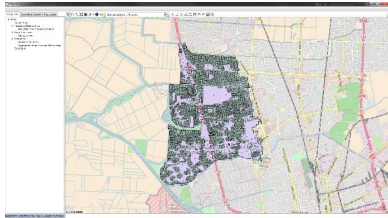


Need



New User Interface with Geospatial

HEC-FDA plays a central role in nearly all new flood risk management investment decisions. It is used throughout the USACE by nearly every flood risk management economist and PDT. However, the program (which was originally released in the late 1990's) has never received a major update. Today the following needs are clear:

- Overhaul increasingly brittle and difficult to maintain codebase;
- Support modern geospatial and two dimensional hydraulic data;
- Improve data visualization and validation capabilities; and
- Increase support for modern nonstructural and levee safety teams.

Addressing these needs will result in better supported flood risk management teams and a more informed evaluation of flood risks, thereby leading to more efficient investments and improved flood risk management decisions.

Approach

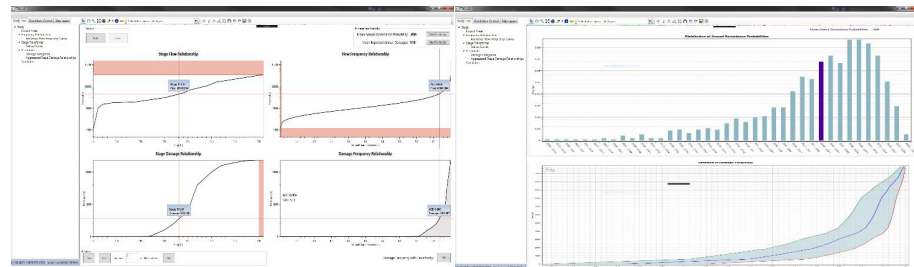
Under this work unit, HEC-FDA will receive its first ever major update. This update, labeled HEC-FDA 2.0, will include a complete overhaul of the existing codebase; specifically, the program's computational engine, user interface and database structures will be modernized. During the update the new code base will extensively tested and thoroughly documented. As a result, HEC-FDA 2.0 will be more robust, stable and maintainable. It will also:

- Support modern geospatial and two dimensional data types;
- Facilitate better data visualization and validation; and
- Increase support for nonstructural and levee safety teams.

Outcomes

The main outcome of these efforts will be the release of HEC-FDA 2.0 as well as associated training materials and documentation.

New research needs are continually submitted by USACE FRM Communities of Practice to focus future research investigations and products. Statements of Need can be submitted by USACE on the R&D Gateway (<https://gateway.erdc.dren.mil/son/index.cfm?Cop=Flood&Option=Start>).



Improved Data Visualization Capabilities

More Information

For more information contact John Kucharski at john.r.kucharski@usace.army.mil

For more information on FRM R&D, see the ERDC FRM wiki:
https://wiki.erdc.dren.mil/Flood_and_Coastal_Storm_Damage_Reduction_Research_Program