June 17, 2025

AGENDA ITEM SUMMARY
City Council

STAFF

Katie Donahue, Natural Areas Director
Julia Feder, Environmental Program Manager
Tawnya Ernst, Natural Areas
Jonathan Piefer, Senior Real Estate Specialist

SUBJECT

First Reading of Ordinance No. 101, 2025, Authorizing the Conveyance of a Permanent Drainage Easement on Fossil Creek Reservoir Natural Area to South Fort Collins Sanitation District.

EXECUTIVE SUMMARY

The purpose of this item is to authorize the conveyance of a drainage easement to South Fort Collins Sanitation District ("SFCSD") across the southwest side of Fossil Creek Reservoir Natural Area. The request is tied to an expansion of SFCSD's infrastructure at their headquarters immediately adjacent to the natural area. The proposed easement alignment would cross Highway 392 (north to south) via a culvert into Duck Lake.

STAFF RECOMMENDATION

Staff recommends adoption of the Ordinance on First Reading.

BACKGROUND / DISCUSSION

Fossil Creek Reservoir Natural Area (Fossil Creek Reservoir NA) is located in southeast Fort Collins adjacent to I-25 and Highway 392 (Carpenter Road) intersection. Fossil Creek Reservoir NA was acquired in a series of transactions between 1998 and 2017 in partnership with Larimer County Open Lands. The City and County share ownership of approximately 470 acres of the natural area, including the 116 acres that encompass Duck Lake. Each holds an undivided 50% interest in the property rights to Duck Lake. Duck Lake water quality has historically been impacted by agricultural runoff which has resulted in high nutrient levels and severe algal blooms. These issues are exacerbated by lack of water cycling. Fossil Creek Reservoir provides crucial habitat to bald eagles (in the winter) and other types of raptors, and many species of shorebirds, songbirds, and waterfowl. Coyotes, deer, and prairie dogs also frequent the property.

South Fort Collins Sanitation District (SFCSD), established in 1964, provides sanitary sewer service to more than 60,000 customers in south Fort Collins, north Loveland and west Timnath and Windsor. SFCSD owns a 17-acre property immediately adjacent to Fossil Creek Reservoir NA. SFCSD acquired the property in 1974 – it contains their administrative headquarters and water reclamation facility. SFCSD has outgrown their current office space and is proposing to build a new administrative building on site. SFCSD is undergoing a site planning review with Larimer County Planning as well as the permitting process with the Colorado Department of Transportation (CDOT) for the road improvements to Highway 392. The project

will entail construction of a 4,100 sq. ft. administration building with associated internal site roadway and parking improvements, utilities, drainage infrastructure (including a detention pond), and landscaped areas. In addition, SFCSD proposes to construct turn lane improvements in conjunction with the new administrative building to address traffic impacts and improve safety and site circulation. SFCSD conducted a traffic study as part of the CDOT permitting process. CDOT is not requiring the new turn lanes but the SFCSD Board was motivated to add the turn lanes due to safety concerns. Their staff have experienced many near-misses and one operator was rear-ended turning into the SFCSD headquarters.

As a condition of site plan review, SFCSD is required to obtain the necessary easements to handle stormwater runoff. Natural Areas staff were contacted in spring 2024 about the potential need for a drainage easement across City property to address the stormwater anticipated from the proposed development. Staff submitted the easement application to Larimer County Open Lands for their review as well. The Open Lands and Advisory Board was presented with the request at their April meeting. OLAB members asked for clarification about measures being taken to protect water quality and to schedule construction to limit potential impacts to migratory waterfowl.

In addition, staff also shared the easement request with Fort Collins Community Development and Neighborhood Services (CDNS) staff to determine if the project necessitated a 1041 permit review. CDNS staff reviewed the project information and issued a determination that the project is **excluded** from the definitions City Council designated as an activity of state interest subject to 1041 regulations.

Currently, stormwater runoff from roughly 6 acres on the southern portion of the SFCSD property and approximately 24 acres of Fossil Creek Reservoir NA runs westerly along a drainage swale on the north side of Highway 392. In smaller storm events (up to a 10-year event), the existing swale carries stormwater through two culverts to another drainage swale on the west side of the SFCSD property where stormwater then drains north to Fossil Creek Reservoir. In larger storm events, stormwater overtops Highway 392 (up to 37 cfs in the 100-year storm event) and drains south onto the Duck Lake side of Fossil Creek Reservoir NA. From there, stormwater flows westward toward an outfall pipe on the west side of Duck Pond and is carried northwesterly back across Highway 392 to the drainage swale west of SFCSD that links to the reservoir.

Larimer County Planning is requiring SFCSD to construct storm drainage and water quality improvements as part of the site plan approval process for the new SFCSD headquarters improvements. The SFCSD drainage system being proposed would capture and direct runoff towards an onsite detention pond. The SFCSD site will feature a full spectrum detention pond (as defined in the Urban Drainage and Flood Control District manual) designed to capture stormwater and release it slowly with discharges that approximate pre-developed conditions – reducing pollutant loading and channel erosion.

The City of Fort Collins Natural Areas and Conserved Lands Easement Policy (adopted by City Council 1/3/2012) states the following:

"Drainage Facilities for Private Development. Drainage facilities that serve new development (such as detention, retention, or water quality ponds) shall be located on private land within the development and not on City-owned natural areas or conserved land. Easements for conveyance facilities will be considered on a case-by-case basis when the city-owned land is located between the private parcel and the historic receiving channel or stream. The design of the new flow conveyance must utilize existing drainages to the maximum extent feasible and must blend into the surrounding terrain, must not impact the existing geomorphic character of the drainage and must enhance the natural habitat features and character of the site."

Natural Areas staff review of the stormwater outfall easement request has focused on minimizing ecological impacts to the natural area. SFCSD, with feedback from Natural Areas, has submitted several alternatives.

Alternative A

Alternative A provides for a new culvert to be constructed on the south side of the SFCSD property that would carry stormwater underneath Highway 392 and route it directly to Duck Lake. A drainage outfall easement (approximately 2,560 square feet (0.06 acres) in size would be located between the culvert in CDOT right-of-way and Duck Lake. This concept is not the preferred alternative because it would require a significantly larger 24"x38" elliptical pipe compared to an 18" circular pipe proposed in Alternative D – preferred alternative) to convey stormwater westerly across the private SFCSD driveway to the north.

Alternative B

Alternative B mimics the historic condition, namely, stormwater drains west along a roadside swale and overtops Highway 392 in large storm events. In this alternative, storm sewer construction across Highway 392 would not be necessary and an easement from NAD would likely not be necessary. This concept is not the preferred alternative because CDOT would not allow this historic condition to persist given the safety hazards of overtopping and the likelihood of future road widening. The roadside swale and culverts on the north side of the road will need to convey all stormwater so that Highway 392 is not overtopped in a large storm event.

Alternative C

Alternative C is similar to Alternative B except that all drainage swales and culverts would be sized to convey the entire 100-year storm event on the north side of the road so that no overtopping of Highway 392 occurs. Stormwater would continue to follow its existing path toward Fossil Creek Reservoir. In this alternative, storm sewer construction across Highway 392 would not be necessary. This concept is not the preferred alternative because it would require a significantly larger elliptical pipe and would require a much larger drainage swale on the north side of the road, significantly impact existing fiber optic, gas, and electric lines on the north side of the road.

Alternative D (Preferred)

Similar to Alternative A, this alternative proposes a new culvert on the east side of the SFCSD property that would take stormwater underneath Highway 392 and route it directly to Duck Lake. The total area that would drain to Duck Lake is approximately 30-acres (including 6 acres of the SFCSD site and 24 acres of Fossil Creek Reservoir).

- The proposed culvert underneath Highway 392 is a 24"x38" elliptical concrete pipe capable of conveying the entire 100-year storm event of 43 cfs. The 10-year, 5-year, and 2-year storm events are approximately 10 cfs, 5 cfs, and 2 cfs respectively.
- Construction work would involve installation of a concrete flared end section on the end of the concrete pipe and placement of rip rap that will cover an area approximately 15'x8'. This will involve excavation of roughly two feet of soil and installation of 6 inches of bedding material and then approximately 18 inches of 3 inch to 5 inch-riprap. SFCSD has offered to bury the riprap to eliminate the visual intrusion.
- The impacted area would be seeded post-construction with a native seed mix approved by Natural Areas.
- Placing the culvert under Highway 392 on the east side of the SFCSD driveway also puts the culvert closer to where the majority of the stormwater is coming from (primarily Fossil Creek NA and also reduces the possibility of the driveway culvert plugging and stormwater inadvertently overtopping Highway 392. Reducing that risk is seen as a benefit to Highway 392 and the downstream Natural Areas property.

This option would improve stormwater management along Highway 392.

In this concept, a 30' drainage easement is proposed from the northern NAD border to Duck Lake. The total proposed easement area is 3,250 square-feet (0.075 acres).

Natural Areas staff support the preferred alternative in part because it has the potential to bring more water into Duck Lake. The Duck Lake basin is a very small, localized low-lying area with significant potential nutrient inputs from adjacent farming and livestock production. Any additional water inputs into the system from relatively nutrient-free locations would assist with decreasing nutrient concentrations within the shallow body of water and would complement NAD management actions aimed at tying up phosphate in the system.

Environmental Impact

Considering the preferred alternative (Alternative D), the overall impact to Fossil Creek NA would be relatively minimal, with only a small amount of initial disturbance to the property when the outlet pipe and riprap are installed in the Highway 392 ROW. The only visible component within the natural area's boundaries limits will be the proposed flared end section of the outlet pipe.

An ecological characteristics study was conducted. The project area contains Duck Lake, a pond waterfowl used as a migration resting and mating area. The proposed project area does not support an extensive population of native vegetation, although several native species are present. The CDOT right-of-way areas are characterized by upland grassland species, including western wheatgrass (Pascopyrum smithii), pigweed (Amaranthus spp.), and various annual weeds. In the wetland zone along the boundary of Duck Lake, cattails (Typha spp.) and assorted sedges (Eleocharis spp.) predominate. Additionally, a solitary rubber rabbitbrush (Ericameria nauseosa) was observed near the proposed outflow location for the new stormflow path. A CODEX report indicates that documented occurrences of protected species have occurred within 1 mile of the Project Area. According to the High Priority Habitat dataset and field observations, the project is within a buffer for an eagle roost site associated with Fossil Creek Reservoir.

Stormwater runoff from the SFCSD site will be treated in an extended detention and water quality ponds where the water will settle and slowly drain through an outlet structure before it enters the drainage swale and culvert along Highway 392. The runoff from the Natural Area is treated as it flows through grass buffers and the grass-lined drainage swale that runs on the north side of Highway 392.

Construction is anticipated to take two weeks, and its timing will be coordinated to minimize impact to migrating waterfowl.

CITY FINANCIAL IMPACTS

Application fee	$5,000.00
Mitigation Fee- $3,985/ac. @ 0.075 acres	$3,985.00
Easement fee - $43,560/ac. x 0.075/ac. @ 50% of fair market value	$3,086.00

The application fee and mitigation fee will be paid to the Natural Areas Department to support administrative costs and land conservation efforts. The mitigation fee is set in the easement policy and provides a cost per acre for mitigation with a minimum of one acre. Real Estate Services provided an in-house market valuation to calculate the underlying fee value of the City property that was used as the basis for the easement value.

BOARD / COMMISSION / COMMITTEE RECOMMENDATION

At its May 14, 2025, meeting, the Land Conservation and Stewardship Board voted (8 -0) to recommend that City Council approve the conveyance of the drainage easement, Alternative D, to South Fort Collins Sanitation District.

PUBLIC OUTREACH

None.

ATTACHMENTS

1. Vicinity Map
2. Ordinance No. 101, 2025