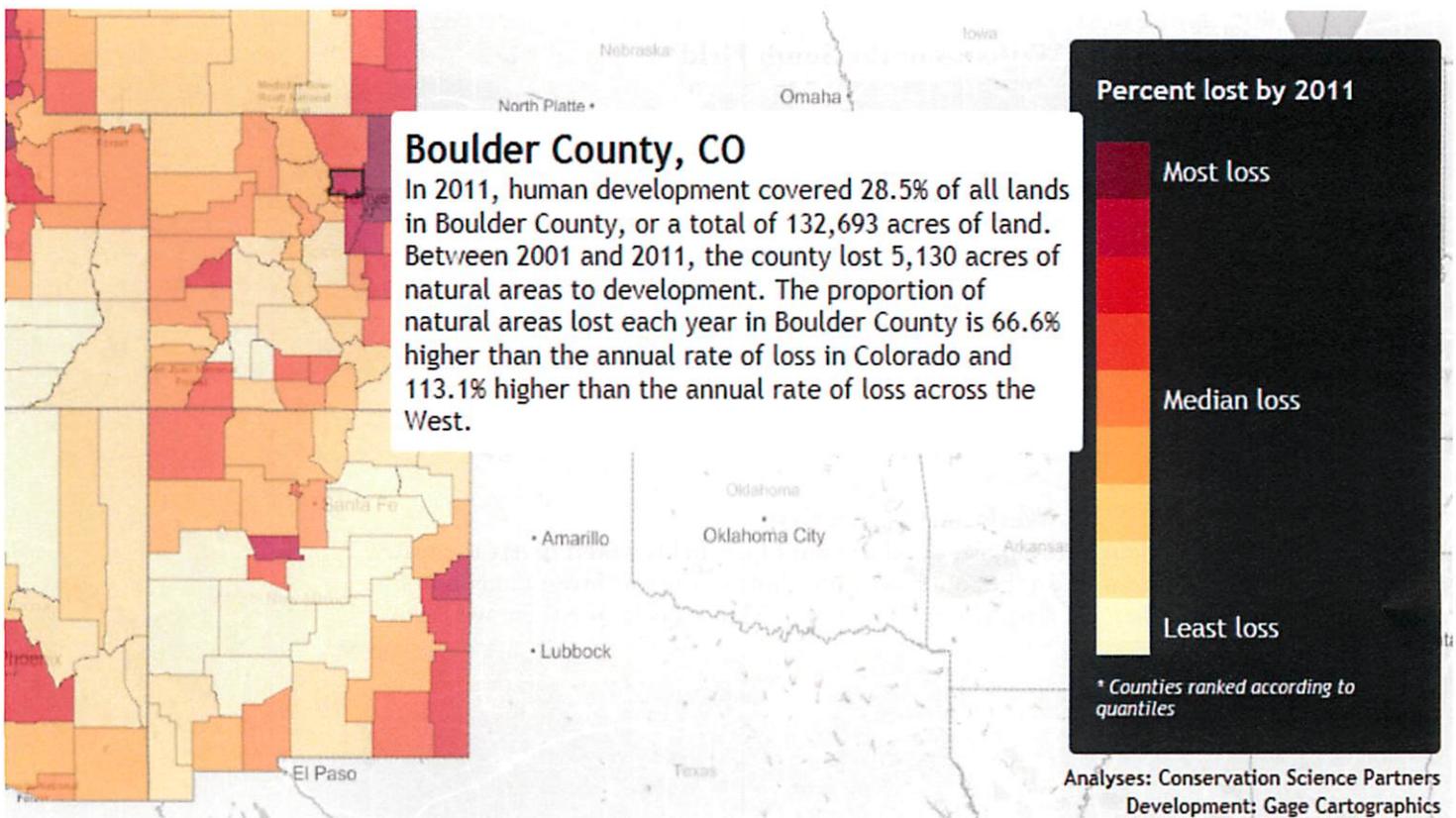




Coyote leaves the south field and enters the Johnson/Coen Trust at 11:41 a.m.



Coyote enters the south field from the Johnson/Coen Trust at 8:32 p.m. same day.



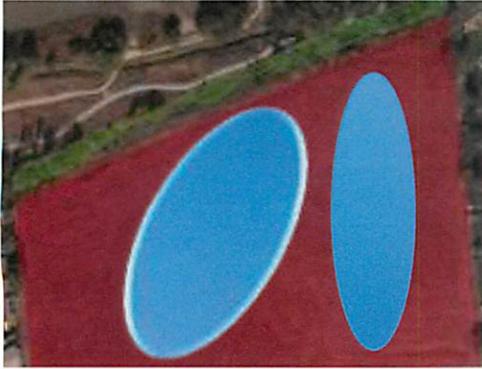
“If we want to have wildlife populations be able to move across the land, the most widely recommended strategy is to maintain connectivity of landscapes. If we are increasingly fragmented, that does not bode well.”

—David Theobald, a Colorado State University geographer and conservation biologist, and the Conservation Science Partners senior scientist who led the 2016 “Disappearing West” study.

Waters of the United States on the Twin Lakes Fields

➤ **BVCP 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. 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.”

Wetlands of the North Field



Green northern area shows federal waters delineated by Apex in June 2016; wetlands continue east and west. Blue ovals map Arctic rush (*Juncus arcticus*), a wetland grass important to birds.



North field's wetlands.



Ducks swimming and foraging on ephemeral wetlands.

Wetlands of the South Field



Green area shows federal waters delineated by Apex in June 2016. Arctic rush also occurs on this field.



Wetland/ephemeral stream area of south field.

Did you know...

- ❖ Small streams filter out 20-40% of nitrogen pollution.
- ❖ 1 acre of wetlands can store up to 1.5 million gallons of floodwater.
- ❖ 60% of stream miles in the U.S. only flow seasonally or after a rain.

Wetland Connectivity

According to an independent hydrologist, development of the fields would divert the water that charges the federal wetlands on the south field and those to the southwest (shown in blue at left and in photo at right), negatively impacting them. Many species use these wetlands.



The EPA's 2015 Clean Water Rule

protects ephemeral wetlands and wetland connectivity, which are important for trapping floodwater, filtering pollutants, and providing wildlife habitat.

Prime Agricultural Land

The gold standard for determining prime agricultural land—and the standard that the County bases its own maps on—is the USDA/National Resources Conservation Service classification system. The USDA/NRCS designates both Twin Lakes fields as being of prime importance (see charts and soil map).

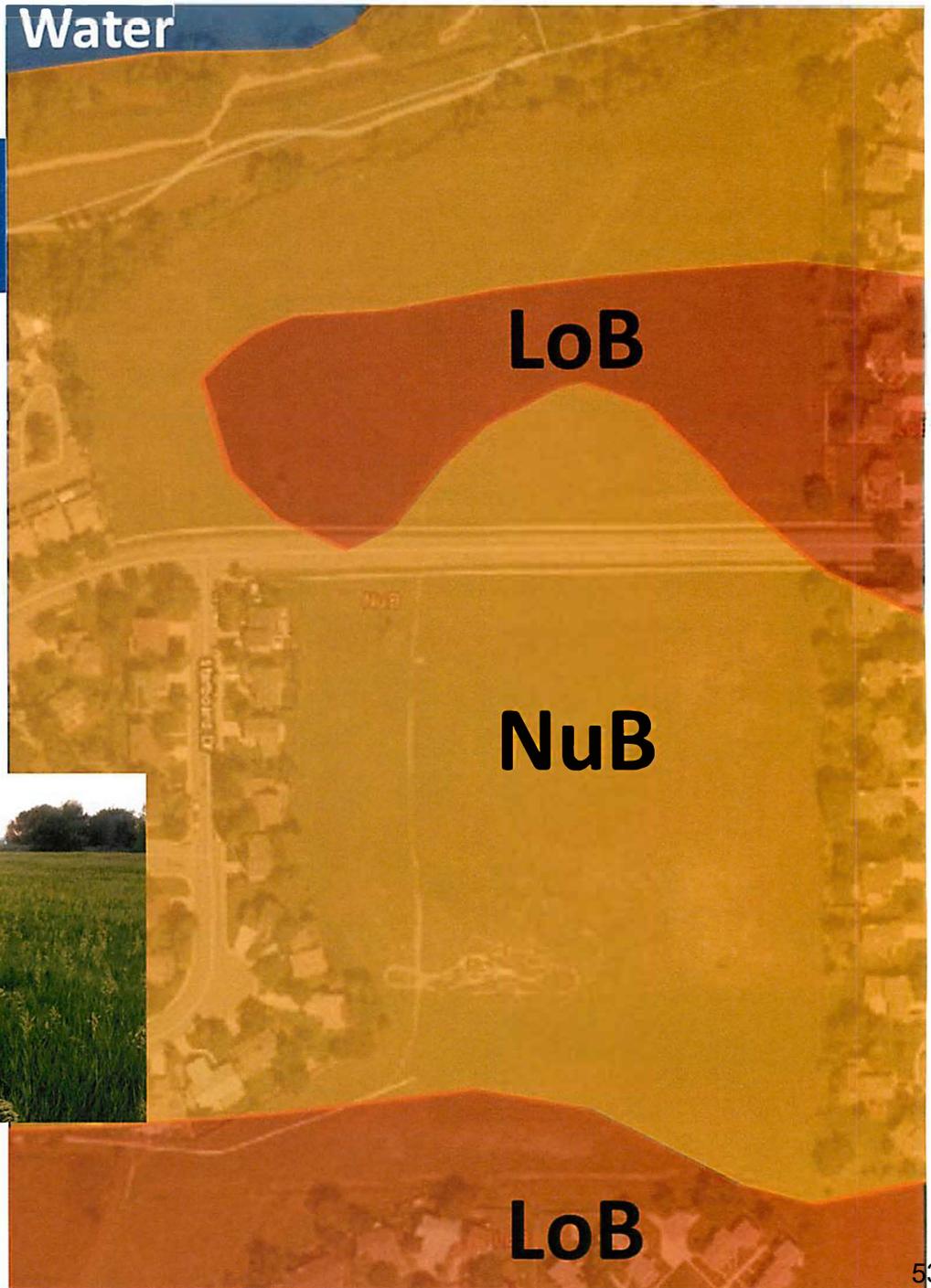
Prime agricultural lands are the “lands of last resort” for development. The reason for this is best conveyed using the Boulder County Comprehensive Plan’s own words:

“Agricultural land is a nonrenewable resource. Once public and private decisions are made that result in the conversion of agricultural land and/or water to nonagricultural uses, this vital resource is almost always irretrievably lost.

“Since 1959, the Front Range has been consuming agricultural lands for other purposes at an average of 60,000 acres per year. Between 1959 and 1974, Boulder County led the State of Colorado in this category, a fact that formed one of the core reasons for the eventual development of the original edition of the Boulder County Comprehensive Plan.

“Since 1978, 18,000 acres of agricultural land has been annexed into Boulder County’s municipalities.”

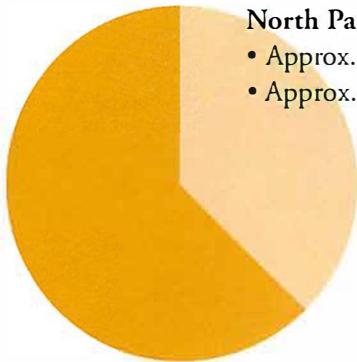
“AG 1.01 It is the policy of Boulder County to promote and support the preservation of agricultural lands and activities within the unincorporated areas of the county, and to make that position known to all citizens currently living in or intending to move into this area.”



Prime Farmland, as defined by the USDA, "...is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land. *Farmland of Statewide Importance*...generally, this land includes areas of soils that nearly meet the requirements for *Prime Farmland*...some areas may produce as high a yield as *Prime Farmland* if conditions are favorable."

North Parcel (BCHA) Farmland Classification:

- Approx. 62% of the total acreage is Prime Farmland if irrigated.
- Approx. 38% of the total acreage is Farmland of Statewide Importance.



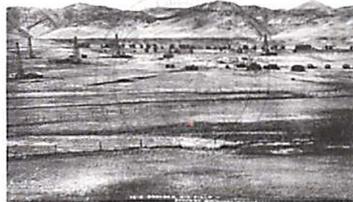
South Parcel (BVSD) Farmland Classification:

- Approx. 92% of the total acreage is Prime Farmland if irrigated.
- Approx. 8% of the total acreage is Farmland of Statewide Importance.



1866 Homesteaders A.N. Allen and Robert Low forge a path that connects the eastern plains with Boulder. The path soon acquires the name "Gunbarrel Road" on account of its "straightness."

1874 Black gold is discovered underneath Gunbarrel hill. An oil well called "Old Whiterock" is sunk in 1892 at the top of Gunbarrel Hill.



1933 Bootlegging thrives during the prohibition era. Police uncover the largest beer still in Northern Colorado on Gunbarrel Hill.



1869 Hiram Fullen Sr. becomes the owner of a 180-acre ranch located near present-day Gunbarrel. This ranch would be purchased by IBM about 90 years later.

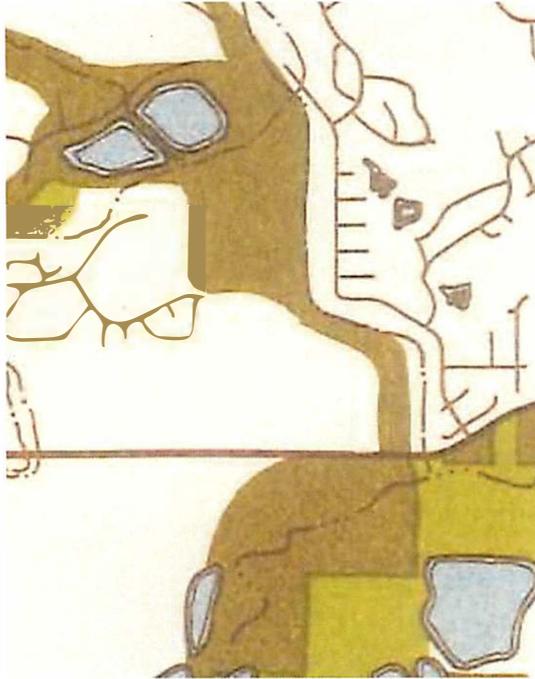


Gunbarrel remains a rural and agricultural community. **1880s-1950s**

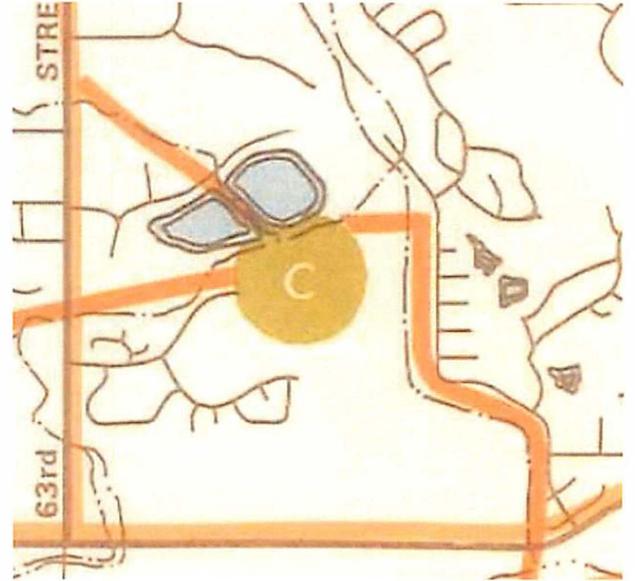


Vision for the Twin Lakes Fields: Both the Past and Present Point to Open Space

Original Plans from 1970 and 1977



Planned greenbelt connecting
the Twin Lakes with Walden Ponds
(Source: 1977 BVCP)



Planned 40-acre community park
(Source: 1977 BVCP)

In the 1970 and 1977 Boulder Valley Comprehensive Plans, the very first comp plans, the County and City planned for a wildlife corridor to link the Twin Lakes with Sawhill Ponds and Walden Ponds and for a 40-acre community park to be just south of the lakes.

- The City collects about \$8 million a year from the commercial/industrial parts of Gunbarrel. It also collects property taxes from the ~25 percent of Gunbarrel residents who are already incorporated. And all of us contribute to the County Parks and Open Space funds. Some of this money could go toward the community park and greenbelt.
- The Williams brothers dedicated the south field to serve the Gunbarrel Green residents for “school or recreational use.” In addition to the community park and greenbelt, 60% of the south field was intended to be a kids’ park as part of the school.



Current Land-Use Designations

North Field:

Low-density Residential / Open Space

South Field:

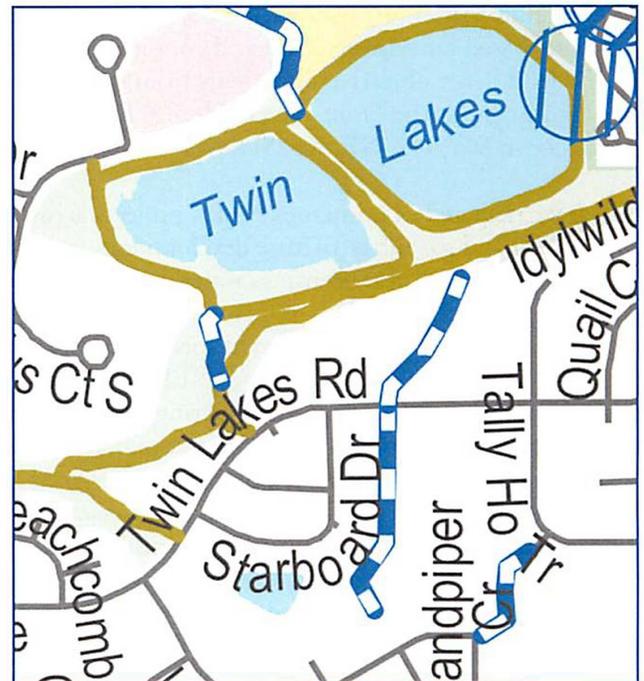
Public / LDR

The recent planning efforts also point to Open Space for these fields, as indicated by the current land-use designations, the Existing Land Use map, and the proposed trail connections.

Recognizing the importance of these fields for their recreational, scenic, and environmental value, planners and decision-makers, in the 2010 BVCP, marked the Existing Land Use as Public/Semi-Public. They also proposed trail connections.



2010 BVCP map for existing land use. Blue stands for Public/Quasi-public (e.g. church).



2010 BVCP proposed these trails for the Twin Lakes fields.

What does an Open Space – Other designation mean?

Boulder defines it as:

“Other public and private land designated prior to 1981 that the City and County would like to preserve through various preservation methods including but not limited to intergovernmental agreements, dedications or acquisitions.”

“The Boulder Valley Comprehensive Plan Trails Map is a comprehensive guide for existing and proposed trails and trail connections for the entire Boulder Valley. It shows proposed trails that have been planned through departmental master planning or area planning processes as well as trail connections that are important links in the Boulder Valley and regional trails systems.”

Blue Mountain Environmental Consulting Report

About BMEC

Since 2001, Blue Mountain Environmental Consulting has provided ecological services, conservation planning, and environmental compliance solutions to landowners and managers throughout the Rocky Mountain west. Their commitment to sustainable environmental management and conservation has established Blue Mountain Environmental Consulting as a leading natural resource management organization for landowners, non-profit organizations, and government agencies. Providing ecologically based resource management strategies to achieve project outcomes in an efficient, sustainable, and responsible manner.

Matt Tobler, M.S., Natural Resource Specialist / Director

Mr. Tobler is a natural resource manager with over 21 years of experience; he currently serves as principal instigator and project leader on numerous ecosystem management projects that integrated forest restoration, wild-fire mitigation, rangeland and noxious weed management, wildlife management and riparian management initiatives. Mr. Tobler has conducted numerous field investigations and developed management programs that are based on existing ecological conditions, historical conditions and landowner objectives for clients from the public and private sectors throughout the Front Range. He also has ecological project experience in WY, UT, NE, KS, SD, MT, NY, NV, NM.

Mr. Tobler has participated in numerous NEPA projects across western states addressing oil and gas infrastructure development, communication facility construction, FERC licensing, water development and conveyance. In this capacity, he has conducted wetland determinations and delineations, threatened and endangered species surveys, ecological assessments and prepared documentation per NEPA and Section 404 requirements. Matt also has experience conducting ecological investigations both regionally and internationally. As a research associate with the USDA Forest and Range Experiment Station, he designed and implemented original research studies to investigate causes of landscape diversity and vegetative responses to disturbance within ponderosa pine forests of the Colorado Front Range. As a research associate at the Woods Hole Research Center, he assisted in the implementation of a pioneering study that assessed the fire susceptibility of primary tropical rainforest in the northeastern Amazon of Brazil. Matt worked as ranger for the National Park Service, administered conservation programs for the Natural Resource Conservation Service in New York, and implemented wildfire mitigation and forest stewardship programs for the Colorado State Forest Service. His earliest experiences with resource management come from growing up on a dairy farm in upstate New York where he was a farm hand. Matt holds a M.S. in Rangeland Ecosystem Science from Colorado State University and a B.S. in Resource Management and Forestry from SUNY College of Environmental Science and Forestry. He is a Society of American Foresters Certified Forester, an Ecological Society of America Certified Ecologist, U.S.D.A. Natural Resource Conservation Service Technical Service Provider, Colorado Department of Transportation Erosion Control Supervisor and has completed the U.S. Corps of Engineers Wetland Delineation Training.

Degree(s)

M.S. Colorado State University

Certifications

Society of American Foresters Certified Forester
Ecological Society of America Certified Ecologist
U.S.D.A. Natural Resource Conservation Service Technical Service Provider
Colorado Department of Transportation Erosion Control Supervisor
inShare

Clint Hinebaugh, B.S., Wildlife Biology / Sportsman

Clint Hinebaugh is a natural resource specialist with four years of experience; he currently serves as the associate wildlife biologist and habitat specialist for Blue Mountain Environmental Consulting. Mr. Hinebaugh has prepared due diligence reports for conservation easement transactions including baseline reports, Wetland delineations and Phase 1 environmental assessments throughout Colorado and Wyoming. This work has included field investigations, correspondence with landowners as well as state and federal authorities, extensive research, and the preparation of technical documentation. Field work has included extensive use of ARC Pad as well as inventories of flora and fauna. He has completed Riparian Assessment Workshops provided by the BLM and is currently completing Technical Service Provider Training through the NRCS. Currently Mr. Hinebaugh has worked to conserve over 25, 000 acres throughout the western states.

As a Research Technician with the Colorado Division of Wildlife, Mr. Hinebaugh Assisted Biologists in an ongoing research project aimed at evaluating the effect of waterfowl hunting restrictions on a cross section of State Wildlife Areas within the South Platte River Valley. Duties included operating check stations; extensive public interaction; monitoring duck and goose populations; and collaborating information between division wildlife managers, biologists, and property technicians.

Mr. Hinebaugh is an avid sportsman and conservationist whose travels have taken him throughout the lower 48, Canada, and Africa. He has been invited to join the Worldwide Ethical Hunters Association and in an active member of Safari Club International, Pheasants Forever, Ducks Unlimited, Rocky Mountain Elk Foundation, and Mule Deer Foundation.

Degree(s)

B.S. in Wildlife Biology (Colorado State University)

Certifications

Certified Aquatic Invasive Species Watercraft Inspector
and Decontaminator



August 23rd, 2016

Memorandum

To: Kristin Bjornsen, Twin Lakes Action Group
From: Matt Tobler and Clint Hinebaugh, Blue Mountain Environmental Consulting
RE: Open Space Evaluation of 6655 and 6600 Twin Lakes Road (Twin Lakes Parcels)

Blue Mountain Environmental Consulting was contracted by Kristin Bjornsen with the Twin Lakes Action Group to investigate the suitability of two parcels near the Twin Lakes Open Space, in unincorporated Boulder County, for open space designation by the County and City.

Currently the northern parcel (located at 6655 Twin Lakes Road), which encompasses 9.96 acres, is owned by the Boulder County Housing Authority (BCHA). The southern parcels (located at 6600 Twin Lakes Road and 0 Kalua Road, henceforward called simply 6600 Twin Lakes Road), which encompass 10.03 acres, is owned by the Boulder Valley School District (BVSD) RE-2J. The BCHA and BVSD are jointly requesting a change in land-use designation to Mixed Density Residential, which would allow up to 360 dwelling units on the +/-20 acres. This proposed development would come in the form of affordable housing units.

We understand that Twin Lakes Stakeholder Group facilitated discussions were conducted during spring/summer 2016, and that an accurate depiction of the Property is portrayed by the assessments listed below and here incorporated by reference:

- Preliminary Hydrologic Analysis of 6600 Twin Lakes Road by Gordon McCurry with McCurry Hydrology, 2015,
- Preliminary Hydrologic Analysis of 6655 Twin Lakes Road by Gordon McCurry with McCurry Hydrology, 2015,
- Potential Waters of the United States for 6600 Twin Lakes Road by Apex Company, 2016,
- Potential Waters of the United States for 6655 Twin Lakes Road by Apex Company, 2016,
- Comments on wildlife habitat values of Twin Lakes Parcels by Dave Hoerath, BCPOS, 2015,
- Comments on wildlife habitat values of Twin Lakes Parcels by Therese Glowacki, BCPOS, 2015
- Boulder County Wildlife Species of Special Concern living at or using the Twin Lakes area, by Twin Lakes Action Group,
- Wildlife Study by an independent consulting group, currently unavailable, 2016

Residents of the surrounding community champion Open Space designation for the Twin Lakes parcels and we here underscore a number of attributes of Boulder County Open Space policy. While the Twin Lakes parcels are presently owned by the County, they meet the following Open Space acquisition criteria as stated on <http://www.bouldercounty.org/os/openspace/pages/acquisitions.aspx>:

- **Land threatened by development that is near or adjacent to existing open space:**
The proposed 280 to 360 housing units would be adjacent to the Twin Lakes, a Boulder County Parks and Open Space property.

- **Prime agricultural land:**

According to the NRCS Web Soil Survey assessed on August 23, 2016, 92% of the southern parcel and 62% of the northern parcel have been identified as Prime Farmland. The remaining percentage has been identified as Farmland of Statewide Importance. Prime farmland is identified as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops and is also available for these uses. It has the soil quality, growing season and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management.

It is evident that the Twin Lakes parcels have historically been farmed and they are now dominated by a monoculture of pasture grasses, primarily smooth brome (*Bromus inermis*). While future large scale agriculture is unlikely, the fields could serve as community gardens. Development is seldom the highest and best use of Prime Agricultural soils, which are being converted to other uses across the nation.

- **Wildlife habitat:**

The Twin Lakes parcels are bordered by Twin Lakes Open Space to the north and by neighborhoods to the east, west and south. The urban location of the parcels and homogenous vegetative composition limit the wildlife value. However, the parcels do function as a wildlife corridor between the Twin Lakes Open Space and the Johnson Trust (located to the southeast) and the drainage owned by the Twin Lakes Homeowners Association (located to the southwest). The area is frequented by a variety of urban adapted mesopredators. Wildlife cameras and photographs have shown the corridor to be used by fox (*Vulpes vulpes*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), skunk (*Mephitis mephitis*) and even the occasional mountain lion (*Felis concolor*). Just this summer a moose from Walden Ponds (located less than one mile to the south) traveled to the Twin Lakes via the corridor. Additional mammals expected to utilize the parcels include deer (*Odocoileus hemionus*), eastern cottontail (*Sylvilagus floridanus*), fox squirrel (*Sciurus niger*) and vole (*Microtus pennsylvanicus*). Habitat value could be enhanced by restoring native species composition and curtailing mowing which limits vertical structure and diversity.

Avifauna benefit from the vertical structure provided by the trees and shrubs associated with the Boulder White Rock Ditch along the northern parcel boundary and will utilize the zone for roosting, feeding and nesting habitat. While these trees may remain intact if the site is developed, the adjoining fields would be lost. According to neighboring residents, Western Meadowlarks (*Sturnella neglecta*) have been seen using the fields for nesting. In summer 2016, five meadowlarks successfully hatched in the field. The fields also provide foraging habitat for the abundant raptors that call Boulder County home. Great horned owl (*Bubo virginianus*), red-tailed hawk (*Buteo jamaicensis*) and American kestrel (*Falco sparverius*) are the most common species expected.

According to the Twin Lakes Action Group, four to five Boulder County Wildlife Species of Special Concern the site. These include wood duck (*Aix sponsa*), tiger salamander (*Ambystoma tigrinum*), meadow vole (*Microtus spp.*), garter snake (*Thamnophis spp.*) and, periodically, the long-eared owl. The Twin Lakes Action Group has done an outstanding job

of documenting wildlife use of the parcels in the document “Boulder County Wildlife Species of Special Concern living at or using the Twin Lakes area.”

According to the United States Fish and Wildlife Service Information and Conservation Planning Application (IPAC), 11 migratory birds of conservation concern occur within the region. Species are documented in the table below:

Table 1. IPAC Migratory Birds of Conservation Concern within the region.

SPECIES	SEASON IN PROJECT AREA	Potential Habitat
Bald Eagle	Year-round	at Twin Lakes
Burrowing Owl	Breeding	Yes
Ferruginous Hawk	Year-round	Yes
Golden Eagle	Year-round	Yes
Lewis’s Woodpecker	Breeding	Yes
Loggerhead Shrike	Year-round	Yes
Mountain Plover	Breeding	Yes
Short-eared Owl	Wintering	Yes
Swainson’s Hawk	Breeding	Yes
Williamson’s Sapsucker	Breeding	Yes

- **Riparian and scenic corridors:**

A riparian corridor (wetland) associated with the Boulder White Rock Ditch exists along the northern parcel’s boundary. Dominant vegetation includes eastern cottonwood (*Populus deltoides*), peach leaf willow (*Salix amygdaloides*), narrow leaf willow (*Salix exigua*), broadleaf cattail (*Typha latifolia*), currant (*ribes* spp.) and smooth brome (*Bromus inermis*). The wetland was delineated by Apex and was confined to the south bank of Boulder and Whiterock Ditch, up and northward of the north bank.

According to the National Wetlands Inventory Wetlands Mapper assessed, on August 23, 2016, a 1.503-acre intermittent stream (R4SBC) flows east to west through the south end of the southern parcel. This stream is seasonally flooded and connects with a freshwater emergent wetland on the Twin Lakes Homeowner Association property located to the southwest. Dominant vegetation includes peach leaf willow, narrow leaf willow, watercress (*Nasturtium officinale*), Emory’s sedge (*Carex emoryi*) and teasel (*Dipsacus* spp.) Apex delineated this wetland to be approximately 0.55 acres, a portion of which lies within the subject property. Final jurisdiction rests with the Army Core of Engineers.

- **Land that could provide trail connections:**

The most noteworthy conservation use of the Twin Lakes parcels would be for scenic and open corridors, which are strongly supported by County Open Space Policy as indicated below:

- OS 3.01 “Where necessary to protect water resources and/or riparian habitat the county shall ensure, to the extent possible, that areas adjacent to water bodies, functional irrigation ditches and natural water course areas shall remain free from development (except designated aggregate resource areas). The county may preserve these open corridor areas by means of appropriate dedication during the

development process, reasonable conditions imposed through the development process, or by acquisition.”

- OS 3.02 “Where appropriate the county shall continue to acquire parcels of land or right-of-way easements to provide linkages between public lands.”
- OS 3.03 “To the extent possible, the county shall protect scenic corridors along highways and mountain road systems. The county may preserve these scenic corridor areas by means of appropriate dedication during the development process, reasonable conditions imposed through the development process or, by acquisition.”

As indicated on the 2010 Boulder Valley Comprehensive Plan, there is a proposed line that begins at Davis Reservoir Number 1 and East Lake known as the Twin Lakes, which are approximately 720 feet to the north of 6655 and 6600 Twin Lakes Road properties. This proposed line trail proceeds south through the north and south fields of the properties and ends about 400 feet north of Kalua Road as shown on this link: <https://www-static.bouldercolorado.gov/docs/bvcp-trails-map-1-201305140905.pdf>

Open space designation of the Twin Lakes parcels could also meet the goals as laid out in the federal tax code if they are protected with a conservation easement. **Internal Revenue Code (IRC) § 170(h) (4)** supports the protection of a relatively natural habitat of fish, wildlife, or plants, or similar ecosystem. Section 170(h)(4)(A)(ii); *see also* § 1.170A-14(d)(1)(ii) and (3). A second permitted conservation purpose is the preservation of open space (“open space easement”), including farmland and forest land, for the scenic enjoyment of the general public or pursuant to a clearly delineated governmental conservation policy. Other permitted conservation purposes include preservation of land areas for outdoor recreation by, or the education of, the general public.

According to the tax code, a significant public benefit can be attained because current land use is compatible with surrounding lands in unincorporated Boulder County, which consist of a patchwork of open spaces that conserve natural features and provide recreation to neighboring residences. Scenic values are met because a degree of contrast and variety of colors are present with the open field in the foreground and the adjacent riparian corridor, which is approximately +/- 950 feet long, in the mid-ground and the Colorado Front Range in the background. Relief from urban closeness is accommodated because the parcels are situated between the rapidly growing cities of Gunbarrel and Boulder. Importantly, the potential for public recreation exists if formal trails are constructed through the parcels, connecting neighborhoods with existing Boulder County Open Space.

Transference of lands into conservation easements is supported by the Boulder Valley Comprehensive Plan as follows. “PPA 2.03: Conservation easements pursuant to **CRS 38-30.5-101** through 110, as amended, or other legally accepted methods between the county and landowners, should continue to be the acceptable development control, for the purpose of preventing additional parcel division or development of lands committed for agricultural activities, environmental and historic resource protection, and other activities consistent with the rural character of the county.”

The Twin Lakes Fields Meet ALL THREE of Parks and Open Space's Criteria for Open Space Acquisition

1. "Preserving rural areas that provide community buffers including significant agricultural land."

The Twin Lakes fields provide community buffers by providing community space, breaking up contiguous developments, providing a wildlife corridor, and as a hydrological buffer that includes protected wetlands. They are USDA/NRCS-designated as agricultural lands of Prime/statewide importance—the gold standard for agricultural lands.

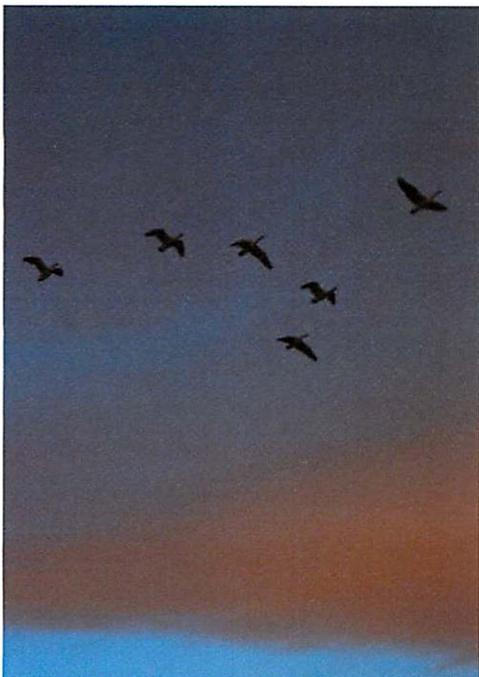
2. "Land for passive recreation including land for public access and potential trail connections."

The 2020 BVCP maps propose Trail Connections on these fields. People use them for passive recreation, including walking, cross-country skiing, and scenic beauty.

3. "Land with other significant resources (cultural, scenic, and natural), including natural landmarks, archaeological sites, historically significant land and buildings, scenic view corridors, significant plant communities, riparian corridors, wetlands, and wildlife habitat. Riparian and scenic corridors."

Both fields have designated Waters of the United States, are adjacent the Twin Lakes, and offer a much-loved scenic corridor for Gunbarrel residents. Six species of special concern live directly on the fields; eighteen others use the field along with ground-nesting birds protected by the Migratory Bird Treaty Act. Meadowlarks, tiger salamanders, meadow voles, rabbits and other species all live directly on the fields and many other species use them for traveling between areas, hunting, and foraging.

Let's make this vision a reality!





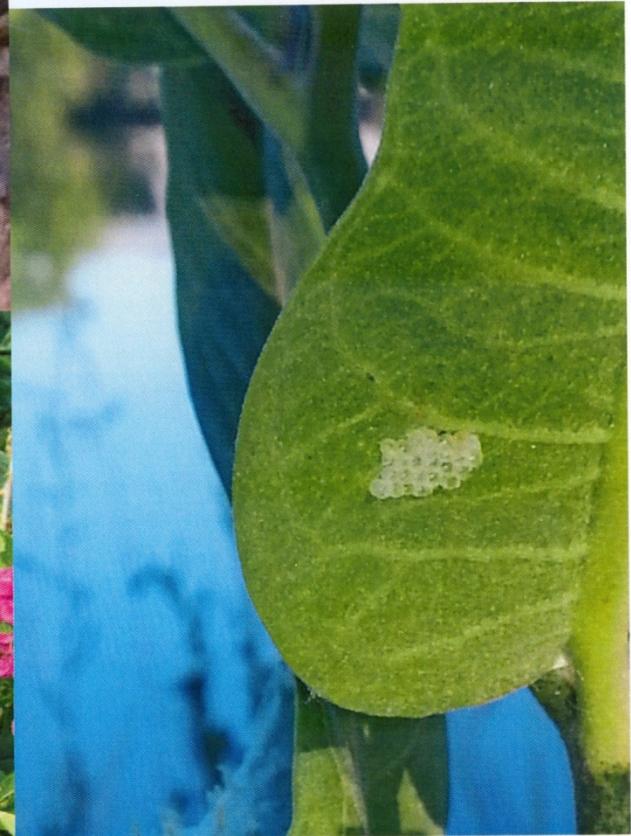
Greater Twin Lakes Open Space



*With gratitude to the hundreds of people who contributed photos and for whom
the Twin Lakes are very beloved*



Top left: Viceroy butterfly
Bottom left: Two-tailed swallowfly



Hatched monarch eggs underneath a milkweed leaf.



Milkweed is abundant in the Twin Lakes area. Monarch butterflies store a poison from milkweed, called cardiac glycosides, that they ingested as caterpillars. This makes them poisonous to some predators, helping them survive their migration.



Clockwise from top left: Beetle on an asparagus berry on the north field; sunflowers; white butterfly



Honeybee gathers nectar

Wild beehive on the north field. The meadows are important to pollinators.







Deer and, even this summer, moose use the fields to travel between the Walden Ponds and the Twin Lakes.

More Than Meets the Eye

Just an overgrown and abandoned field? Look again! Parks like this one connect one open space to another—a way from here to there for animals as well as people. Even small areas can provide shelter, resting and nesting sites, and food for all kinds of wildlife.



Coyote

Hunting Grounds

Foxes and coyotes often come by in search of a meaty meal. The park's bumpy terrain offers plenty of places where these hunters can stalk prey, hole up and rest, or even stay and raise a family.

LOOK for signs of animal activity. You might see scat (poop), or find paw prints in mud or snow.



Meat eaters leave scat that is often full of undigested bones and hair.



Vole

Completing the

The uneven ground offer good home tiny mice and vol

LOOK for their the grass.

Sign at Eaton Park on the north side of the Twin Lakes. Eaton Park is a special blend of wetlands, prairie, and a small expert bike park.



"My home backs up to the north field, and I have lived here for 24 years, so I have seen much activity in the field over the years. People from all the surrounding area use it for flying electric remote airplanes, sunbathing, playing frisbee, walking dogs and many other activities. CU also brings many students here to study the many plants and grasses growing in these fields. However, one of the best things I have seen is a mother coyote and her five pups lined up on the field. It was at night, and as a flashlight was shined on them, their eyes would light up. They just stood there like they were waiting for a handout. This open field is a true treasure." --Jerry G



"Beautiful songs of coyotes in the south field last night! My very favorite nighttime melody!" --Caroline Hogue

Coyote leaves the south field and enters the Johnson/Coen Trust in the morning.



That night, coyote leaves the Johnson/Coen Trust and enters the south field.







Top left: Five baby Western meadowlarks, 3 to 5 days old, nestled in the tall grasses of the south field.
Bottom left: Western meadowlark. This photo not taken at Twin Lakes. Credit: Matt Bryant

Edna St. Vincent Millay:

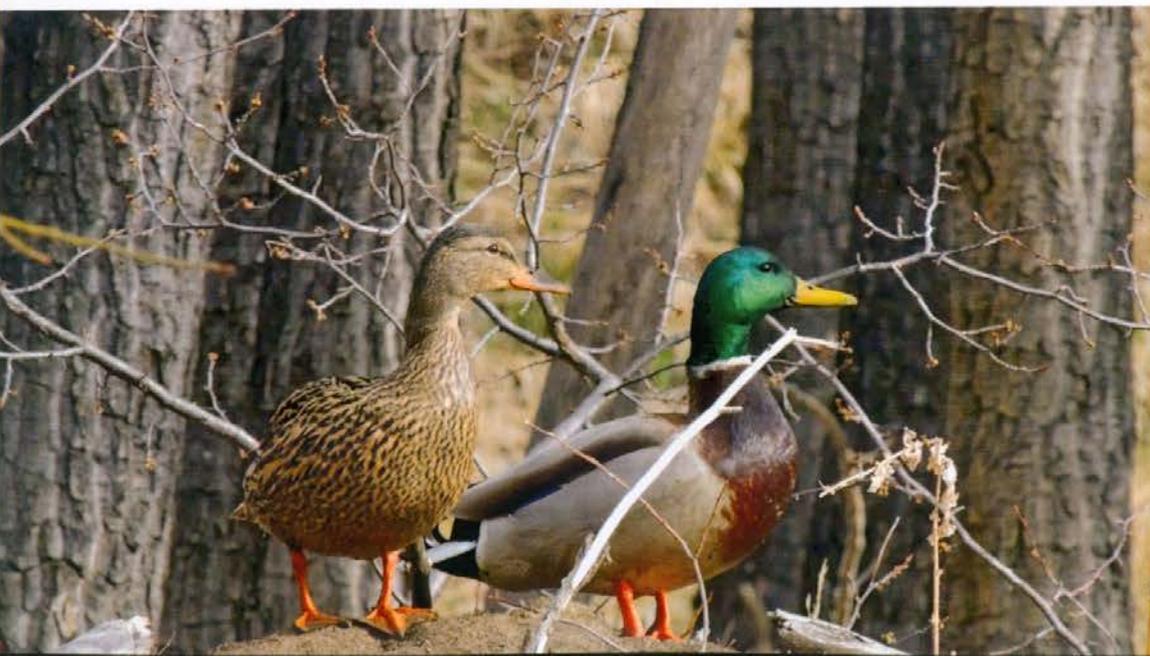
"What is the name," I ask, "of those big birds
With yellow breast and low and heavy flight,
That make such mournful whistling?"

"Meadowlarks,"

You answer primly, not a little cheered.

"Some people shoot them." Suddenly your eyes are wet
And your chin trembles. On my breast you lean,
And sob most pitifully for all the lovely things that are
not and
have been.

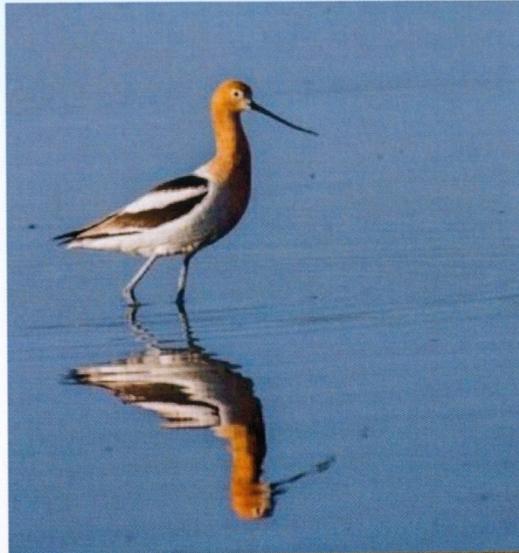






Northern harrier foraging on the Twin Lakes fields.
The harrier is one of Boulder County's rarest and most imperiled birds.

Left: Ducks enjoying the ephemeral wetlands of the north field (spring 2016)



Clockwise from top: American avocet;
California ring-billed gulls; and killdeer





Western bluebird

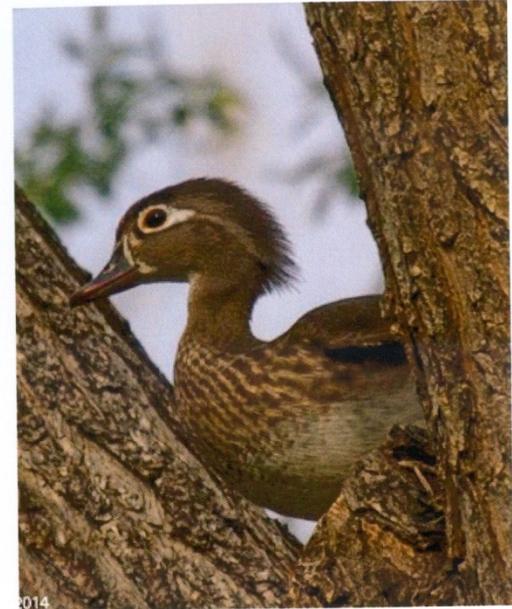


Leucistic red-winged blackbird
"I've been watching these 'albino'
blackbirds come to the fields for
years."
--Dinah McKay



Clockwise from top: White-crowned sparrow; swamp sparrow; Harris's sparrow; song sparrow; and Lincoln's sparrow





Clockwise: Bohemian waxwings; wood duck; and Canadian geese who use the fields for foraging and rest



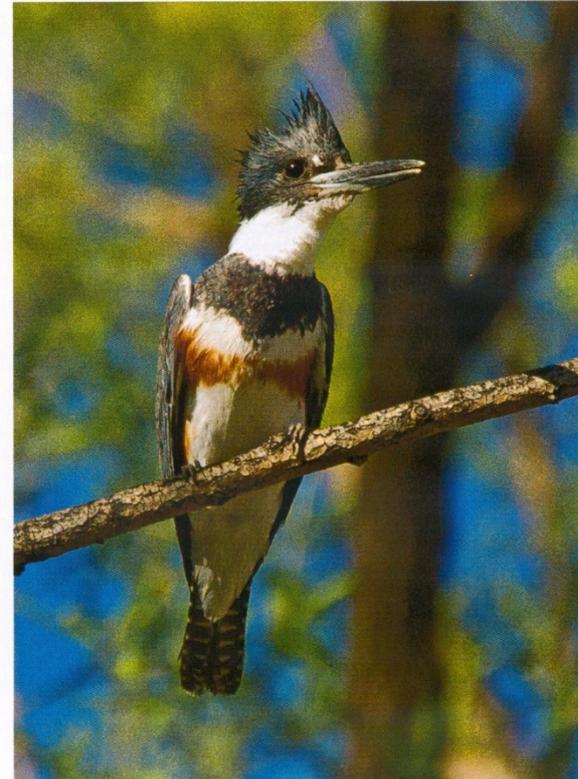
Red-tailed hawks





Clockwise from top: White-breasted nuthatch; belted kingfisher; and lazuli bunting

Facing page: Great blue heron







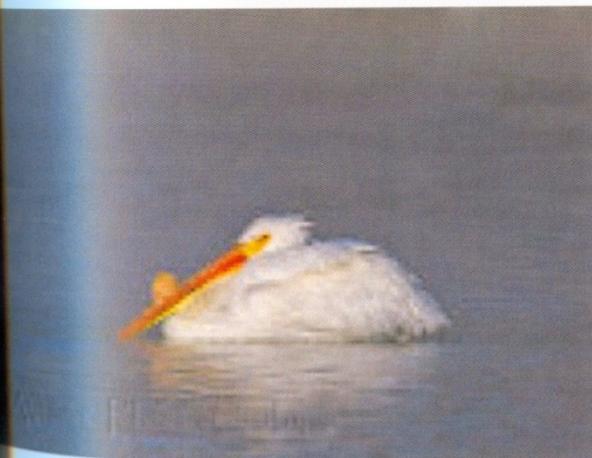
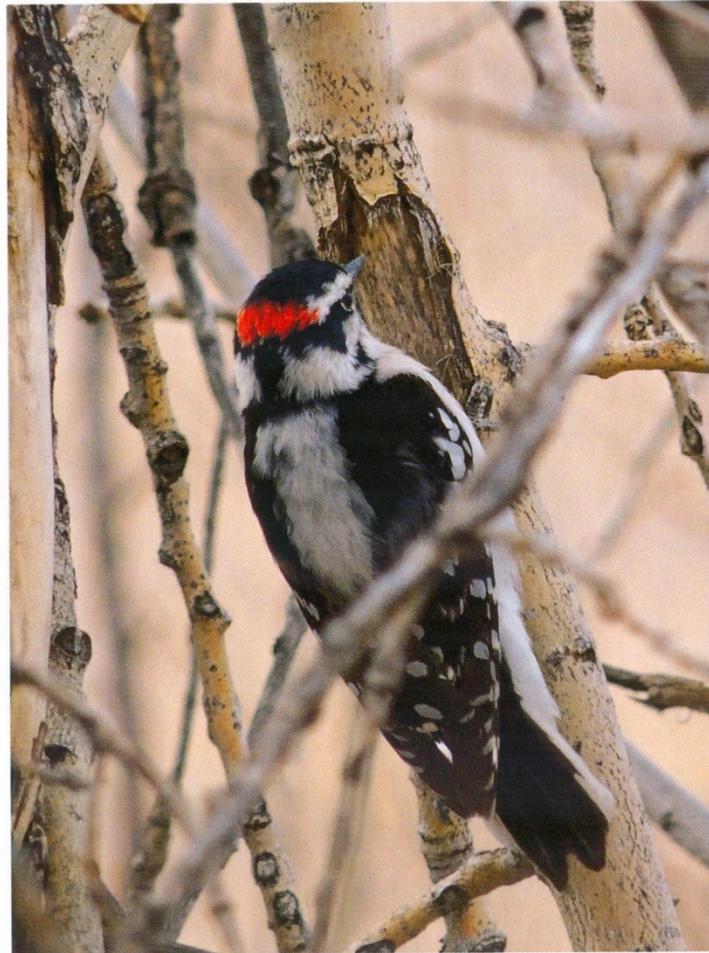
Great blue herons on the north field



American kestrel, North America's littlest falcon



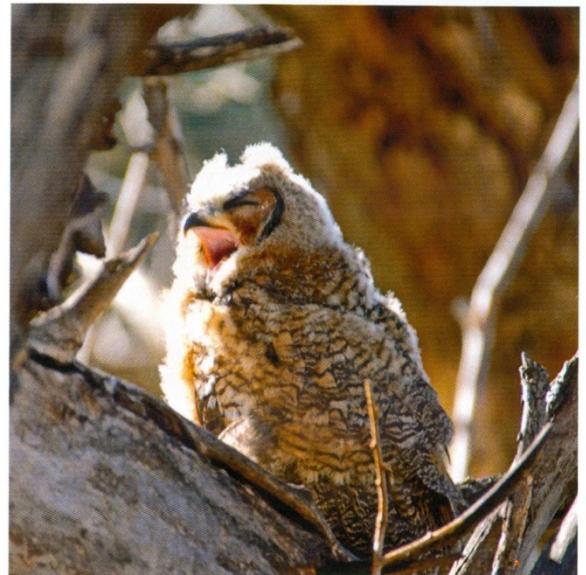
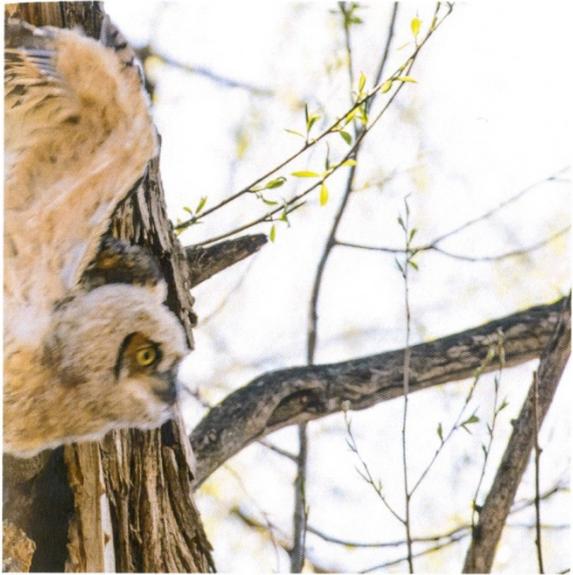
Osprey with a fish in a tree



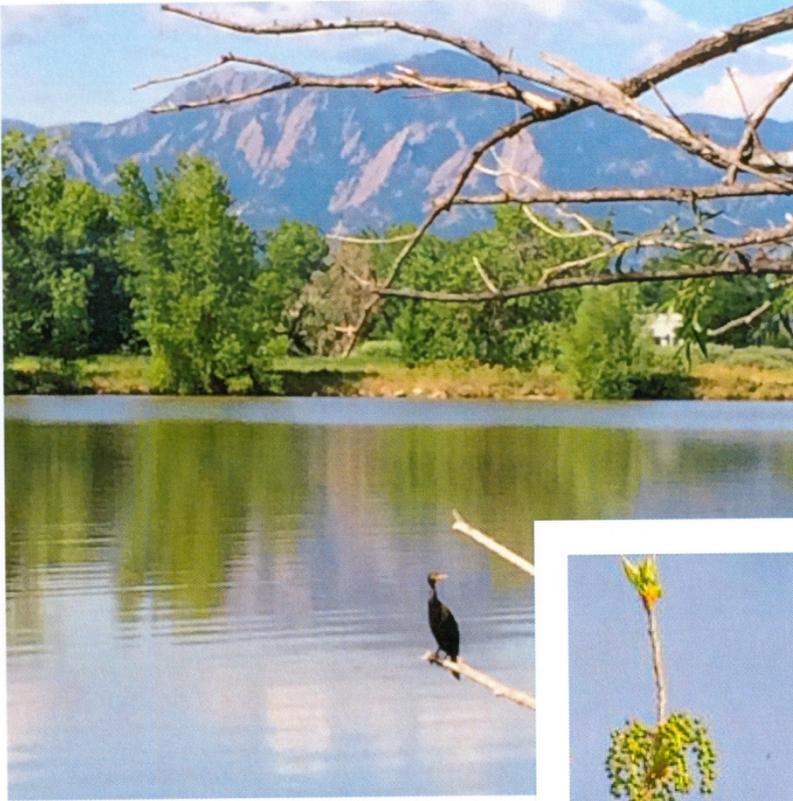
Clockwise from top left: Warbling vireo; downy woodpecker; great horned owllet; raptor foraging on the north field; and American pelican



The owl nesting tree; great horned owl in flight

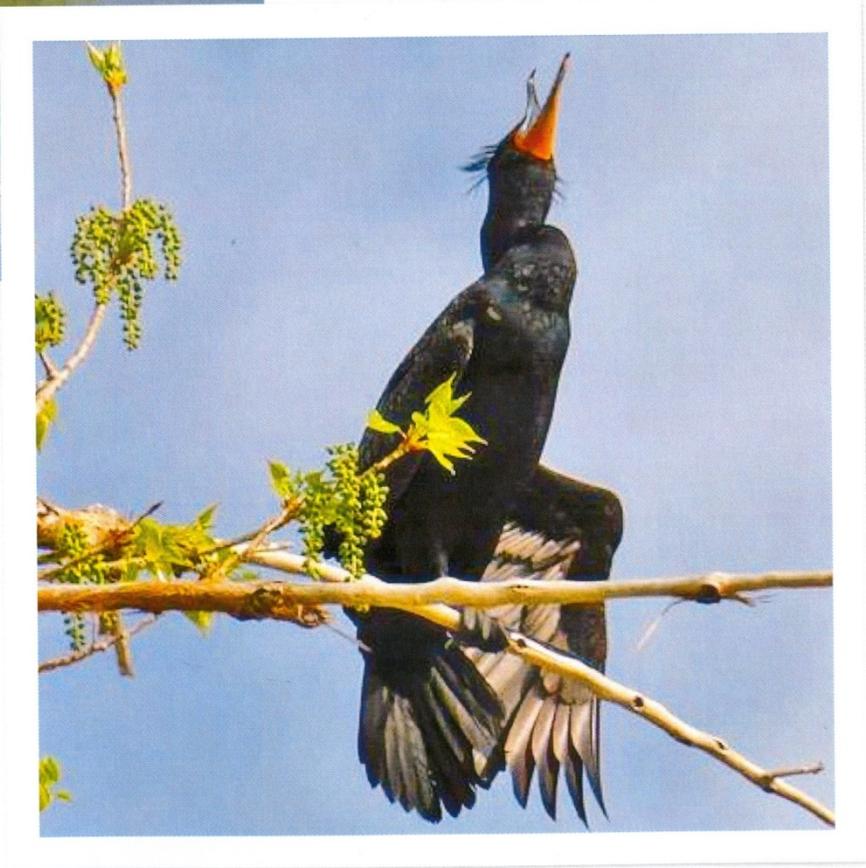


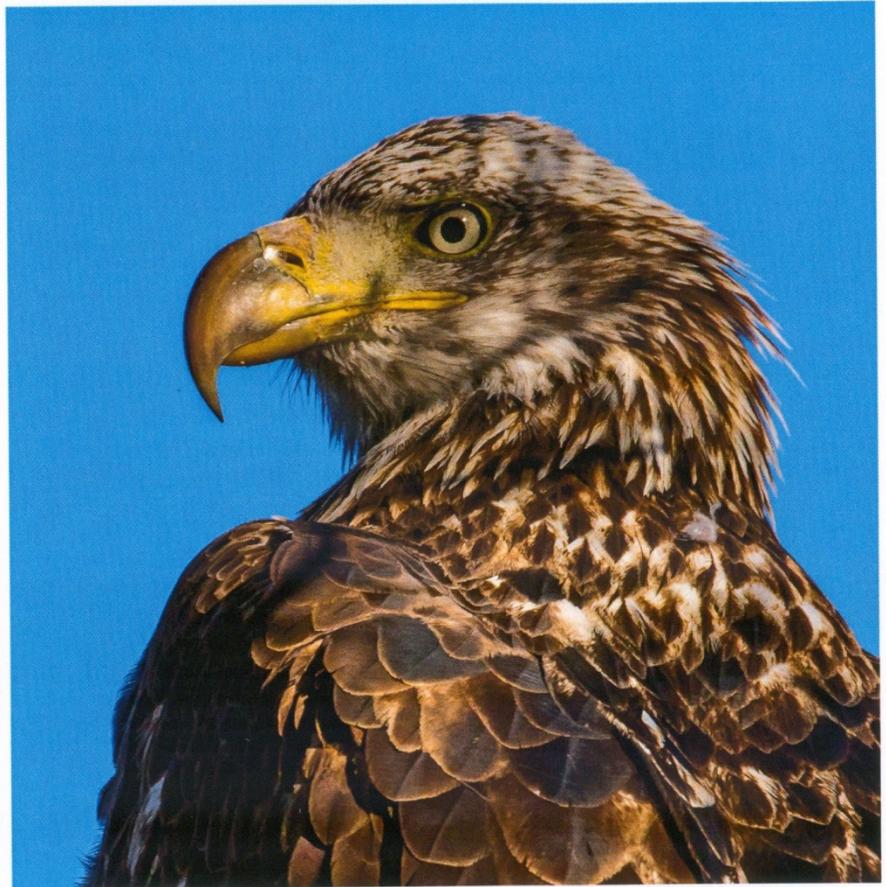
Owlet takes its first flight; and big yawn



Double-crested cormorants

Facing page: Bald eagle and
immature bald eagle



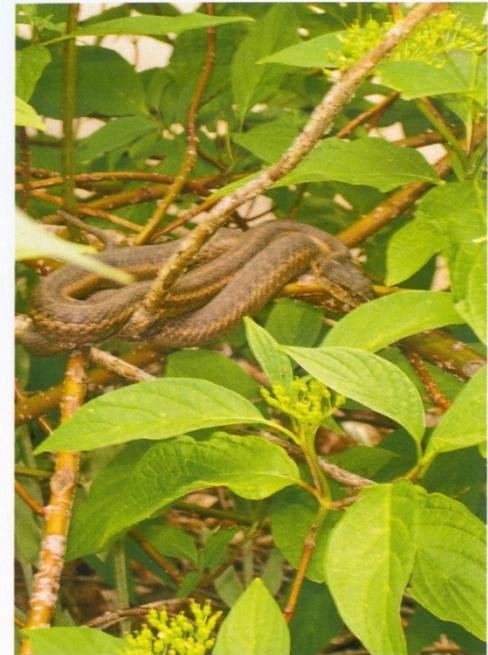




"I was able to capture a swallow in flight feeding a young one. The parents were swooping over the south field to catch insects, and then flying to feed their young ones who were all perched in a row on a tree branch." --Anne Pienciak



Snapping turtles. Baby turtle at right.

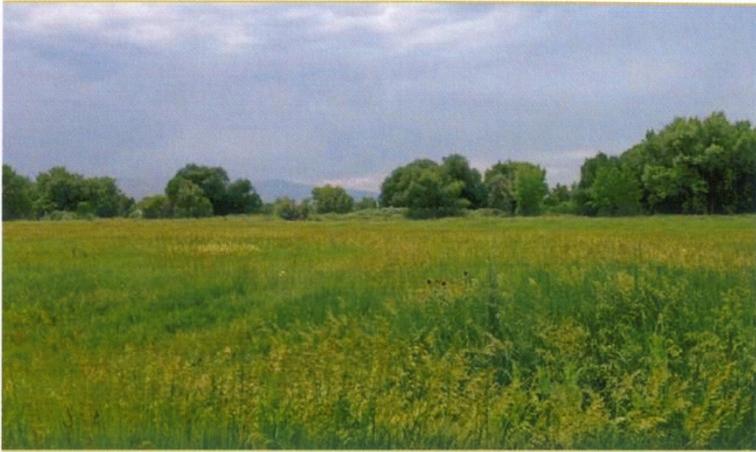


Clockwise from top left: Painted turtle; garter snake; bullfrog; yellow-bellied racer.
"One of the last places in Boulder you can see fireflies on a hot summer night." --Shonna Tyrer



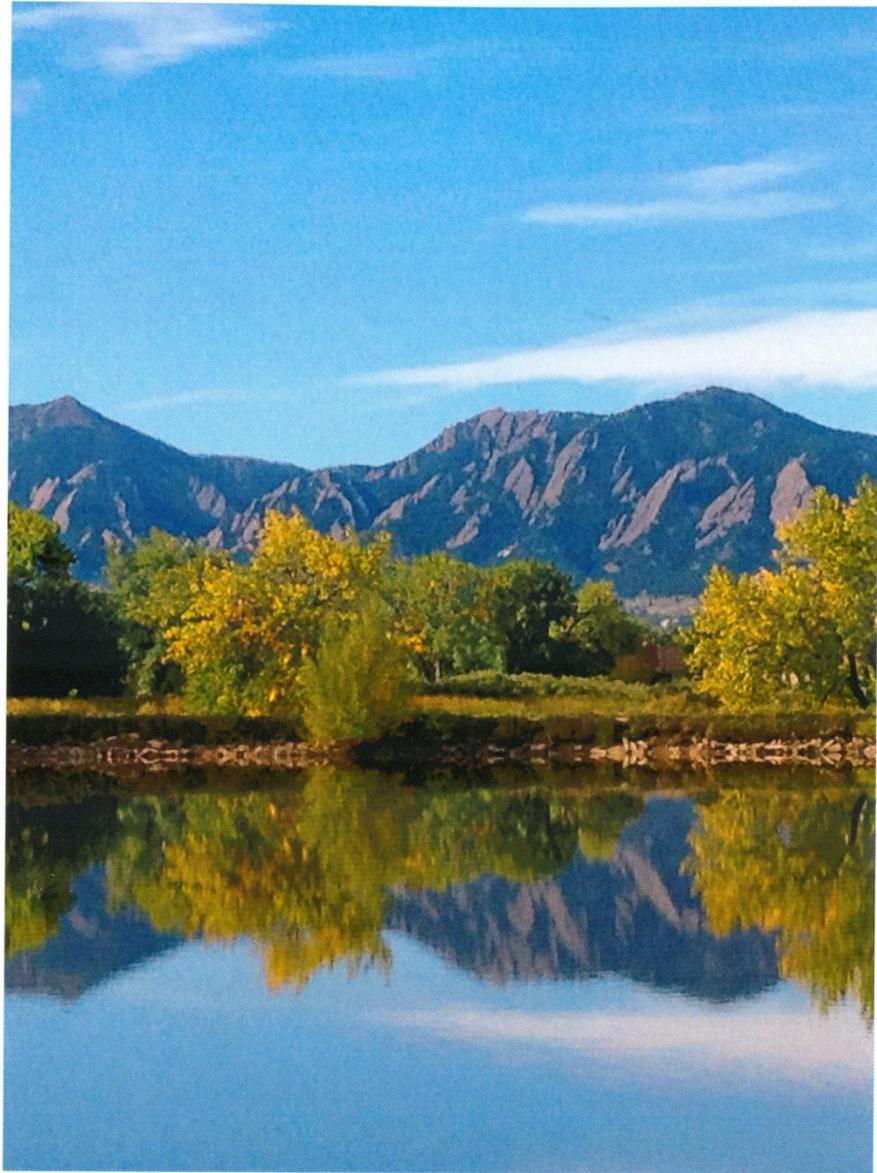
Tiger salamanders







Standing on the south field looking through the wildlife corridor to the Johnson/Coen Trust. To reach Walden Ponds, follow the rainbow!



"My favorite thing to do in this lovely, wild field is this: I walk all the way to the line of cottonwoods and willows at the northern most part of the field, without looking back. Once there, I turn around and admire the jaw-dropping views of the Front Range."
--Melanie Lynn

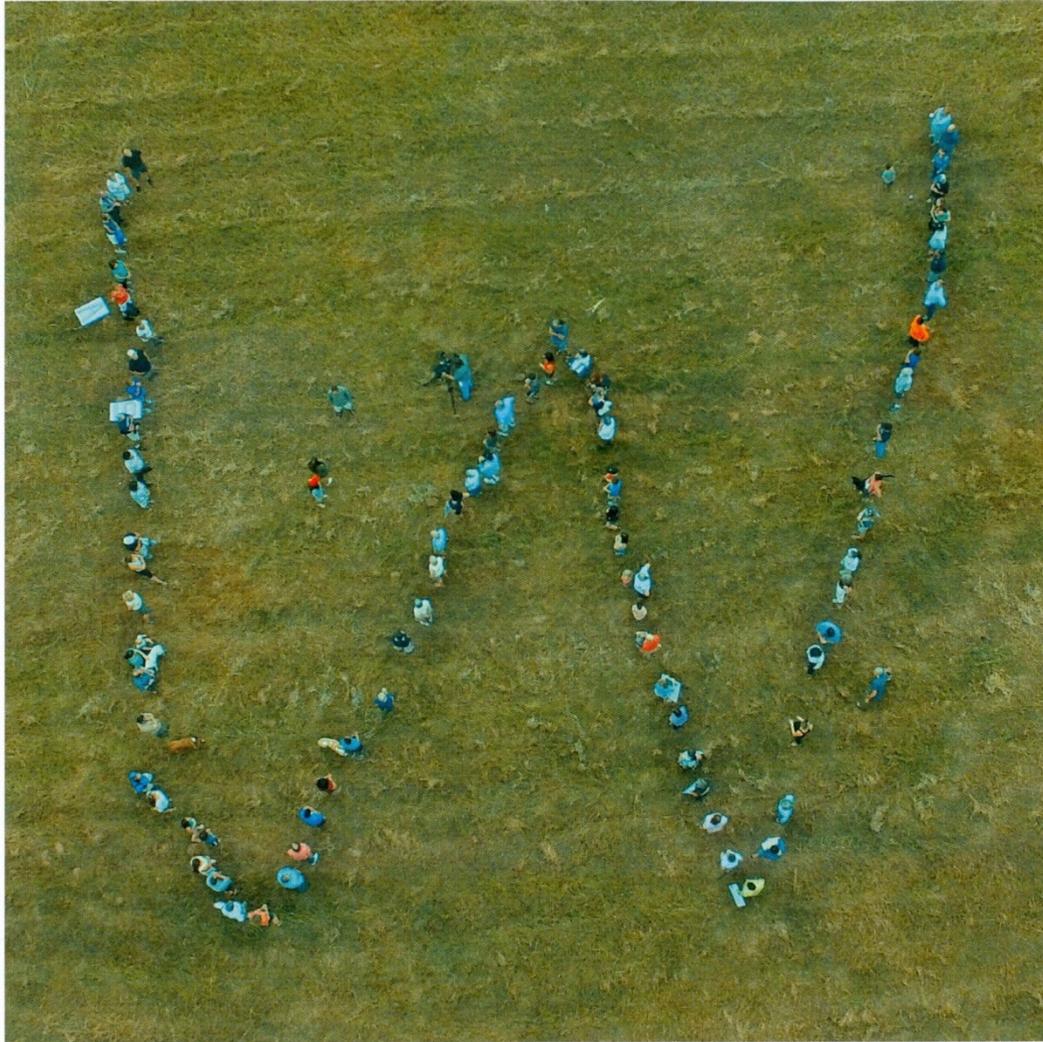








Clockwise from top: Community gathering on the north field; child riding on the south field's small BMX track; and an evening stroll



'W' is for Wildlife. More than 100+ people came to form the letter. Photo by Steve Smart



Bushy-tailed woodrat

Thanks to all the Twin Lakes creatures, great and small!