

Read Me:

Model Name: DM-24_Lake Washington_Floating Bridge_(EE10.1)

Objective: Use EFDC+ Explorer (EE) and EFDC+ to simulate the impact of the Partial Depth Blocking (Vertical Masks) feature in EEMS. Lagrangian particle tracking show movement of particles through a floating bridge in Lake Washington, Seattle, USA.

Model Grid: 1,183 horizontal grid cells and 55 vertical layers.

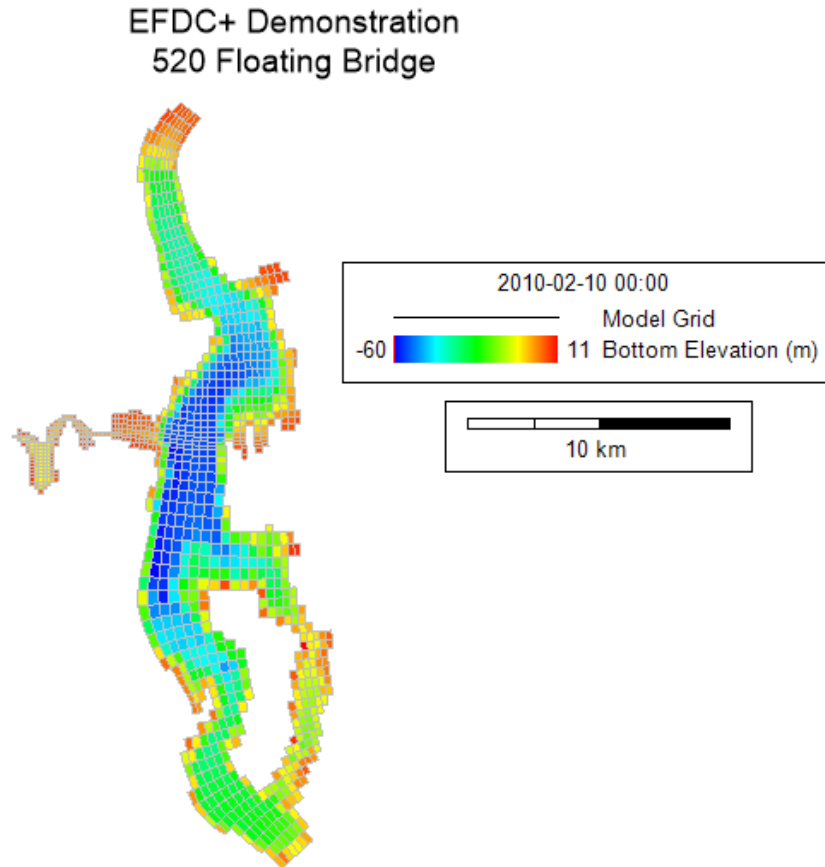


Figure 1 Model Domain of DM-24_Lake Washington_Floating Bridge.

Folder Structure:

Data: This folder contains data that can be used with the model. These data can be measured data or output from model or derived from analytical equations.

Model: EFDC model that can be loaded in EE to pre- and post-process.

Grid: This folder contains grid for building the model

- LW_Grid.cvl: CVL grid format, EE uses this grid type for building model
- LW_Grid.kml: This file can be opened with Google Earth

Maps-Images: This folder contains the maps / images of the study area. The formats of the maps / images can be *.geo (geo-referenced file), *.jgw, *.jpg etc.

- LW_Topo.jgw
- LW_Topo.jgw

Test_record file: This file is just a record file that informs which EFDC+ executable was used to run the model.

Modules Activated: Hydrodynamics, Lagrangian particle tracking (LPT).

Description: This model is designed to demonstrate the impacts of partial depth blocking by using Lagrangian particle track (LPT) movement through a floating bridge in Lake Washington.

Disclaimer: The model is provided to our users to demonstrate that EFDC_Explorer and EFDC+ can be used to better understand how to build this kind of model. The model is running as expected; however, shouldn't be considered final as the model can be modified / refined to obtain improved results.

Files in Data Folder:**Bathymetry**

- Bathymetry.dat

Boundaries: contains time series data for setting the model's boundaries

Lagrangian particle tracking (LPT)

- Seed_N.p2d: Polygon defined to release particles in the north of the bridge
- Seed_S.p2d: Polygon defined to release particles in the south of the bridge

Model Results:

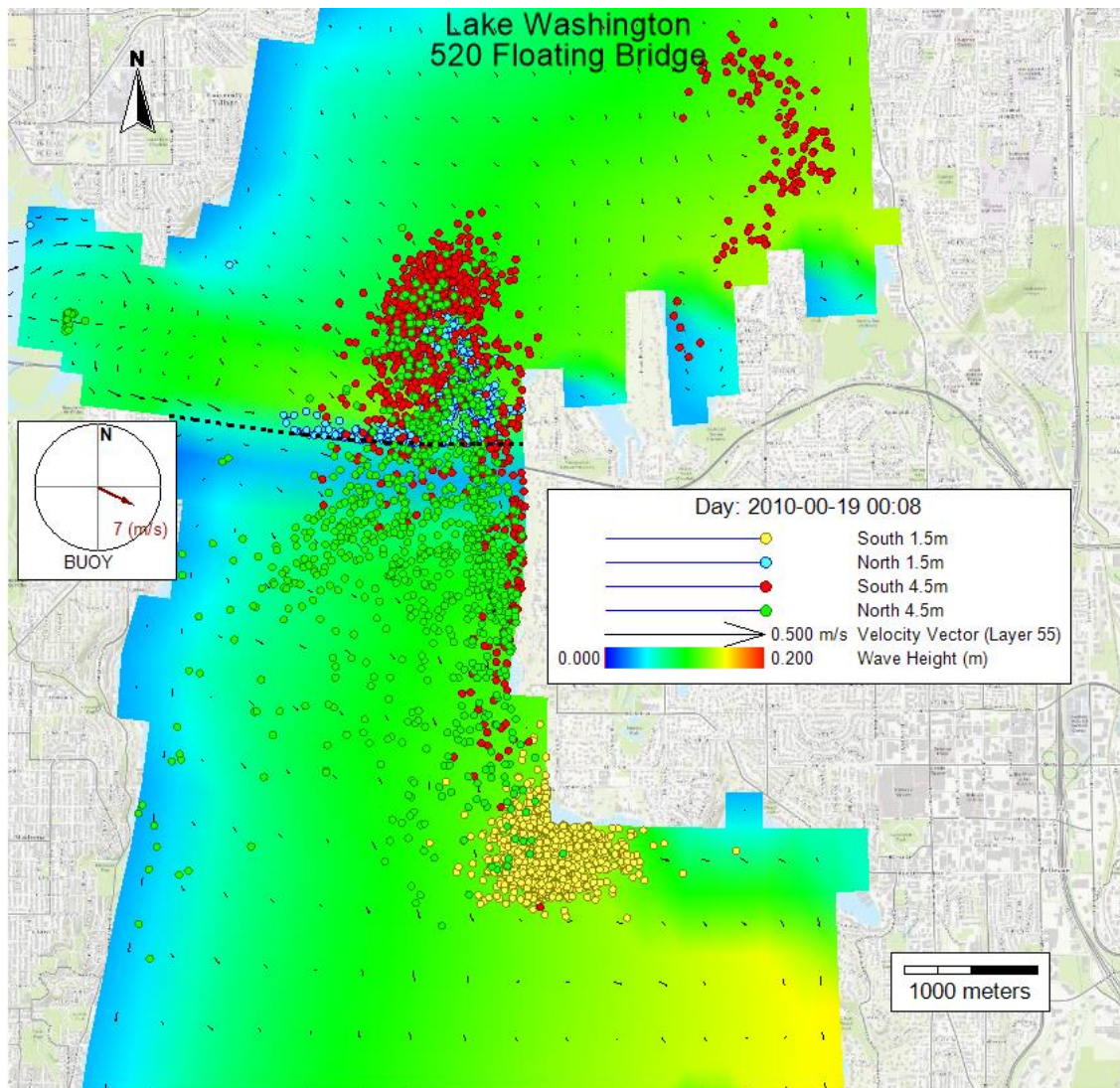


Figure 2 Particles groups movement through floating bridge.