## **United States Senate** WASHINGTON, DC 20510

October 11, 2016

The Honorable Jo Ellen Darcy Assistant Secretary of the Army (Civil Works) 108 Army Pentagon

Lieutenant General Todd T. Semonite Commanding General and Chief of Engineers U.S. Army Corps of Engineers 441 G Street NW Washington, DC 20314-1000

Dear Secretary Darcy and General Semonite:

Washington, DC 20310-0108

Over the past several decades, Iowa has experienced numerous record-breaking, devastating floods that have affected the majority of the state. We wrote to you on September 27, 2016, with concerns about the U.S. Army Corps of Engineers' (Corps) calculation of its benefit to cost ratio (BCR) and budgetary process related to the Cedar River project in Cedar Rapids. However, there are other projects in Iowa that have faced similar challenges with BCR. We find this extremely concerning and believe there are flaws in how the Corps calculates the costs and benefits on flood risk management projects, which will leave cities like Iowa's two largest and others around the nation vulnerable to catastrophic flooding.

As we wrote last month, although the Water Resources Reform and Development Act of 2014 authorized approximately \$73 million for the Cedar Rapids project, the Obama Administration has failed to include the project in its budget. Although the project's BCR is only 1.2 to 1, this score merely reflects the fact that property values in smaller cities, like Cedar Rapids, are lower than those in larger cities, and yet the risk to public safety could well be higher.

Similarly, the Corps is currently conducting a feasibility study in Des Moines, Iowa's largest city. The project would provide enhanced flood protection for the downtown area with some of Iowa's highest real estate values. Yet, because of the way the BCR appears to be calculated, the project is still not likely to have a high enough score to be funded, relative to higher-value property elsewhere in the country.

It appears that the budget prioritization process may be biased against smaller cities and towns. In addition to failing to give adequate weight to the public safety risk, refusing to fund flood damage reduction and risk management projects in smaller cities and towns can be penny wise and pound foolish. Without sufficient flood risk management structures, the flood damages to a small city or town recur again and again. Millions of dollars are spent to implement temporary protection measures and billions of dollars are spent to pay for emergency recovery efforts after-the-fact. As a result, the city centers face economic development issues and property values can decrease.

Cities without permanent flood protection structures, such as Cedar Rapids, use temporary emergency protections including sand bags, Hesco barriers, temporary levees, and ring levees around specific residences or businesses to mitigate anticipated flooding. Often these measures are funded wholly or partially by the Corps (sand bags) or the Federal Emergency Management Agency (reimbursements). For example, in the severe storm and flooding event that the State of Iowa experienced starting September 21, 2016, the City of Cedar Rapids spent approximately \$6 million on these preventative measures. These efforts were successful, yet costly, and are only temporary. Would it not be wiser to build the permanent flood reduction structure once and spend millions, instead of spending billions over time in temporary emergency measures?

The Water Resources Development Act (WRDA) of 2016, as passed by the Senate, includes a provision we championed requiring the Government Accountability Office (GAO) to examine the current methodologies and performance metrics used to calculate BCRs and construction projects. The House has included a similar provision in its version of WRDA 2016. While we await GAO's independent assessment, we have several questions regarding the Corps' process and analysis for calculating BCRs.

Accordingly, please answer the following:

- 1. Please advise whether, and if so how, the Corps considers these costs or this negative economic effect when performing its economic analysis during a feasibility study. Also, please advise whether these measures are considered when providing report recommendations.
- 2. Does the Corps include the cost of personal, local, city, state, and federal disaster recovery efforts when performing its project economic analysis?
- 3. Please explain how public safety and loss of life are considered in the decision process to budget and fund flood risk reduction projects. Please include some concrete examples that illustrate how these factors are considered together with the traditional benefit cost analysis to arrive at a budget or funding decision.
- 4. In the Civil Works Budget for fiscal year 2017, five of the flood and coastal storm damage projects have BCRs below 2.5, but nonetheless are included due to "significant risk to human safety." Please explain how the Corps selects these projects, including factors the Corps considers to arrive at these budget or funding decisions.
- 5. We have noticed that the effects of flooding on our communities goes far beyond the effects measured by the flood damages that flooding causes. Specifically, flooding leads to social disruption, loss of economic productivity, and seems to disproportionately impact lower income neighborhoods. Please explain how these factors are considered in the budget and funding decision process and provide me with some real world examples from your past decisions.
- 6. Please provide a list of all authorized projects, or projects with completed studies but not yet authorized. Please include the project name, short description, city, state, BCR, and construction cost.

Thank you for your time and attention to this important matter for the State of Iowa and across the country. If you have questions, please contact Sherry Kuntz in Senator Grassley's office at 202-224-3744 or Andrea Hechavarria in Senator Ernst's office at 202-224-3254.

Sincerely,

Charles E. Grassley United States Senator

Joni K. Ernst United States Senator