



# **Ecological Assessment + Corridor Management Plan**



**SAND CREEK** REGIONAL GREENWAY  
Wilderness In the City



**NOT affiliated with the Sand Creek Massacre**

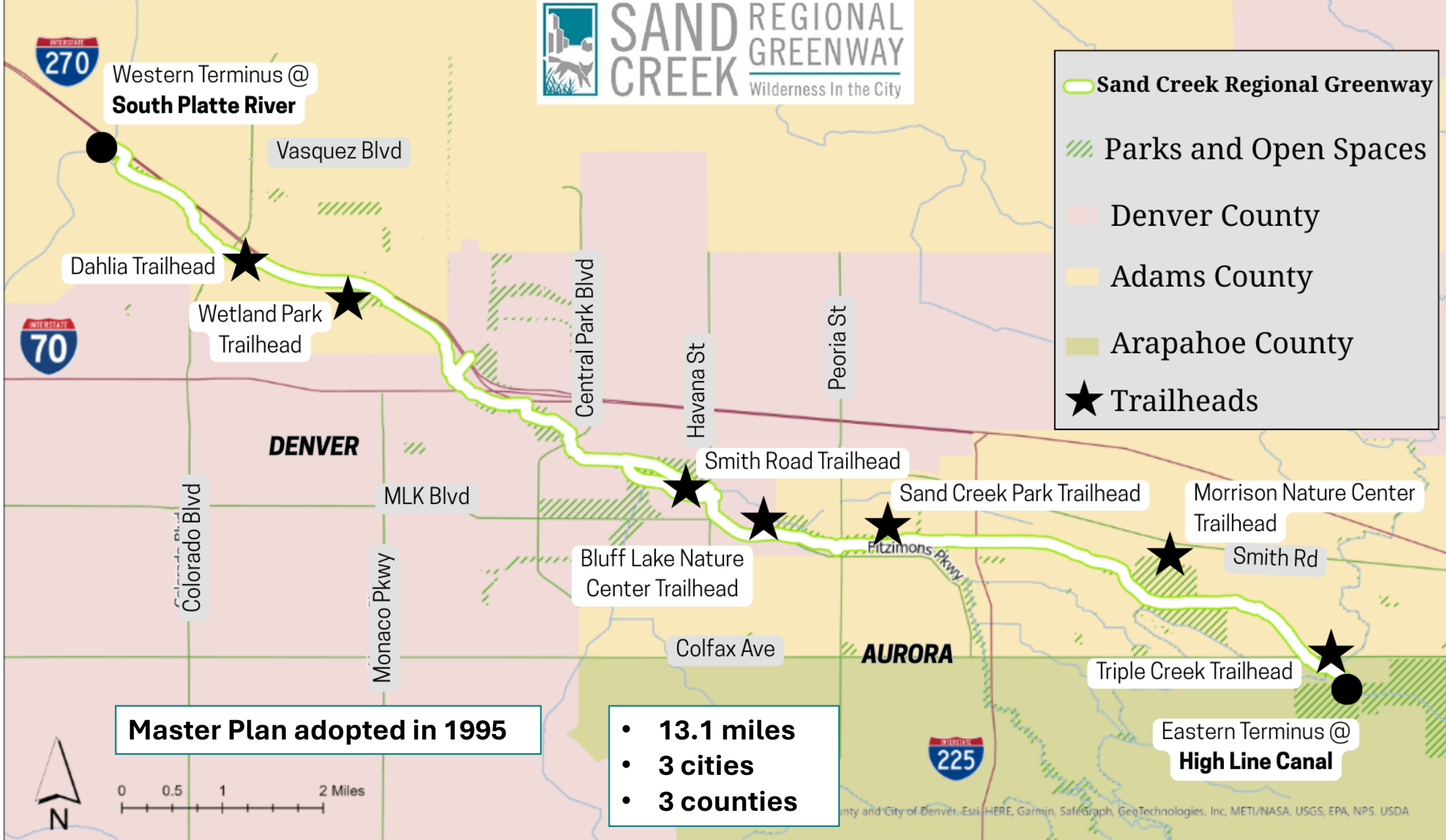
Sand Creek Regional Greenway

Sand Creek Massacre National Historic Site

# COMMERCE CITY



- Sand Creek Regional Greenway
- Parks and Open Spaces
- Denver County
- Adams County
- Arapahoe County
- Trailheads



**Master Plan adopted in 1995**

- **13.1 miles**
- **3 cities**
- **3 counties**

County and City of Denver. Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc. METI/NASA, USGS, EPA, NPS, USDA

# Sand Creek Regional Greenway Partnership

- Non-profit established in 2000
- 2000-2021 – Building the trail with Aurora, Denver, and Commerce City
  - Over \$40M raised
- 2021-Present – Activation and Stewardship. Enhancing the equitable access, awareness, and engagement of the Greenway.
  - Environmental education
  - Community science
  - Outdoor wellness
  - Volunteering (since 2011!)
  - Trail improvements & ecological restoration
- Since 2023
  - 3296+ pounds of litter removed
  - 1330+ pounds of noxious weeds removed





# **Ecological Assessment + Corridor Management Plan**

With generous support from the  
National Fish and Wildlife Foundation RESTORE Colorado Program



### Raccoon

Raccoons are nocturnal animals known for their problem solving. They can swim to catch food. Their mask functions as an anti-glare device.  
**\*Find me year-round active at night.\***



### Carpenter Ant

Their jaws are strong enough to chew through wood, and inflict a painful bite. Colonies can contain 50,000 ants.  
**\*Find me active during March - October near anthills.\***



### Canadian Goose

One goose can have over 20,000 feathers. Goslings can learn to swim within one day of being born. Can be very territorial and aggressive.  
**\*Find me March - October during the day.\***



### American Beaver

Largest rodent in the U.S. Can stay underwater for 15 minutes. Their front teeth don't stop growing, so they gnaw on wood to keep them small.  
**\*Find me year-round, active at dawn and dusk.\***



### Cabbage White Butterfly

They drink nectar from flowers and prefer purple, blue, and yellow flowers. Lay eggs on the underside of leaves.  
**\*Find me April - October near plants\***



### Mallard

Enjoy ponds and marshy areas, and sometimes swimming pools. They build nests on the ground out of plant material. Migrating groups can travel about 55mph.  
**\*Find me year-round near water\***

### Prairie dog

Support other species through their creation of tunnels, and burrows that can be up to 10 feet deep. They use a complex language for communication.  
**\*Find me year-round, active during the day\***



### Crawdad

Can regrow limbs after they fall off. Live in fresh bodies of water. Burrow underground during the winter months.  
**\*Find me April - October under rocks and in aquatic plants.\***



### Red-Tailed Hawk

Can spot prey from 100 feet up while flying. Have a third eyelid to protect their eyes when they dive for food. Reuse their stick nests for multiple years.  
**\*Find me year-round in Colorado.\***



### Cottontail Rabbit

They can run up to 18mph. They eat herbs, and grasses, and have about 100 million scent receptors in their nose.  
**\*Find me year-round, active mainly during dawn, dusk.\***



### Grasshopper

Have ears on their bellies. Can jump up to 2 and a half feet (20 times their body length). Exist as eggs during the winter then hatch in the spring and live until late fall.  
**\*Find me in March - October in grassy areas.\***



### Bullsnake

These non-venomous snakes prefer soil that is easy to burrow into. Commonly eat small rodents, reptiles, bird eggs, and other small creatures.  
**\*Find me during March - October mainly in grass.\***

### Fox Squirrel

Have 2 shelters types: tree dens, and leaf nests. They can leap up to 15 feet horizontally. Sweat through their paws during hot weather.  
**\*Find me year-round active during the day.\***



### Mule Deer

Only males (bucks) grow antlers, but shed them during the winter months. Live in groups, eating mainly woody vegetation, but also grasses.  
**\*Find me year-round, mostly active during the fall months.\***



### Red-eared Slider

These are introduced in Colorado and mostly found in urban areas near water. Live for about 20 - 30 years in the wild.  
**\*Find me during April - October near water.\***





**Snowy Egret**  
They eat bugs washed up on shore, and use their feet to stir up shallow waters for food. Male and female birds take turns incubating their eggs.  
**\*Find me March - September during the day near water.\***



**Coyote**  
Coyotes live in a variety of habitats, and are omnivores. They hunt in packs during the colder months, but have also been known to travel alone.  
**\*Find me year-round, mainly at dawn or dusk.\***

**PRICKLY POPPY**



Native drought-tolerant plant found in sunny areas attracting pollinators. Known for white flowers, and spiny stems and leaves. Certain parts of the plant can be toxic, while others have been used medicinally.

**PHRAGMITES**



Invasive perennial noxious weed growing up to 15 feet tall. Feather-like reeds have been known to disrupt native vegetation. Indigenous people used the stems for building.

**White-Crowned Sparrow**  
Ground forager eating seeds, and insects that spend summer in the mountains, and winter in the lowlands near Denver.  
**\*Find me year-round in Colorado\***



**Red Fox**  
They can hear rodents digging underground, and can use the Earth's magnetic field to find prey. They are omnivores and can run about 30mph.  
**\*Find me year-round, active at dawn and dusk\***



**THREE-SQUARE BULRUSH**

Native perennial flowering plant with spiked blooms in clumps along the stem found in open sunny areas along bodies of water. Has been used to treat snake bites and bleeding by Indigenous peoples.



**SMOOTH BROME**

Invasive perennial noxious weed. Usually found in sunny open ground. Can be good for livestock grazing but has a tendency to take over native vegetation. Small animals may use it as shelter from predators.



**Barn Swallow**  
The most widely distributed species of swallow in the world. They build nests of mud in man-made structures, sometimes under bridges.  
**\*Find me March - October during the day\***



**Bald Eagle**  
They mainly eat fish. Can live 30 years in the wild and have up to an 8-foot wingspan. Their nests can weigh as much as a small car (over 1000 lbs.)  
**\*Find me year-round in early morning and late afternoon.\***

**SCOTCH THISTLE**



Non-native plant that can produce thousands of seeds per plant that remain viable for 30 years. The plants live for around 2 years. Some parts are edible, but hard to collect since the plant is sharp.

**CHEATGRASS**



Invasive noxious weed harmful to native plants due to shallow roots taking water. It could increase the risk of wildfires due to rapid growth rate, and extreme dryness of the grass.

**Western Meadowlark**  
Build their dome-shaped nests on the ground out of grass, preferring open prairie habitat. They eat seeds, and insects.  
**\*Find me March - October in open spaces\***



**Great Horned Owl**  
They can swivel their head more than 180° and take down animals larger than themselves. Their wings make barely any noise while flapping.  
**\*Find me year-round, mostly active at night.\***



**MEADOW FOXTAIL**

Non-native perennial plant flowering in April - June found in wet meadows. Known for fluffy long, "tail-like" tops. Has been used to treat high blood pressure, headaches, and inflammation.



**HEART-PODDED HOARY CRESS**

Invasive perennial noxious weed found in unshaded areas up to about 2 feet tall. Known for heart-shaped seed pods and white flowers. Can produce thousands of seeds, and chemicals that inhibit the growth of other plants.



**Red-Winged Blackbird**  
Males have multiple mates at one time. Eat insects, seeds, and grain. Enjoy nesting in marshland, and moist grassy areas especially near cattails.  
**\*Find me year-round in Colorado near water.\***



**American Kestrel**  
Smallest bird of prey in North America weighing only 3 - 6 ounces. They eat a variety of small animals and insects.  
**\*Find me year-round hunting during the day\***

## COYOTE WILLOW



Native shrub found near water that can grow up to 15 feet tall. Indigenous people used the bark to make baskets, arrow shafts, and traps. Coyote willow is good at preventing erosion.

## RABBITBRUSH

Native plant that grows bright yellow flowers during the summer. Can grow in a variety of different soils and requires very little water. Provides habitat for rabbits and other small animals.



## MEXICAN HAT



Native perennial plant preferring sunny areas and blooming mid-summer to fall. Also known as the prairie coneflower. Attracts a variety of pollinators. Has been used for medicinal purposes by Indigenous people.

## SHOWY MILKWEED

Native plant where Monarch butterflies lay their eggs. Prefers full sun, and soil that is well draining. Produces toxic milky sap eaten by Monarch larva. Attracts a variety of pollinators with its pink flowers.



## CHOKO CHERRY



Native plant found in moist areas with clusters of white flowers, and colored fruit. The fruit is edible, but the pits are poisonous. Frequently eaten by Indigenous people living on the plains.

## PLAINS COTTONWOOD

Native trees that grow over 100 feet tall with heart-shaped leaves. Branches look like stars inside. The bark contains a substance called salicin that has been used as a pain reliever. Shed cotton and seeds in the fall.



## HONEY LOCUST



Native drought-tolerant tree that can reach upwards of 40 feet, and live for 125 years. The young pods of the tree are edible. Commonly used in urban settings due to ability to provide shade.

## PENSTEMEN

Over 62 varieties are native to Colorado. Source of food for deer, and used as food and shelter by birds. Attracts a variety of pollinators due to various colors including blue, purple, and red.



## SPIDERWORT



Native perennial plant found mostly on the eastern slope in Colorado. Prefers full sun, but doesn't need much water. Good for pollinators. Young leaves are edible.

## YARROW

Native perennial plant preferring full sun and able to withstand dry conditions. Flowers can be various colors. Dried leaves were used as tea and other parts were used for wound healing.



## YUCCA



Native drought-tolerant plant growing in a variety of environments. Pollinated by the Yucca moth. Indigenous people have used the plant for ropes, sandals and other uses. Provides shelter for animals.

## BROADLEAF CATTAIL

Native plant thriving in wetland landscapes. Provides shelter for fish and habitat for birds and other water animals. Parts of this plant are edible. Known to be good soil stabilizers.



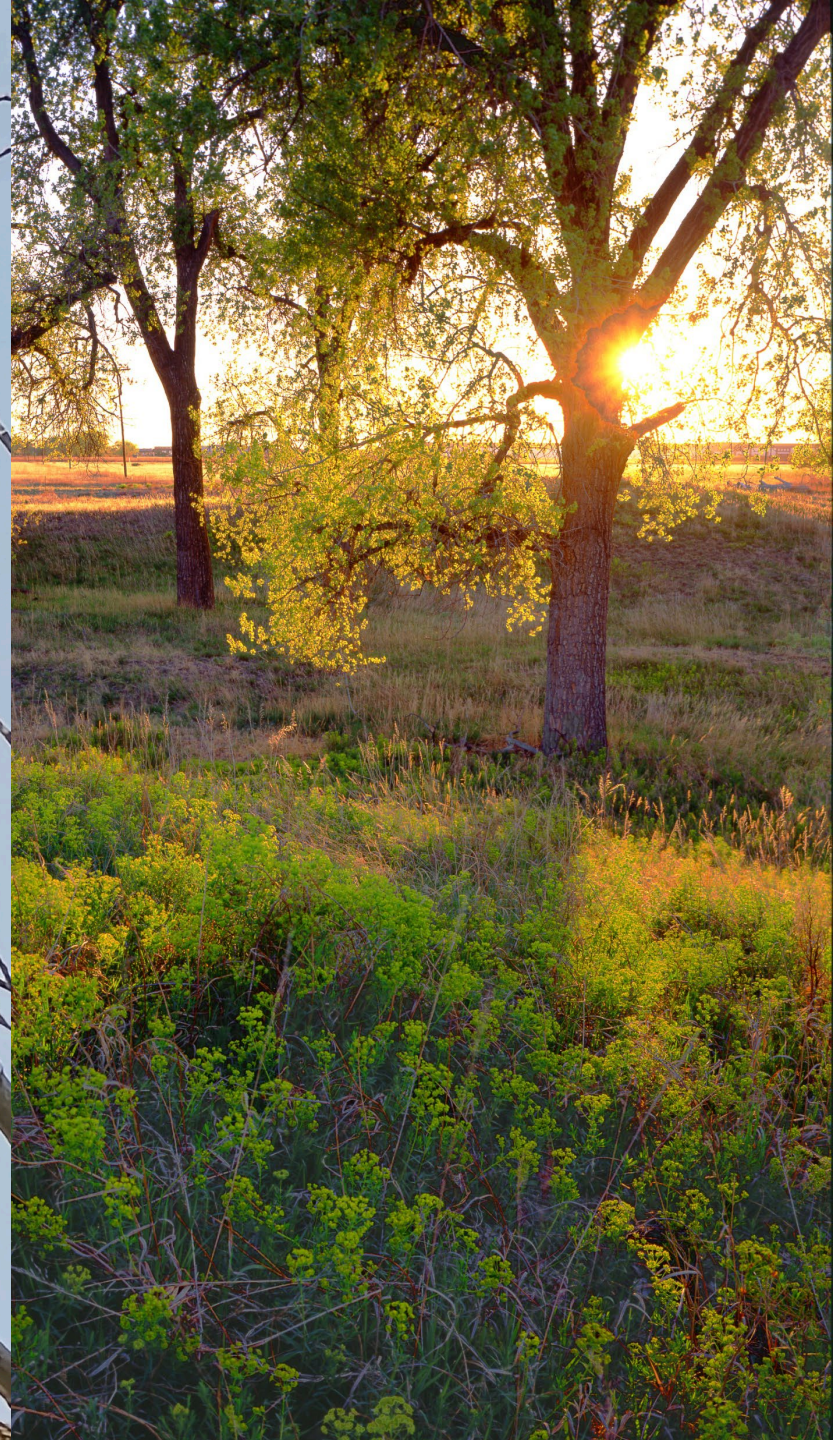
# Issues & Needs

- Listed on the 303(d) list for E. coli and selenium contamination
- Affected by nearby industrial activity
- Impacted by increased recreational use
- Address habitat loss and fragmentation
- Foster native biodiversity
- Improve climate resilience
- Enhance watershed resilience
- Piecemeal restoration approach for a continuous stream and wildlife corridor



# Objectives

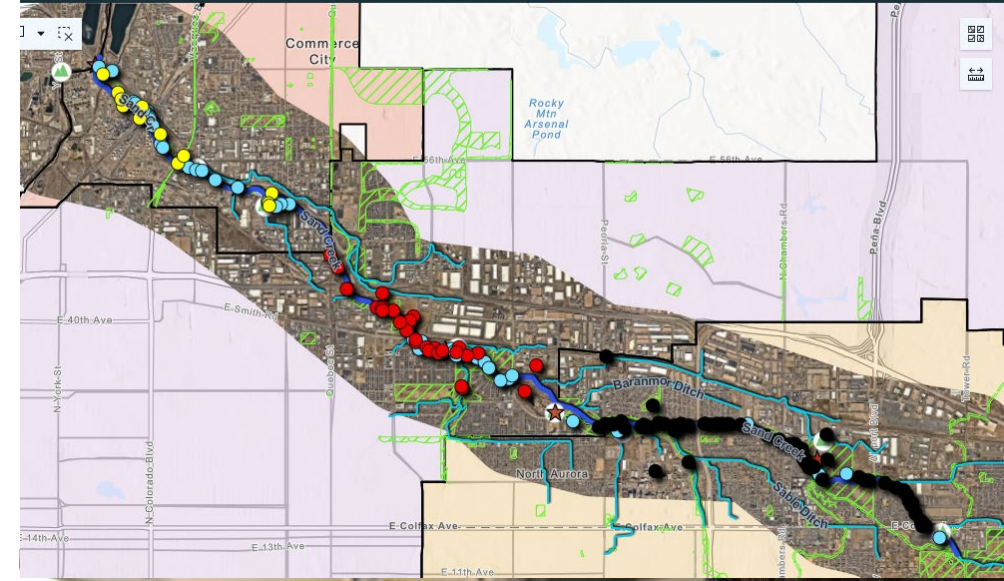
- Improve the ecological health and resilience of the Greenway corridor, including Sand Creek, trails, and riparian, wetland, and upland habitats.
- Greenway community members co-create the plan, which reflects their shared vision, priorities, knowledge, and lived experiences as Greenway users and nearby residents.
- Align jurisdictions on management and restoration projects and practices.
- Provide a roadmap for future projects and investment that enhance wildlife habitat and promote equitable access to the Greenway.
- Cultivate sustained and shared stewardship of the Greenway.



# Building on Existing Work

- Sand Creek Downstream of Colfax Study, led by Mile High Flood District
  - Hydrology
  - Hydraulics
  - Geomorphology
  - Vegetation
  - Community Values
- 
- SCRGP Ecological Assessment + Corridor Management Plan
  - Water quality
  - Vegetation
  - In-stream, riparian, and upland habitat
  - Community priorities
- SCRGP Community Science program – RiverWatch sampling

## SAND CREEK URBAN STREAM STUDY



# Process

