

MEMORANDUM

TO: Programs, Projects, and Operations Subcommittee

FROM: Eric Williams, Natural Resources Planner

SUBJECT: FY 2018 Urban Cost Share Programs

- Urban Conservation Assistance Program
- Urban Drainageway Program
- Recreation Area Development Program
- Trails Assistance Program
- Lake Dredging Program
- Flood Mitigation Assistance Program

DATE: April 7, 2017

The District solicited applications for the urban cost share programs (guidelines attached) from the various units of government in the District for the upcoming fiscal year. The following applications were received.

Urban Conservation Assistance Program

The Urban Conservation Assistance Program (UCAP) cost shares with units of government to solve relatively minor erosion, flooding, and stormwater management problems within their jurisdiction. The Policy Manual allows for Management approval of all applications.

Bennington, Johns-Born Bank Stabilization

Severe erosion has occurred on the south side of the Big Papio Creek near the new Papio Creek Pedestrian Bridge. Clearing and grubbing, grading, hydro-seeding, and reinforced mulch will be used to stabilize the slope and protect the bridge footing and trail from additional erosion in the future.

Omaha, Ida Street at 99th Street Erosion Repair

The 99th and Ida Street Storm Sewer and Erosion Repair project is located east of the intersection of I-680 with Blair High Road. The 18-inch storm sewer pipe that runs under Ida Street has eroded the bank and pipe segments have fallen into the creek, which is a tributary to Thomas Creek. The erosion threatens to undermine a box culvert under Blair High Road (Highway 133) and a billboard located near the southwest part of the parking lot. The proposed solution includes repair of the existing storm pipe, filling the washout, stabilization of the surrounding area and dissipation measures to reduce the stormwater velocity to prevent this from reoccurring.

Omaha, West Papio L Street Embankment

The embankment to the West Papio Creek in the vicinity of “L” Street has been eroding for some time. The erosion has undermined the slope on the west side of the west bridge pier, causing damage to the concrete pavers. The project will remove the concrete pavers, regrade the slope, and reinstall the pavers. Undermined sections of the trail will be removed and new fill brought in to fill the voids before pouring the concrete trail. Additional grading will be done on the uphill side of the trail to create swales to collect surface runoff and direct it to storm drainage structures that will carry the water under the trail and down into the creek.

SID 190 (Sarpy County) Hickory Ridge, Channel Improvements

A tributary leading south from SID 190 toward the South Papio Creek has eroded, and is in need of stabilization. The section will be stabilized using Flex Mat, allowing for vegetation to grow between the modular concrete sections. A new gabion basket will be installed at the outlet of the culvert on the northern end of the channel to reduce flow velocity, and decrease the change of future erosion.

SID 221 (Sarpy County) Cedar Hollow, Channel Improvements

An unnamed tributary has experienced active head-cutting north from the South Papio Creek, to the outlet of a box culvert under the BNSF railroad line. This has resulted in significant degradation of channel and bank erosion which is causing damage to personal property and threaten public infrastructure. Grade control structures, bank stabilization, and channel elevation and restoration are planned for this section.

SID 225 (Sarpy County) Giles Ridge, South Papio Bank Stabilization

In the fall of 2016, the District worked with two SIDs, Sarpy County, and the City of Gretna to perform emergency stabilization of the south bank of the South Papio Creek, downstream of the BNSF rail line near 156th Street. Significant erosion threatened the sanitary sewer in this location, and bank grading and stabilization was determined to be the most effective solution. This project was completed with the understanding that all partners would arrange financial contributions, including cost share from the District.

The FY 2017 budget included \$207,384 for new projects in this program. The following table summarizes the FY 2018 applications.

<u>Sponsor, Project</u>	<u>Total Estimated Cost</u>	<u>FY 2018 Cost Share</u>
Bennington, Johns-Born Bank Stabilization	\$78,502	\$30,000
Omaha, Ida Street at 99th Street Erosion Repair	\$200,000	\$30,000
Omaha, West Papio L Street Embankment	\$118,500	\$30,000
SID 190 Hickory Ridge, Channel Improvements	\$80,000	\$30,000
SID 221 Cedar Hollow, Channel Improvements	\$90,000	\$30,000
SID 225 Giles Ridge, South Papio Stabilization	\$122,625	\$30,000
Total	\$689,627	\$180,000

- It is recommended that the Subcommittee recommend to the Board of Directors that the applications from Bennington for \$30,000, Omaha for \$30,000 and \$30,000, SID 190 for \$30,000, SID 221 for \$30,000, and SID 225 for \$30,000, for a total of \$180,000 be approved, subject to funding in the FY 2018 Budget.

Urban Drainageway Program

The Urban Drainageway Program (UDP) cost shares with units of government to rehabilitate major urban drainageways within their jurisdiction. The cost share rate varies depending on the level of rehabilitation. This program was redefined by the Board in 2011. Board approval is required on all applications.

This project was previously approved by the Board with cost share components in FY 2018.

The City of Omaha has requested assistance for Hell Creek Rehabilitation at Westwood Lane, This project is now completed. Work included removing the broken and degrading concrete liner from the channel, and improving the ecological condition of the creek through biologically-based engineering practices. Replacement of four road culverts provides greater hydraulic capacity in the area. The total cost of this project is \$3,800,000 and an Interlocal Agreement with the City of Omaha indicates a total cost share of \$900,000, with \$300,000 in FY 2016, 2017, and 2018.

New program applications were received and are outlined below.

Omaha, Blondo at 209th Street

Stormwater from the residential area to the south of 208th and Parker Street flows into a channel from a 72-inch storm sewer pipe with an impact basin at the outlet. Approximately 100 feet downstream of the storm sewer outlet, the channel has degraded and is showing evidence of bank erosion and channel downcutting. A 10-inch sanitary sewer line which crosses this channel is being threatened by the channel degradation. The proposed solution would include stabilizing the eroded channel, potentially with grade control structures that would have the dual benefit of stabilizing the channel and protecting existing infrastructure. The channel cross section downstream of the sanitary sewer crossing would be restored with stable side slopes to allow connection with the floodplain.

SSC, Flatwater Crossing - East Side Drainage Way

An existing concrete-lined stormwater channel extends from the current end of 29th Street to the Missouri River. The channel was designed to be utilitarian in nature appropriate given the low visibility and use of the adjacent agricultural parcels. The concrete-lined channel is meant to move storm water quickly through the area, depositing it into the Missouri River with no treatment provided due to the lack of vegetation within lower portion of the channel. The goal of the project is to transform the channel from its current paved condition into a

natural storm water chain that will improve water quality for the regional storm water system. Channel restoration would involve removing the concrete from the base of the channel and regrading the waterway with a meandering alignment. Throughout the length of the new system, pockets of water of varying sizes will be provided to allow solids within the storm water chain to settle out before the water moves on to the next pond in the “chain.” In this manner, both water quantity and quality concerns would be addressed as storm water moves from west to east through the system toward outfall into the Missouri River. This project application requested Level 1 funding at 75% of the total cost, and was adjusted to Level 2 at 60% of the total cost based on design characteristics of the drainageway.

The FY 2017 budget included \$1,072,153 for projects in this program. The following table summarizes the FY 2018 applications.

Sponsor, Project	Total Estimated Cost	FY 2018 Cost Share
Omaha, Blondo at 209th Street	\$300,000	\$120,000
SSC, Flatwater Crossing - East Side Drainage Way	\$745,800	\$447,480
Total	\$1,045,800	\$567,480

- **It is recommended that the Subcommittee recommend to the Board of Directors that the applications from Omaha for \$120,000, and from South Sioux City for \$447,480 for a total of \$567,480 be approved, subject to funding in the FY 2018 Budget.**

Recreation Area Development Program

The Recreation Area Development Program (RAD) cost shares with communities to develop and improve recreation areas within their jurisdiction. The cost share rate is 50%. On projects requesting more than \$20,000, the Policy Manual requires Board approval. On all others, Management has approval authority.

Bennington, Logemann Park Improvement Project

Logemann Park is a 12-acre park donated and annexed in February 2017. The park is currently on accessible or ADA compliant. Preliminary plans for the park include an access road, much needed additional parking, two soccer fields, two ball fields, a picnic shelter, storage building, and playground area. These improvements will help provide the City of Bennington additional needed recreation space that can be accessed by all citizens.

Blair, California Walking Trail

A 10-foot wide by 4,800-foot long rock walking trail is planned, extending from the east end of Lincoln Trail at the Missouri River, north into the California Bend Area. This request is for materials only, the work will be completed by Blair Public Works staff.

Blair, Lions Park Restrooms

Lions Park serves as a hub for the city's bike trail system, and hosts many community events throughout the year. The existing Deerfield-Lions trail connects the park with the Blair Arboretum, and a small wetland project. The new year-round restroom facilities will serve as a trail head for the entire trail system. The current restroom facility does not meet ADA requirements, and does not have heat. The new restroom is designed to match the exterior features of the restored historic depot, which is also located in the park.

Omaha, 3101 Florence – Sustainable Spaces

This project is designed to meet a variety of needs and goals, including community betterment and environmental education opportunities. This former gas station site is at the center of the city's Neighborhood Strategy Revitalization Area (NRSA). The project is focused on community education regarding native plants and stormwater pollution prevention. The site will include native grasses, pollinator plants, and educational signage. The location is within walking distance from Lothrop Elementary and King Science magnet school.

Omaha, Fontenelle Park Lagoon Fishing Access

This project proposes 12' x 20' concrete fishing access points around the Fontenelle Lagoon, providing "accessible" fishing locations. This work will be incorporated into the comprehensive park work which is already underway. The shoreline around the lake will be planted with wetland/emergent wetland plantings, including tall grasses to prevent the use of the lagoon by geese. This work will support the substantial changes and updates that have been completed at the park over the last 5 years.

Omaha, Hanscom Park Recreation Improvements

Phase 2 of the improvements to Hanscom Park includes installing pedestrian trails to provide accessibility throughout the park, and removal/replacement of old picnic facilities. Trails will connect from 32nd Ave on the west, Woolworth Ave on the north, to/from the Dog Park, and throughout the central section of the park.

Papillion, Halleck Park Arboretum Nature Trail

The Arboretum sits at the heart of Halleck Park in central Papillion. This project will upgrade the park with an 8' concrete interpretive trail to help provide better access and enjoyment of this Nebraska Statewide Arboretum recognized site. This project is submitted as a local recreation improvement, not directly connected with the main trail system, and was recommended in the Parks Master Plan in 2011.

SSC, Orchard Education Center

The proposed Community Orchard Education Center will include a restroom, and serve as an education center, observatory, and resource center.

Valley, RV Camper Pads and Electrical

City Park features a variety of amenities, and construction of camper pads with electrical connections will provide additional access to recreation. Adjacent features at the park include sports fields, playgrounds, a pool, and shelters.

The FY 2017 budget included \$52,500 for projects in this program. The following table summarizes the FY 2018 applications.

<u>Sponsor, Project</u>	<u>Total Estimated Cost</u>	<u>FY 2018 Cost Share</u>
Bennington, Logemann Park Improvement Project	\$203,950	\$50,000
Blair, California Walking Trail	\$26,000	\$13,000
Blair, Lions Park Restrooms	\$180,000	\$50,000
Omaha, 3101 Florence – Sustainable Spaces	\$33,210	\$16,210
Omaha, Fontenelle Park Lagoon Fishing Access	\$78,000	\$39,000
Omaha, Hanscom Park Recreation Improvements	\$254,395	\$50,000
Papillion, Halleck Park Arboretum Nature Trail	\$300,000	\$50,000
SSC, Orchard Education Center	\$61,858	\$30,929
Valley, RV Camper Pads and Electrical	\$14,450	\$7,225
Total	\$1,151,863	\$306,364

- It is recommended that the Subcommittee recommend to the Board of Directors that the applications from Bennington for \$50,000, Blair for \$13,000 and \$50,000, Omaha for \$16,210, \$39,000, and \$50,000, Papillion for \$50,000, South Sioux City for \$30,929, and Valley for \$7,225 for a total of \$306,364 be approved, subject to funding in the FY 2018 Budget.

Trails Assistance Program

The Trails Assistance Program cost shares with sponsors on trail projects to provide recreation and active transportation opportunities in the District. The cost share rate is 50% of the local share. All projects require Board approval.

Omaha, Fontenelle Park Walking Path

A concrete walkway is proposed around the perimeter of the Fontenelle Park Lagoon. The total length of the 6’ trail would be over 1,700 feet. An existing walking path around the park perimeter is approximately 1.25 miles long, this new section would provide waterfront access to the lagoon, and allow increased interaction with the water quality, stormwater quantity, and natural resource features that area being constructed throughout the park.

Omaha, Turner Blvd Trail on Pacific Street

The District has collaborated with the City of Omaha on a number of connected trail segments; Keystone Trail, South Omaha Trail Phase 1, Phase 2, Field Club Trail, and Turner Blvd Trail. This final connection will complete the dedicated trail from Karen Park, under I-80, through midtown, under I-480, onto Creighton University campus, and into downtown Omaha. The final short section will climb the hill on the south side of Pacific Street from the Field Club Trail, along the north edge of the golf course, and connect with the existing Turner Blvd trail at the northeast corner of 36th Street.

Omaha, West Papio Trail Bent Creek Park

Erosion along the West Papio Creek has threatened the trail just south of Blond Street. The trail will be relocated away from the creek, and connect back to the ramp under and over Blondo Street. This trail relocation allows time for more comprehensive study, design, and construction of channel stabilization along the creek.

Sarpy County, Ashford Hollow North Trail

This project will extend the Marv Holubar Trail from the north end of the Bellevue Soccer Complex to Raynor Parkway, and will connect to the 48th Street Trail. This connection will provide increased local access to the West Papio Trail, and close proximity to the Keystone Trail. The connection to the underpass at Hwy 370 will allow for significantly better crossing access for residents who are divided by the highway.

SID 506 (Douglas County) Quail Run Valley, West Papio Trail Improvements

The West Papio Trail currently has missing sections as it follows the “North Branch” to the location of DS-15a. This section from the west side of 168th Street near Ames Ave, to the south side of Fort Street at HWS Cleveland Blvd will connect to the existing 168th Street underpass, and bring trail users to the entrance of the new recreation area. A bridge across the creek will connect the adjacent neighborhood.

SSC, Atokad Trail

The City of South Sioux City in partnership with Dakota County, Nebraska seek to construct a 1.85 mile trail that would connect with the existing trail that runs to the High School/Middle School and then onto a number of the elementary schools in the community. The area that this trail will be located is considered a rural location that is partially in the city and partially in the county and would serve a trailer court that is home to a large number of students. The work to be performed would include the construction of a 6” deep, 10’ wide pedestrian/bike trail that would travel the entire 1.85 miles. This project will also receive Safe Routes to School funding.

Tekamah, Tiger Trail Loop

The Tiger Trail Loop is 4,400 feet long and will be constructed 10 feet wide of 6 inch concrete. The trail will begin adjacent to the existing parking lot in Memorial Park, proceed west and

south around the edges of the park until it nears the Highway 75 right of way, to the northern limits of Memorial Park, and north to enter the public school property. On the school property the trail will proceed on the west side of the football/track to the northern property line where it will head east and then south along the east property line and re-enter Memorial Park. Once back in the park, the trail will stay outside the northern ball field and turn east between the two fields to tie back into the start at the parking lot. This trail is part of the recently updated Tekamah Master Trail Plan and will be the first trail constructed within the City of Tekamah.

The FY 2017 budget included \$556,513 for projects in this program. The following table summarizes the FY 2018 applications.

<u>Sponsor, Project</u>	<u>Total Estimated Cost</u>	<u>FY 2018 Cost Share</u>
Omaha, Fontenelle Park Walking Path	\$69,000	\$34,500
Omaha, Turner Blvd Trail on Pacific Street	\$167,224	\$83,612
Omaha, West Papio Trail Bent Creek Park	\$37,465	\$18,732
Sarpy County, Ashford Hollow North Trail	\$187,500	\$93,750
SID 506 Quail Run Valley, West Papio Trail	\$800,000	\$400,000
SSC, Atokad Trail	\$563,565	\$56,356
Tekamah, Tiger Trail Loop	\$322,821	\$36,410
Total	\$2,147,575	\$723,360

- It is recommended that the Subcommittee recommend to the Board of Directors that the applications from Omaha for \$34,500, \$83,612, and \$18,732, Sarpy County for \$93,750, SID 506 for \$400,000, South Sioux City for \$56,356, and Tekamah for \$36,410 for a total of \$723,360 be approved, subject to funding in the FY 2018 Budget.

Lake Dredging Program

The Lake Dredging Program cost shares with communities to remove accumulated sediments from public recreation lakes. The cost share rate is 50%, up to a maximum of \$100,000. All applications require Board Approval.

Omaha, Hanscom Park

This project will dredge the lagoon at Hanscom Park to provide a sustainable, year-around fishery. Comprehensive recreation, water quality, and stormwater work is being constructed at the park, and dredging will provide fishery habitat which would otherwise not be available. Lake depths will follow recommendations from Nebraska Game and Parks Commission (NGPC) to provide adequate depth for fish stocking purposes.

SID 439 (Douglas County) West Bay Woods

West Bay Woods desires to clean out the sediment basin which is located upstream from Zorinsky Lake. Many areas are nearly full of accumulated silt. This location has been partially dredged in the past, with a portion of the project being reimbursed by the District.

The FY 2017 budget included \$100,000 for projects in this program. The following table summarizes the FY 2018 applications.

<u>Sponsor, Project</u>	<u>Total Estimated Cost</u>	<u>FY 2018 Cost Share</u>
Omaha, Hanscom Park	\$198,775	\$99,387
SID 439 (Douglas County) West Bay Woods	\$147,000	\$50,000
Total	\$345,775	\$149,387

- It is recommended that the Subcommittee recommend to the Board of Directors that the applications from Omaha for \$99,387, and SID 439 for \$50,000 for a total of \$149,387 be approved, subject to funding in the FY 2018 Budget.

Flood Mitigation Assistance Program

The Flood Mitigation Assistance Program is an authorized program of the District to provide technical and financial assistance to municipalities and other units of government to mitigate flood losses through structural flood control projects in developed, urban areas. This program provides 50% cost sharing on all eligible costs of the project to a maximum amount of \$500,000. Board approval is required on all applications.

Douglas County, Elk City Drainage Improvements

The vicinity of “Elk City” experienced substantial localized flooding in 2016, in some cases requiring 225th Street to be closed. Several concepts are being evaluated, and will be discussed with the local residents. The most likely plan includes ditches on both sides of the road, culverts under driveways, and water drained into existing field drains and channels.

The FY 2017 budget included \$250,000 for the second payment for a project in this program. The following table summarizes the FY 2018 applications.

<u>Sponsor, Project</u>	<u>Total Estimated Cost</u>	<u>FY 2018 Cost Share</u>
Douglas County, Elk City Drainage Improvements	\$126,854	\$63,427
Total	\$126,854	\$63,427

- It is recommended that the Subcommittee recommend to the Board of Directors that the applications from Douglas County for \$63,427 be approved, subject to funding in the FY 2018 Budget.