## Working Together for a Resilient Economy Improving Oregon's Levees and Flood Management Infrastructure

October 2016

Business Oregon budget request for the Levee Assistance Program \$10 million for local grants and loans during the FY 2017-2019 biennium

## Background

In 2015, the Oregon Legislative Assembly recognized levees as critical infrastructure in reducing flood risk for local economies and communities throughout the state. The Legislature declared that levees were as critical as roads, bridges, water systems and other types of economic infrastructure, and appropriated \$5million to the Infrastructure Financing Authority (IFA) at Business Oregon to provide grants and loans to inspect, assess, rehabilitate, improve and accredit local levee systems. See the attached brochure for more information.

By December 1, 2016, Governor Kate Brown will complete work on her proposed budget for the FY 2017-2019 biennium. Business Oregon has submitted a budget proposal that extends the Levee Assistance Program and increases available funds for local grants and loans to \$10 million. The requested budget is a fraction of the more than \$244 million in potential costs<sup>1</sup> for levee investigations and assessments statewide. This preliminary work is a necessary first step to repairing and improving levees, and for some agencies, is required to achieve accreditation by the Federal Emergency Management Agency (FEMA).

## Why is support for the accreditation of local levy systems so critical at this time?

The following facts justify the urgency of rehabilitating and accrediting local levee systems in Oregon on an accelerated and sustaining basis, beginning with the FY 2017-2019 budget for the IFA Levee Assistance Program.

- In the wake of Hurricane Katrina in 2007, Congress directed FEMA to enforce higher safety standards for the nation's levee systems. Local levee systems in Oregon are subject to these new safety standards in order to receive FEMA accreditation.
- FEMA administers the National Flood Insurance Program (NFIP). The NFIP imposes flood insurance requirements and
  development standards on properties that are located in designated flood hazard areas. Accredited levees reduce the risk
  of flooding to public, private and community properties. As a result, these properties are not mapped within the Special
  Flood Hazard Area (SFHA), and are exempt from flood mitigation development standards and flood insurance requirements.
- 3. In 2016, the National Oceanic and Atmospheric Administration Fisheries Service (NOAA-Fisheries) released a scientific opinion that will increase restrictions on the use and development of properties located in designated floodplains in Oregon. The biological opinion's reasonable and prudent alternatives primarily apply to areas within or in close proximity to the SFHA. It is important to stay accredited, so that when FEMA re-evaluates the SFHA maps, areas behind levees continue to show reduced flood risks and are not mapped into a SFHA.
- 4. According to the National Levee Database, there are 333 miles of levees in Oregon<sup>2</sup>, half of which are maintained by special purpose districts that typically have limited professional, technical, and financial resources. The Corps has determined that 35% of levee miles are unacceptable and 43% are minimally acceptable, based on their inspection standards. The remaining 22% of levee miles have not been inspected at all and their safe conditions are unknown. Of the more than 330 miles of identified levees in Oregon, only 45 miles of levees within five communities are currently accredited by FEMA, roughly 13.5% of the total.
- 5. National and regional cost estimates suggest an average cost of rehabilitating and accrediting a levee in Oregon could exceed \$18.4 million per levee or \$3.9 billion statewide<sup>3</sup>, although the need per levee system could vary greatly. While costly, the resources that the levee systems reduce flood risk for are substantial. In the Portland metro region alone, the estimated economic value of levee-protected properties exceeds \$5.5 billion alone. The overall value of the annual economic activity generated by these levee-protected properties in Portland, including Portland International Airport, is estimated at \$16 billion.

<sup>&</sup>lt;sup>1</sup> This figure is based on estimates contained in the Final Report of the Flood Protection Structure Accreditation Task Force (FEMA/USACE, 2013), applied to 213 levees in Oregon identified in the USACE National Levee Database. The Task Force estimated an average cost of \$600,000 for the collection and analysis of information required for accreditation, plus an additional \$545,000 for the analysis of potential levee failure modes.

<sup>&</sup>lt;sup>2</sup> The National Levee Database currently contains the majority of levees within the USACE program but is currently incomplete. There are ongoing efforts to add levee data from federal agencies, states, and tribes. (USACE)

<sup>&</sup>lt;sup>3</sup> This figure includes the estimated costs of discovery (footnote 1), plus an estimate of the cost per levee mile of rehabilitation and improvement costs. The Levee Ready Columbia project staff conducted a survey of levee projects in the western United States in 2015 and calculated an average of \$11 million per levee mile for rehabilitation and improvement to new federal safety standards. According to the USACE National Levee Database, the 213 identified levees in Oregon have an average length of 1.57 miles.