

## ENVIRONMENTAL ASSESSMENT CHECKLIST

### VALLEY SANITATION DISTRICT – INTERCEPTOR RELOCATION PROJECT

Use the Discussion and References space at the end of each section to document your responses. For example, explain how you determined the level of impact and document the reasoning if checking PA (possible adverse) for any resource. Attach additional pages if necessary.

1. Brief project description, including identification of selected alternative: Three Alternatives were evaluated. The alternative that was selected includes replacing the line along South Clay Street and installation of a new lift station. The line would traverse along South Clay Street to West Oxford Avenue. The line would then turn east on West Oxford Avenue to a tie-in location where it would tie into the existing line. A new lift station would pump flows to the high point of the alignment along South Clay Street. From the high point, the flow would transition from gravity to the tie-in point.
2. Describe if the project will improve or maintain water quality, and if the project addresses a TMDL, and/or Watershed Management Plan.  
This project does not specifically address water quality, TMDLs or a Watershed Management Plan. It provides for the reconstruction of an existing sewer pipe that is severely corroded and at risk of failing. If this sewer pipe were to fail, untreated wastewater would likely flow into the South Platte River, creating significant water quality concerns. This project seeks to eliminate that risk by construction a new lift station and sewer force main to replace the existing gravity sewer pipe.
3. Provide latitude and longitude of the proposed project (if a transmission / distribution / collection line identify the center point not the whole line): The latitude and longitude for the approximate center point are 39.638906°N/105.021867°W.
4. Provide discharge information:  
This is a lift station and interceptor pipeline. As this project involves the replacement of infrastructure already in existence – with no increase in capacity – discharge information is not applicable. Any and all discharge standards are maintained by the entity treating the wastewater, which is the City of Englewood via the Littleton-Englewood Wastewater Treatment Plant.
5. Provide NPDES/PWSID number:  
The Valley Sanitation District does not have an NPDES or PWSID number. The District’s wastewater discharges to the Littleton/Englewood Wastewater Treatment Plant (L/EWWTP).
6. Provide primary waterbody name and waterbody ID, secondary name (if available), and State designated surface water use:  
This project does not include any treatment facilities as it is the reconstruction of an existing interceptor sewer line. The sewer line conveys raw wastewater to the L/EWWTP where it is treated and discharged to the South Platte River. The District has no control over this treatment plant as the cities of Englewood and Littleton own and operate it.
7. Did your analysis consider how this project impacts community planning efforts in other areas (i.e. transportation, housing, etc.)?  
This project does not support any growth or new development. It is the reconstruction of an existing sewer line to provide for more stable long-term operation and safer working conditions for the system operators. Providing reliable wastewater collection service supports any community planning efforts by ensuring citizens have a way for their wastewater to be conveyed to the wastewater treatment plant in a safe and cost-effective method.

For the following questions: Y = Yes; N = No; PA = Possible Adverse

**1. Physical Aspects - Topography, Geology and Soils**

- Y  N  PA  a. Are there physical conditions (e.g., steep slopes, shrink-swells soils, etc.) that might be adversely affected by or might affect construction of the WWTF facilities?
- Y  N  PA  b. Are there similar limiting physical conditions in the planning area that might make development unsuitable?
- Y  N  PA  c. Are there any unusual or unique geological features that might be affected?
- Y  N  PA  d. Are there any hazardous areas (slides, faults, etc.) that might affect construction or development?

*Discussion and References:*

Preliminary soil borings at the location of the new lift station and along the selected sewer pipe alignment do not show any unusual subsurface conditions. A preliminary review of the project site did not indicate the presence of any physical conditions that would affect construction. No hazardous areas were present that would affect construction.

As this project does not support new development, a review of limiting physical conditions or hazardous areas was not conducted for the planning area.

**2. Climate**

- Y  N  PA  a. Are there any unusual or special meteorological constraints in the planning area that might result in an air quality problem?
- Y  N  PA  b. Are there any unusual or special meteorological constraints in the planning area that might affect the feasibility of the proposed wastewater treatment alternative?

*Discussion and References:*

There are no known unusual or special meteorological constraints in the planning area. The majority of the area served by the District is residential with very limited commercial and industrial activities. As this project does not include any wastewater treatment alternatives, the second question is not applicable.

**3. Population**

- Y  N  PA  a. Are the proposed growth rates excessive (exceeding State projections, greater than 6% per annum for the 20 year planning period)?
- Y  N  PA  b. Will additional growth be induced or growth in new areas encouraged as a result of facilities construction?
- Y  N  PA  c. Will the facilities serve areas which are largely undeveloped areas at present?

*Discussion and References:*

The District's service area is almost 100% built-out. The District is allocated approximately 2,250 taps as part of the Connector's Agreement with the City of Englewood. At the end of 2016, 2,240 of those have connected to the system. Absent any possible redevelopment – which is not expected in this service area – little to no additional growth is planned.

**4. Housing, Industrial and Commercial Development and Utilities**

- Y  N  PA  a. Will existing homes or business be displaced as a result of construction of this property?
- Y  N  PA  b. Will new housing serviced by this facility affect existing facilities, transportation patterns, environmentally sensitive areas, or be in special hazard or danger zones?
- Y  N  PA  c. Will new housing create strains on other utilities and services - policies, power, water supply, schools, hospital care, etc.?

Discussion and References:

No homes or businesses will be displaced due to the construction of this project. Any temporary impacts during construction activities in public roadways will be appropriately managed.

No new housing or development is expected as a result of this project – this project will not increase the capacity of the District’s wastewater collection system.

**5. Economics and Social Profile**

- Y  N  PA  a. Will certain landowners benefit substantially from the development of land due to interceptor routing or WWTP location and size?
- Y  N  PA  b. Will the facilities adversely affect land values?
- Y  N  PA  c. Are any poor or disadvantaged groups especially affected by this project?

*Discussion and References:*

As the Valley Sanitation District service area is almost 100% built-out, there is no opportunity for any landowner to benefit from the project beyond what is already expected. This project is an infrastructure replacement project, not an expansion project. As the project will be located within an area that does not have residential properties, there is not an expectation that this project will adversely affect land values. Additionally, no one specific population group will be especially affected due to the location of the project away from any residential areas.

**6. Land Use**

- Y  N  PA  a. Will projected growth defeat the purpose of local land use controls (if any)?
- Y  N  PA  b. Is the location of the WWTP or other facilities incompatible with local land use plans?
- Y  N  PA  c. Will inhabited areas be adversely impacted by the project site?
- Y  N  PA  d. Will new development have adverse effects on older existing land uses (agriculture, forest land, etc.)?
- Y  N  PA  e. Will this project contribute to changes in land use in association with recreation (skiing, parks, etc.), mining or other large industrial or energy developments?

*Discussion and References:*

The proposed sewer pipe and lift station will replace the current gravity sewer main in-kind. No additional capacity will be added beyond what exists in current Connector Agreements with the City of Englewood. As the Valley Sanitation District is almost 100% built-out, there is no expected growth that would conflict with existing land use controls. Additionally, this project will not adversely impact any current land uses or contribute to changes in land use within the planning area.

**7. Floodplain Development**

- Y  N  PA  a. Does the planning area contain 100 year floodplains?  
If yes –
- Y  N  PA  b. Will the project be constructed in a 100 year floodplain?
- Y  N  PA  c. Will the project serve direct or indirect development in a 100 year floodplain anywhere in the planning area?

*Discussion and References:*

See the attached maps to verify the planning/project area is not within the floodplain. These include FEMA map #08005C0144K and a self-created map from the Arapahoe County GIS (AreaMap) system. 100 year floodplains are located to the north and east of the project site, but not within the boundaries associated with this project.

**8. Wetlands**

- Y  N  PA  a. Does the planning area contain wetlands as defined by the U.S. Fish and Wildlife Service?  
If yes -

- Y  N  PA  b. Will any major part of the treatment works be located on wetlands?  
 Y  N  PA  c. Will the project serve growth and development which will directly or indirectly affect wetlands?

*Discussion and References:*

The lift station associated with this project will be located less than 300 feet from Centennial Lake and an associated freshwater pond (see attached map). Appropriate mitigation measures will be taken during the construction phase and spill prevention procedures will be developed for when the lift station is operating.

None of the project will be located directly on wetlands. Additionally, this project will not serve growth or development that would adversely impact identified wetlands in any way. As mentioned in other places, this project replaces existing infrastructure in-kind and does not add any capacity to the system.

**9. Wild and Scenic Rivers**

- Y  N  PA  a. Does the planning area contain a designated or proposed wild and scenic river?  
 If yes –  
 Y  N  PA  b. Will the project be constructed near the river?  
 Y  N  PA  c. Will projected growth and development take place contiguous to or upstream from the river segment?  
 Y  N  PA  d. Will the river segment be used for disposal of effluent?

*Discussion and References:*

While the project is located close to the South Platte River, that river is not a designated or proposed wild and scenic river (according to information provided by the U.S. National Park Service).

<https://www.rivers.gov/colorado.php>

**10. Cultural Resources (Archeological/Historical)**

- Y  N  PA  a. Are there any properties (historic, architectural, archeological) in the planning area which are listed on or eligible for listing on the National Register of Historic Places?  
 If yes –  
 Y  N  PA  b. Will the project have direct or indirect adverse impacts on any listed or eligible property?

*Discussion and References:*

Arapaho Hills is a residential subdivision in Littleton, Colorado listed as a historic district in the National Register of Historic Places. The Valley Sanitation District provides wastewater collection service to this community of 56 homes. This project will provide safe and reliable wastewater collection service to this community. If this interceptor relocation project is not constructed, there is significant potential for the existing interceptor pipe to fail. If that happens, sewer service to this community would be disrupted for an indeterminate amount of time, possibly resulting in sewer backups into the homes.

**11. Flora and Fauna (including endangered species)**

- Y  N  PA  a. Are there any designated threatened or endangered species or their habitat in the planning area?  
 Y  N  PA  b. Will the project have direct or indirect adverse impacts on any such designated species?  
 Y  N  PA  c. Will the project have direct or indirect adverse impacts on fish, wildlife or their habitat including migratory routes, wintering or calving areas?  
 Y  N  PA  d. Does the planning area include a sensitive habitat area designed by a local, State or Federal wildlife agency?

*Discussion and References:*

According to the Critical Habitat for Threatened & Endangered Species mapping system provided by the US Fish & Wildlife Service, there are no designated threatened or endangered species located within the project or planning area (see attached Q11 map). Additionally, the Colorado Wildlife Habitat Protection Program does not designate any sensitive habitat areas within the planning or project boundaries.

<http://cpw.state.co.us/learn/Maps/CWHPP-Propertes-Protected-Map.pdf>

### 12. Recreation and Open Space

- Y  N  PA  a. Will the project eliminate or modify recreational open space, parks or areas of recognized scenic or recreational value?
- Y  N  PA  b. Is it feasible to combine the project with parks, bicycle paths, hiking trails, waterway access and other recreational uses?

#### *Discussion and References:*

The new lift station will be located within the boundaries of Centennial Park, which is owned and operated by the City of Englewood. Discussions have commenced with them regarding this project and they are supportive of the proposed location of the lift station. Due to the location of most of the pipe alignment in area zoned for commercial/industrial uses, it is not feasible to combine it with any recreational uses.

The lift station will be located in the far northwest corner of the parking lot, bounded to the west by an industrial park (Centennial Trade Center) and to the north by a very high retaining wall for a parcel owned by Excel Properties LLC. The lift station will be designed to minimize above-ground structures. The architectural components of any above-ground structures will be agreed upon in collaboration with staff from the City of Englewood's Parks Department.

### 13. Agricultural Lands

- Y  N  PA  a. Does the planning area contain any environmentally significant agricultural lands (prime, unique, statewide importance, local importance, etc.) as defined in the EPA Policy to Protect Environmentally Significant Agricultural Lands dated September 8, 1978?
- Y  N  PA  b. Will the project directly or indirectly encourage the irreversible conversion of Environmentally Significant Agricultural Lands to uses which result in the loss of these lands as an environmental or essential food production resource?

#### Discussion and References:

The entire service area of the Valley Sanitation District is fully developed and zoned for residential, commercial or industrial use. There are no agricultural lands of any kind located within the service area. Reference zoning maps from Arapahoe County, City of Englewood and City of Sheridan.

<http://www.englewoodgov.org/home/showdocument?id=1724>

<http://co-sheridan.civicplus.com/DocumentCenter/Home/View/169>

### 14. Air Quality

- Y  N  PA  a. Are there any direct air emissions from the project (e.g., odor controls, sludge incinerator) which do not meet Federal and State emission standards contained in the State Air Quality Implementation Plan (SIP)?
- Y  N  PA  b. Is the project service area located in an area without an approved or conditionally approved SIP?
- Y  N  PA  c. Is the increased capacity of the project greater than 1 mgd?
- Y  N  PA  d. Do the population projections used in the facilities plan exceed the State or area-wide projections in the SIP by more than 5%?
- Y  N  PA  e. Does the project conform with the requirements of the SIP? (See EPA regulations under Section 316 of the Clean Air Act.)
- Y  N  PA  f. Is the project inconsistent with the SIP of an adjoining State that may be impacted by the Project?

- Y  N  PA  g. Does the project violate national ambient Air Quality Standards in an attainment or unclassified area?
- Y  N  PA  h. Will the facilities create an odor nuisance problem?

*Discussion and References:*

As there are minimal (if any) air emissions associated with this project, most of these questions are not applicable. The pumps within the lift station will be powered by a traditional electricity source. Very small scale odor control technology may be applied where needed within the project to eliminate any odors created by turbulence within the lift station or discharge point. An emergency generator powered by diesel fuel is included in the project plan and will conform with all regulatory requirements for operation.

**15. Water Quality and Quantity (Surface/Groundwater)**

- Y  N  PA  a. Are present stream classifications in the receiving stream being challenged as too low to protect present or recent uses?
- Y  N  PA  b. Is there a substantial risk that the proposed discharge will not meet existing stream standards or will not be of sufficient quality to protect present or recent stream uses?
- Y  N  PA  c. Will construction of the project and development to be served by the project result in non-point water quality problems (sedimentation, urban stormwater, etc.)?
- Y  N  PA  d. Will water rights be adversely affected by the project?
- Y  N  PA  e. Will the project cause a significant amount of water to be transferred from one sub-basin to another (relative to the 7-day, 10 year flow of the diverted basin)?
- Y  N  PA  f. Will stream habitat be affected as a result of the change in flow or stream bank modification?
- Y  N  PA  g. Are stream conditions needed for deciding upon the required limitations inadequately specified in the 208 Plan? If so, have the wasteload allocations calculations been performed and approved by the State and EPA?
- Y  N  PA  h. Is an Antidegradation Review required?
- Y  N  PA  i. Will the project adversely affect the quantity or quality of a groundwater resource?
- Y  N  PA  j. Does the project adversely affect an aquifer used as a potable drinking water supply?
- Y  N  PA  k. Are there additional cost effective water conservation measures that could be adopted by community to reduce sewage generation?

*Discussion and References:*

This project will not adversely impact groundwater or surface water quality or quantity as it is the replacement of an existing wastewater collection pipe. A lift station is planned due to this sewer pipe needing to transition from a gravity collection system to a pumped system. This change is planned to provide better access to the sewer pipe for operation and maintenance activities.

This project does not include any new wastewater discharges, services to any new developments, flow or stream bank modifications, or impacts on aquifers or groundwater resources. Substantial water conservation efforts have already been undertaken in collaboration with Denver Water and no new efforts are planned as part of this project.

**16. Public Health**

- Y  N  PA  a. Will there be adverse direct or indirect noise impacts from the project?
- Y  N  PA  b. Will there be a vector problem (e.g., mosquito) from the project?
- Y  N  PA  c. Will there be any unique public health problems as a result of the project (e.g., increased disease risks)?

*Discussion and References:*

There will be no permanent adverse noise impacts from this project. The pump station will be fully enclosed and any noise from operation will be appropriately mitigated using sound-proof enclosures. Temporary noise impacts from the project are expected during the construction phase. The majority of the construction will be along an industrial corridor on South Clay Street and West Oxford Avenue. Noise resulting from construction performed within Centennial Park will be appropriately mitigated.

No vector problems are expected from this project. This project will prevent the potential for vector problems by eliminating the existing possibility of a sewer line failure. If the existing sewer line located within the abandoned landfill were to fail it would result in the flow of untreated wastewater onto private property, into the South Platte River, and potentially into Centennial Park. With the construction of this project, this potential public health problem would be eliminated.

**17. Solid Waste (Sludge Management)**

- Y  N  PA  a. Will sludge disposal occur in an area with inadequate sanitary landfills or on land unsuitable for land application?
- Y  N  PA  b. Are there special problems with the sludge that makes disposal difficult (hazardous, difficult to treat)?
- Y  N  PA  c. Is the technology selected for sludge disposal controversial?

*Discussion and References:*

This section is not applicable as there are no solid waste components of this project.

**18. Energy**

- Y  N  PA  a. Are there additional cost effective measures to reduce energy consumption or increase energy recovery which could be included in this project?

*Discussion and References:*

As this project will include a new lift station with pumps, the consulting engineer will ensure the new wastewater pumps are energy efficient. Due to the simplicity of the project and the District’s limited financial resources, no other energy recovery options are feasible to explore further.

**19. Land Application**

- Y  N  PA  a. Has a new or unproven technique been selected?
- Y  N  PA  b. Is there considerable public controversy about the project?
- Y  N  PA  c. Will the project require additional water rights or impact existing water Rights?
- Y  N  PA  d. Is the project multi-purpose?

*Discussion and References:*

This project consists of the reconstruction of an existing wastewater collection pipe and new lift station to pump the wastewater around the abandoned landfill. There are no new techniques or technologies expected to be included in this project. At the moment, no considerable public controversy over the project arose during the three public meetings. No water rights will be impacted. There is not an opportunity to make this a multi-purpose project.

**20. Regionalization**

- Y  N  PA  a. Are there jurisdictional disputes or controversy over the project?
- Y  N  PA  b. Is conformance with the 208 plan in question?
- Y  N  PA  c. Is the proliferation of small treatment plants and septic systems creating a significant health problem?
- Y  N  PA  d. Have inter-jurisdictional agreements been signed?

*Discussion and References:*

As this project will replace existing infrastructure and not change the capacity of the existing sewer pipe, it is expected to fully comply with all existing planning efforts and regulations. Agreements have existed for decades between the District and the City of Englewood regarding acceptance of the District’s wastewater for treatment at the L/EWWTP.

An agreement regarding the location of the lift station within the boundaries of Centennial Park is in development. It is expected that the City of Englewood will provide a temporary construction easement and a perpetual operational easement to the District.

**21. Public Participation**

- Y  N  PA  a. Is there a substantial level of public controversy?
- Y  N  PA  b. Is there adequate evidence of public participation in the project?

*Discussion and References:*

Three public meetings were conducted in the first half of 2017. District customers were notified of the meeting by postcard mailing and in articles published in the Denver Post, Littleton Independent and Englewood Herald newspapers. Support for the project was widely evident although questions remain regarding how the project will be paid for. Additional public meetings will be conducted once more details are available regarding how the project will proceed.

[Valley Sanitation District - Postcard for Customers](#)

**22. Environmental Laws**

- Y  N  PA  a. Does the project threaten to violate any State, Federal or local law or requirement imposed to protect the environment?

*Discussion and References:*

This project will not violate any laws or requirements imposed to protect the environment. The proposed route of the sewer pipe avoids any areas that could potentially be environmentally, culturally or historically sensitive. The alignment of the new pipe is solely along public streets in areas designated for commercial or industrial activities. The location of the new lift station within Centennial Park will be done in conformance with all applicable regulations as dictated by the City of Englewood.

Prepared By: Cynthia Lane, P.E. – Assistant Manager, Platte Canyon Water & Sanitation District  
Name, Title, and Affiliation:

Date: \_\_\_\_\_

Reviewed By (WQCD): \_\_\_\_\_  
Name and Title:

Date: \_\_\_\_\_

Environmental Determination: (Circle One)

CE                      EA                      EIS