



ARAPAHOE COUNTY
COLORADO'S FIRST

Board Summary Report

Date: August 8, 2019

To: Board of County Commissioners

Through: Jan Yeckes, Planning Division Manager

From: Larry G. Mugler, Planner

Subject: LR19-001, Cherry Creek State Park Site Location Application for the Main Lift Station

Request and Recommendation

The Colorado Parks and Wildlife Department (CPW) is seeking approval from the Colorado Department of Public Health and Environment (CDPHE) of a site location for the wastewater lift station needed to serve the eastern side of Cherry Creek State Park. As part of its application to CDPHE, the District has requested the Board of County Commissioners, as the affected county and the 208 management agency for unincorporated Arapahoe County and in accordance with CDPHE Regulation 22, 5 CCR 1002-22, to review and provide comments on the site location application to CDPHE.

This application is for replacement of the Main Lift station at Cherry Creek State Park. A Site Application for this lift station was never completed because it was originally constructed by the United States Army Corps of Engineers (USACE). Since then, CPW has taken over management of the lift station and has decided to replace the aging facility. Therefore, this application is being completed as part of the replacement project.

The replacement lift station will serve the campground, picnic areas, swim beach and marina on the east side of Cherry Creek Reservoir. The maximum monthly flow recorded at the existing lift station has been 0.012 MGD (million gallons per day). CPW does not expect the flows to increase within the service area. The wastewater is discharged into the City of Aurora collection system and treated at the Metropolitan Wastewater Reclamation District facility.

The engineering report has been reviewed by Arapahoe County, Tri-County Health Department, the City of Aurora, and the Cherry Creek Basin Water Quality Authority. Now the final stage is the signatures from these various agencies mentioned and the Chair of the Arapahoe County Board of County Commissioners, with authorization from the Board of County Commissioners.

The County's review and comment and Board approval are part of the CDPHE process for its review of this wastewater facility plan and the proposed site location for the State permit to operate a wastewater facility. Since the facilities are located in the unincorporated portion of the County,

the County's review is conducted under its authority as the 208 management agency, a designation made by the state under the federal Clean Water Act, and as the local government most directly affected by the facility.

For the purposes of the site location application to CDPHE, the Board is asked to review and comment on the application and, in accordance with Regulation 22, CDPHE is interested in the County's position as to whether the proposal is consistent with the water quality considerations contained in its local comprehensive plan and the location of the facility with respect to the floodplain.

Towards this end, Arapahoe County Public Works and Development staff, Aurora staff, and Tri-County Health Department staff have reviewed LR19-001, Cherry Creek State Park Site Location Application, in detail. In addition, the Cherry Creek Water Quality Authority has reviewed the application through the technical review committee and board. The Authority expressed concerns about the ability of the lift station to deal with emergency situations. The Park's engineer has revised the site application to include instrumentation to monitor the force main for potential leaks. The Authority has recommended approval with this revision.

With regards to the floodplain, the site is outside of the 100-year floodplain. However, it is within the property of a flood control reservoir and, therefore, subject to possible flooding. The emergency response plan for the park specifies actions for all of the lift stations in the park, including the Main Lift Station. That plan requires the Main lift station to be shut down if the reservoir water elevation reaches 5565'. Page 129 of the application shows the expected grading plan for the replacement lift station, locating the station above 5569'. Assuming the emergency response plan is followed, the lift station should not cause a health problem during a flood event.

As a result, Public Works and Development staff is comfortable that the application is consistent with the water quality considerations contained in the County's local comprehensive plan and adequately addresses floodplain concerns (as specified in Regulation 22). Further, Tri-County Health Department and Aurora are comfortable with the application and have signed the District's application to CDPHE.

Staff therefore recommends the application **favorably** to the Board of County Commissioners with the findings listed below. If the Board concurs, we request that the Chair sign the application form for forwarding to CDPHE.

Recommended Findings:

1. The Colorado Department of Public Health and Environment (CDPHE) has to review the document prior to final approval for construction of the wastewater facility. Under CRS 25-8-702. Approval for commencement of construction:

(1) No person shall commence the construction of any domestic wastewater treatment works or the enlargement of the capacity of an existing domestic wastewater treatment works, unless the site location and the design for the construction or expansion have been approved by the division.

(2) In evaluating the suitability of a proposed site location for a domestic wastewater treatment works, the division shall:

(a) Consider the local long-range comprehensive plan for the area as it affects water quality and any approved regional wastewater management plan for the area;

(b) Determine that the plant on the proposed site will be managed to minimize the potential adverse impacts on water quality; and

(c) Encourage the consolidation of wastewater treatment facilities whenever feasible.

2. In its role as the 208 Management Agency for Arapahoe County, the Board of County Commissioners finds that the application for the lift station is consistent with the water quality management portions of the Comprehensive Plan and with floodplain regulations.
3. CPW will be required to obtain a building permit prior to construction of the lift station.

Background

Lift stations are wastewater facilities that move wastewater from one drainage basin into another, larger sewer line. The lift station under review was constructed the U.S. Army Corps of Engineers and did not receive CDPHE certification. It sends wastewater to an interceptor in Aurora for ultimate treatment at the Metro Wastewater Reclamation District No. 1. The service area includes a campground, picnic area, swim beach and marina, which are not expected to expand. CPW believes it is necessary to replace the original lift station with a new facility.

CDPHE regulations for site location of a waste water treatment facility, Regulation 22, as regards county approval, provides two opportunities for comment:

Per Reg. 22, the county is being asked to comment as to:

(b) County if the proposed facility is located in the unincorporated area of a county. The county, through its commissioners or its designee, is requested to review and comment upon: the relationship of the treatment works to the local long-range comprehensive plan for the area as it affects water quality; the proposed site location alternatives including the location with respect to the flood plain; and the capacity to serve the planned purpose. A recommendation of approval from the county is considered to be a statement that the proposal is consistent with the water quality considerations contained in its local comprehensive plan.

As the 208 planning agency, the county is asked to comment as to:

...the consistency of the proposed treatment plant to the water quality management plan....

The Arapahoe County Comprehensive Plan addresses the relationship between water quality and discharge from treatment plants into streams as it affects water quality as stated in the goals and policy as quoted below:

Strategy PFS 3.3(a) – Encourage the Reuse of Water by Water Suppliers and Individual Users
Many water suppliers in the County use reclaimed water for irrigation and other appropriate uses. The County supports these efforts and encourages the continued practice. The County supports efforts to expand the reuse of water to individual users.

The wastewater from these lift stations is treated at the Metro Wastewater Reclamation District No. 1, which has a significant reuse program.

Policy PFS 4.2 - Support Provision of New Wastewater Treatment Facilities in Designated Growth Areas

The County will support the approval and construction of new wastewater treatment facilities in Designated Growth Areas only when no other feasible or practicable alternatives are available to provide treatment.

Strategy PFS 4.2(a) - Work With Districts to Plan for New Wastewater Treatment Facilities

The County will cooperate with sanitation or metropolitan districts created in Designated Growth Areas to ensure that they are planning for adequate capacity to meet future growth demands.

The lift station will have the capacity to serve its area and will convey wastewater to a major wastewater treatment facility that meets its state discharge permit conditions. With the revisions planned by CPW, the updated lift stations will also be able to better address emergency situations such as pump failure.

Strategy GM 3.3(h) – Locate Critical Facilities to Avoid Floodplains

The County will require that critical facilities avoid locating in 100-year floodplains, including water and wastewater treatment plants, fire and police protection facilities, community facilities, major utility

The lift station is located outside of the 100-year floodplain and has procedures in place if the reservoir were to exceed the elevation of the lift station.

Discussion:

In this case, the Board County of Commissioners has the responsibility, as the 208 Management Agency for the unincorporated areas of Arapahoe County, to sign the Applicant Certification and Review Agencies Recommendation, Section 22.4 of Regulation 22: New Domestic Wastewater Treatment Facility, on behalf of Arapahoe County.

Based on the information in the site application materials, the staff recommends approval based on the findings in the “Request and Recommendation” section of this memorandum.

Alternatives:

1. Authorize the Chair of the Board of County Commissioners to sign the Applicant Certification and Review Agencies Recommendation form to forward to CDPHE.
2. Do not authorize the Chair of the Board of County Commissioners to sign the Applicant Certification and Review Agencies Recommendation form; the Board may want to identify areas of concern to be addressed.

3. Continue a decision to a future date to receive additional information or to further consider information presented.

Fiscal Impact:

At this time there is no fiscal impact to Arapahoe County.

Concurrence

As noted above, the application has also been reviewed by the City of Aurora and the Tri-County Health Department. Both have concurred in the approval of the lift station. The Cherry Creek Basin Water Quality Authority has recommended approval of the site application with the addition of changes from the project engineer.

Reviewed By:

Larry Mugler, Staff Member
Jan Yeckes, Division Manager
Bryan Weimer, Department Director or Elected Official
Robert Hill, County Attorney

Attachments:

- Draft resolution authorizing Chair to sign site location forms
- Colorado Parks and Wildlife lift station site application
- Draft motions are provided for use only in the event that the item is removed from the Consent Agenda for discussion as a regular Business Agenda Item.