CITY OF SPRINGFIELD, OREGON

February 14,2023

Senate Committee 900 Court Street NE Salem, OR 97301

Re: SB 643, Continued Support of the Statewide Levee Grant Program

Chair Golden, Vice-Chair Girod and Members of the Committee,

The City of Springfield would like to take this opportunity to support SB 634, which allocates \$15 million to the Levee Grant Fund to continue supporting the investigation, planning, and construction of levee safety improvement projects.

SPRINGFIELD

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The 42nd Street McKenzie Levee in Springfield provides flood protection benefits to approximately 24,000 people, 7,500 structures, and more than \$4 billion in property value in the area extending from the McKenzie River west to I-5 and from Centennial Boulevard north to the river. The Levee is over 60 years old and doesn't meet current federal levee standards.

Aerial photos and field measurements show the McKenzie River near the northern end of the Levee has migrated over 400 feet to the west between 1994 and 2022, leaving about 140 feet between the toe of the Levee and the westerly riverbank. Continued westerly river migration will make the 42nd Street McKenzie Levee increasingly susceptible to erosion damage and subsequent failure.

Project At-a-Glance:

- The 42nd Street McKenzie Levee in Springfield is critical for protecting over 35% of the City's population and land area from flooding. This area includes six schools, three fire stations, and federal and state offices, including the Oregon National Guard Armory.
- The Levee, owned and operated by the City of Springfield, was completed in 1960 by the Soil Conservation Service along the west bank of the McKenzie River.
- The Levee is about 0.98 miles long with an average height of 6.5 feet and a maximum height of 8 feet.
- The Levee is over 60 years old and in need of maintenance and improvements to meet federal levee standards.
- Ongoing westward migration of the McKenzie River channel will cause substantial damage to or failure of the Levee within the next several years if left unchecked.
- The largest flood event since construction occurred in December 1964 and was slightly less than a 100- year flood. Media reports stated the flood water reached within 6-inches of the top of the Levee.
- Springfield is seeking federal assistance with modernizing the Levee and stabilizing the channel migration threatening the Levee. The estimated total project cost is \$40 million.
- Please see the attached brochure for more information.

Please direct \$15 million in lottery bond sales to the Levee Grant Program through your support of SB 634. This is an important resource for critical flood safety infrastructure throughout our state.

Sincerely

Sean VanGordon Mayor, City of Springfield



The Ask:

Springfield is seeking federal financial and technical assistance with modernizing its 42nd Street McKenzie Levee and stabilizing the McKenzie River channel migration threatening the Levee. The estimated project cost is \$40 million.

Why this Work is Necessary:

The 42nd Street McKenzie Levee provides flood protection benefits to approximately 24,000 people, 7,500 structures, and more than \$4 billion in property value in the area extending from the McKenzie River west to I-5 and from Centennial Boulevard north to the river. The Levee is over 60 years old and doesn't meet current federal levee standards.

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Recent Project Activities & Timeline:



National Flood Insurance Program

The City was notified by FEMA that they were preparing updated Flood Insurance Rate Maps for the McKenzie River. As part of this process, the City will need to provide certification and accreditation that the Levee meets current federal standards for flood control levees. If unable to meet these standards, the area shown on the map below as "potential area of inundation" will be designated as 100-year flood plain. The current floodplain maps designate less than 0.5% of the area as flood plain.



See insert for largerscale versions of each map shown in this handout.

The City subsequently identified that the elevation of the top of the Levee is too low to meet the federal standards for levee freeboard. Based upon this information and the current lack of available data to certify the structural integrity of the Levee, the City requested FEMA to place a Levee Seclusion Zone on its updated maps to provide time for the City to conduct the necessary studies and improvements to accredit the Levee as a flood control structure. FEMA sent preliminary maps showing the seclusion zone to the City in January 2022 and posted them for public review.

McKenzie River Channel Migration Monitoring

The City initiated monthly monitoring during the rainy season of the west riverbank in January 2019. The monitoring shows the river is continuing to migrate toward the Levee during higher river flows, including about 10 feet in April 2019 and another 9 feet in January 2022.



Holiday Farm Fire

The Holiday Farm Fire burned 173,393 acres or about 25% of the McKenzie River watershed east of Springfield. Post-fire assessments by federal agencies show the watershed runoff characteristics were significantly changed by the fire. The agencies estimated the burned area may generate 50% or more additional runoff from precipitation. Since nearly all the burned area is downstream of the flood control dams in the watershed, this increased runoff is expected to produce higher river flows with a greater risk of flooding. The City expects when these increased flows happen, they will accelerate the channel migration at the Levee as well as increase the risk for the levee overtopping. See the map to the right for the Holiday Farm Fire perimeter.



U.S. Army Corps of Engineers Inventory & Review

The USACE Seattle District conducted an Inventory & Review assessment of the 42nd Street Levee system in 2019. The Levee has a moderate level of risk because of the "(I)ikelihood of inundation due to breach and/or system component malfunction in combination with loss of life, economic, or environmental consequences."

Water Resources Development Act (WRDA)

Senator Merkley included authorization in WRDA to the US Army Corps of Engineers (USACE) to proceed with an expedited Section 205 Feasibility Study and project development for the Levee. In addition, the City requested Section 205 assistance in August 2020 from USACE for "developing and implementing a comprehensive project plan to stabilize the channel migration and to rehabilitate and improve the Levee." At this time, USACE has not initiated the work due to insufficient program funding.

Flood Flight Supplies

The City purchased an additional 20,000 sandbags and is currently seeking bids for about 2,800 feet of rapidly deployable portable flood barriers.



Levee Emergency Action Plan

Springfield partnered with Lane County in November 2021 to begin developing an Emergency Action Plan for the Levee using FY21 State Homeland Security Program (SHSP) grant funds. The project will include community stakeholder involvement and a tabletop exercise on the final plan. The City will lead the effort with support from the County.

North 42nd Street Area Comprehensive Project Management Plan

In addition to the 42nd Street McKenzie Levee modernization and McKenzie River channel stabilization, Springfield and several local public agencies have a variety of other projects being planned in the vicinity of 42nd Street, the McKenzie River, and Marcola Road. Many of these projects are interdependent upon the scope, design, location, permitting, and/or construction of the other projects. The City will use American Rescue Plan Act (ARPA) funds made available through Oregon Representative John Lively to prepare a Comprehensive Project Management Plan (CPMP) to guide the timely and cost-effective delivery of these projects. The CPMP will be a living document guiding the efforts of the City and the community partners over the next 10 to 15 years to successfully deliver these projects to improve the resilience, aesthetics, transportation, livability, and economic vitality of Springfield. See the back page of this booklet for more information on the interdependent projects that will be accounted for.



Interdependent Projects:

The below projects are interdependent on the scope, design, location, permitting, and/or construction of other projects, related to the 42nd Street McKenzie Levee:

- **42nd Street McKenzie Levee Modernization (City)** Rehabilitate and improve the Levee to meet federal levee accrediation standards.
- **McKenzie River Channel Migration Stabilization (City)** Stabilize the channel migration while protecting and improving habitat for listed threatened and/or endangered species.
- **42nd Street Improvements (City)** Improve over a mile of 42nd Street adjacent to the Levee with \$12 million provided by the Oregon Legislature in House Bill 2017.
- Irving Slough Headgate and Culvert Replacement (City) Replace headgate and culvert passing through the Levee and under 42nd Street to provide water to protected wetlands and habitat west of 42nd Street.
- Eugene Water and Electric Board (EWEB) Electric Transmission Line Relocation Relocate overhead electric transmission line located easterly of and parallel to the Levee through the McKenzie Oxbow Natural Area. The McKenzie River channel migration has moved to within about 60 feet of one of the towers providing power between EWEB's only drinking water treatment plant for Eugene and the International Paper facility in Springfield.
- Rainbow Water District and Springfield Utility Board (SUB) Weyerhaeuser Well Field Rainbow Water and SUB jointly own and operate a drinking water well field along the bank of the McKenzie River east of the Levee. Sole access to the well field for operations and maintenance is by a gravel access road along the easterly toe of the Levee. In addition, a 24-inch water transmission main crosses under the Levee to bring water into the City from the wellfield. The current condition of this main is unknown.
- Willamalane Parks and Recreation District The City granted a 99-year lease to Willamalane to provide and maintain passive recreation opportunities within the McKenzie Oxbow Natural Area between the Levee and the McKenzie riverbank, including trailhead parking and access improvements, recreation access points to the river, and McKenzie Oxbow Natural Area habitat restoration.

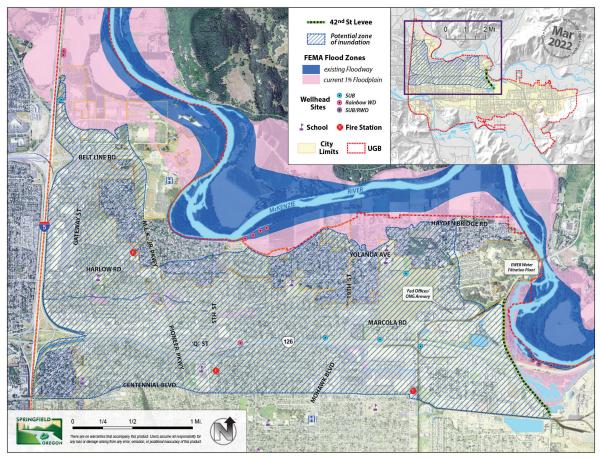
Additional Planning Considerations:

- Drinking water intake for Eugene's sole drinking water source is about ¹/₄-mile downstream of the Levee.
- Long-haul fiber optic communication lines are located within and adjacent to the Levee.
- International Paper has a process water overflow line located within the Levee.
- There are protected wetlands and/or natural resource areas east of and adjacent to the Levee and west of and adjacent to 42nd Street, including McKenzie River Natural Area, Keizer Slough, and Irving Slough.
- The area provides essential/protected riparian habitat for state (ODFW) and federally (ESA, NOAA-Fisheries, USFWS) protected species, including but not limited to spring-run Chinook salmon, red-legged frog, and Western pond turtle.
- National Environmental Policy Act (NEPA)

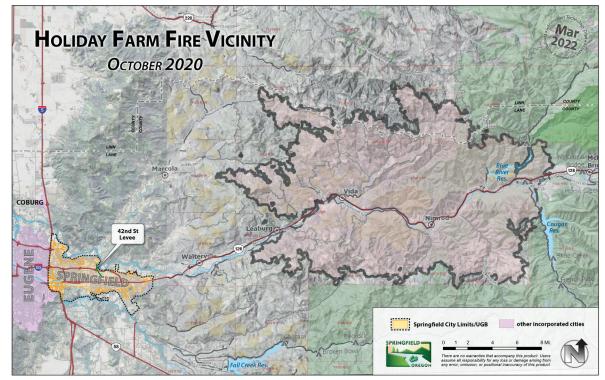
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42nd Street Levee Impacts



National Flood Insurance Program - If Springfield is unable to meet federal standards for flood control levees, the area shown on the above map as "potential area of inundation" will be designated as 100-year flood plain on FEMA's updated Flood Rate Insurance maps. The current floodplain maps designate less than 0.5% of the area as flood plain. The Levee provides flood protection benefits to approximately 24,000 people, 7,500 structures, and more than \$4 billion in property value.



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