New Jersey along Hudson River SBM









Reinforced Dune - Natural Dune Cover

- Reinforced Dune - Partial Dune Cover

- Deployable Flood Barrier - Railroad Gate

- Deployable Flood Barrier - Vehicle Gate

*IFF alignments are denoted with a yellow highlight

The data displayed on this map illustrate the scale of potential flooding, not the exact location, and do not account for future ground elevation, shoreline, or hydrological changes that occurred after the source data was produced. Inundation was assumed to occur at a

indicated on the map. All low-lying shaded areas, are assumed to be hydrologically "connected". Actual flooding extents may vary due to the temporal characteristics of a coastal flooding event as well as the potential combined effects of rainfall run-off, backflow through existing stormwater infrastructure, and seepage. The line width shown is mean to provide an indication of the proposed placement of

line width representative of the scale of the CSRM measure.





Measure Type

- Large Levee
- Medium Levee
- Extra Large Floodwall
- --- Floodwall with Park
- Large Floodwall
- Medium Floodwall
- Elevated Promenade

- Seawall
- Tide Gate
- Storm Surge Barrier
- Deployable Flood Barrier Flip Up Barrier

- Large Levee with Road Ramp
- IFF Large Levee* CSRM Residual Risk with Project

*IFF alignments are denoted with a yellow highlight around SBM line symbology

The data displayed on this map illustrate the scale of potential flooding, not the exact location, and do not account for future ground elevation, shoreline, or hydrological changes that occurred after the source data was produced. Inundation was assumed to occur at a fix plane above the NAVD88 Datum (i.e., bathtub model) as indicated on the map. All low-lying shaded areas, are assumed to be hydrologically "connected". Actual flooding extents may vary due to the temporal characteristics of a coastal flooding event as well as the potential combined effects of rainfall run-off, backflow through existing stormwater infrastructure, and seepage. The line width shown is mean to provide an indication of the proposed placement of the measure, but should not be construed as exact or final, nor is the line width representative of the scale of the CSRM measure.







Reinforced Dune - Natural Dune Cover

- Reinforced Dune - Partial Dune Cover

- Deployable Flood Barrier - Pedestrian Gate

- Deployable Flood Barrier - Railroad Gate

- Deployable Flood Barrier - Vehicle Gate

Medium Levee with Road Ramp

CSRM Reduced Risk with Project

Map 2 of 11





Measure Type

- Large Levee
- Medium Levee
- Extra Large Floodwall
- --- Floodwall with Park
- Large Floodwall
- Medium Floodwall
- Elevated Promenade

- Seawall
- III Tide Gate
- Storm Surge Barrier
- Deployable Flood Barrier Flip Up Barrier
- Deployable Flood Barrier Pedestrian Gate
- Deployable Flood Barrier Railroad Gate
- Large Levee with Road Ramp
- IFF Large Levee* CSRM Residual Risk with Project
- around SBM line symbology

The data displayed on this map illustrate the scale of potential flooding, not the exact location, and do not account for future ground elevation, shoreline, or hydrological changes that occurred after the source data was produced. Inundation was assumed to occur at a fix plane above the NAVD88 Datum (i.e., bathtub model) as indicated on the map. All low-lying shaded areas, are assumed to be hydrologically "connected". Actual flooding extents may vary due to the temporal characteristics of a coastal flooding event as well as the potential combined effects of rainfall run-off, backflow through existing stormwater infrastructure, and seepage. The line width shown is mean to provide an indication of the proposed placement of the measure, but should not be construed as exact or final, nor is the line width representative of the scale of the CSRM measure.







Reinforced Dune - Natural Dune Cover

- Reinforced Dune - Partial Dune Cover

- Deployable Flood Barrier - Vehicle Gate

Medium Levee with Road Ramp

CSRM Reduced Risk with Project *IFF alignments are denoted with a yellow highlight

Map 3 of 11





Measure Type

- Large Levee
- Medium Levee
- Extra Large Floodwall
- ---- Floodwall with Park
- Large Floodwall
- Medium Floodwall
- Elevated Promenade

- Seawall
- Tide Gate
- Storm Surge Barrier
- Deployable Flood Barrier Flip Up Barrier
- Deployable Flood Barrier Pedestrian Gate
- Deployable Flood Barrier Railroad Gate
- Large Levee with Road Ramp
- Medium Levee with Road Ramp
- IFF Large Levee*
- around SBM line symbology

The data displayed on this map illustrate the scale of potential flooding, not the exact location, and do not account for future ground elevation, shoreline, or hydrological changes that occurred after the source data was produced. Inundation was assumed to occur at a fix plane above the NAVD88 Datum (i.e., bathtub model) as indicated on the map. All low-lying shaded areas, are assumed to be hydrologically "connected". Actual flooding extents may vary due to the temporal characteristics of a coastal flooding event as well as the potential combined effects of rainfall run-off, backflow through existing stormwater infrastructure, and seepage. The line width shown is mean to provide an indication of the proposed placement of the measure, but should not be construed as exact or final, nor is the line width representative of the scale of the CSRM measure.







Reinforced Dune - Natural Dune Cover

- Reinforced Dune - Partial Dune Cover

- Deployable Flood Barrier - Vehicle Gate

CSRM Residual Risk with Project CSRM Reduced Risk with Project *IFF alignments are denoted with a yellow highlight

Map 4 of 11





Measure Type

- Large Levee
- Medium Levee
- Extra Large Floodwall
- --- Floodwall with Park
- Large Floodwall
- Medium Floodwall
- Elevated Promenade

- Seawall
- Tide Gate
- Storm Surge Barrier
- Deployable Flood Barrier Flip Up Barrier
- Deployable Flood Barrier Pedestrian Gate
- Deployable Flood Barrier Railroad Gate
- Deployable Flood Barrier Vehicle Gate
- Large Levee with Road Ramp
- Medium Levee with Road Ramp
- IFF Large Levee*

CSRM Residual Risk with Project CSRM Reduced Risk with Project *IFF alignments are denoted with a yellow highlight around SBM line symbology

The data displayed on this map illustrate the scale of potential flooding, not the exact location, and do not account for future ground elevation, shoreline, or hydrological changes that occurred after the source data was produced. Inundation was assumed to occur at a fix plane above the NAVD88 Datum (i.e., bathtub model) as indicated on the map. All low-lying shaded areas, are assumed to be hydrologically "connected". Actual flooding extents may vary due to the temporal characteristics of a coastal flooding event as well as the potential combined effects of rainfall run-off, backflow through existing stormwater infrastructure, and seepage. The line width shown is mean to provide an indication of the proposed placement of the measure, but should not be construed as exact or final, nor is the line width representative of the scale of the CSRM measure.







Reinforced Dune - Natural Dune Cover

- Reinforced Dune - Partial Dune Cover

Map 5 of 11

New York City West Side SBM



NYNJHAT Study Alternative 5 SBM & IFF



Measure Type

- Large Levee
- Medium Levee
- Extra Large Floodwall
- --- Floodwall with Park
- Large Floodwall
- Medium Floodwall
- Elevated Promenade

- Seawall
- Tide Gate
- Storm Surge Barrier

- Large Levee with Road Ramp
- IFF Large Levee* CSRM Residual Risk with Project

*IFF alignments are denoted with a yellow highlight around SBM line symbology

The data displayed on this map illustrate the scale of potential flooding, not the exact location, and do not account for future ground elevation, shoreline, or hydrological changes that occurred after the source data was produced. Inundation was assumed to occur at a fix plane above the NAVD88 Datum (i.e., bathtub model) as indicated on the map. All low-lying shaded areas, are assumed to be hydrologically "connected". Actual flooding extents may vary due to the temporal characteristics of a coastal flooding event as well as the potential combined effects of rainfall run-off, backflow through existing stormwater infrastructure, and seepage. The line width shown is mean to provide an indication of the proposed placement of the measure, but should not be construed as exact or final, nor is the line width representative of the scale of the CSRM measure.







Reinforced Dune - Natural Dune Cover

- Reinforced Dune - Partial Dune Cover

- Deployable Flood Barrier - Flip Up Barrier

- Deployable Flood Barrier - Pedestrian Gate

- Deployable Flood Barrier - Railroad Gate

- Deployable Flood Barrier - Vehicle Gate

Medium Levee with Road Ramp

CSRM Reduced Risk with Project

Map 6 of 11





Measure Type

- Large Levee
- Medium Levee
- Extra Large Floodwall
- --- Floodwall with Park
- Large Floodwall
- Medium Floodwall
- Elevated Promenade

- Seawall
- Tide Gate
- Storm Surge Barrier

- Large Levee with Road Ramp
- IFF Large Levee*

- around SBM line symbology

The data displayed on this map illustrate the scale of potential flooding, not the exact location, and do not account for future ground elevation, shoreline, or hydrological changes that occurred after the source data was produced. Inundation was assumed to occur at a fix plane above the NAVD88 Datum (i.e., bathtub model) as indicated on the map. All low-lying shaded areas, are assumed to be hydrologically "connected". Actual flooding extents may vary due to the temporal characteristics of a coastal flooding event as well as the potential combined effects of rainfall run-off, backflow through existing stormwater infrastructure, and seepage. The line width shown is mean to provide an indication of the proposed placement of the measure, but should not be construed as exact or final, nor is the line width representative of the scale of the CSRM measure.







Reinforced Dune - Natural Dune Cover

- Reinforced Dune - Partial Dune Cover

- Deployable Flood Barrier - Flip Up Barrier

- Deployable Flood Barrier - Pedestrian Gate

- Deployable Flood Barrier - Railroad Gate

- Deployable Flood Barrier - Vehicle Gate

Medium Levee with Road Ramp

CSRM Residual Risk with Project

CSRM Reduced Risk with Project

*IFF alignments are denoted with a yellow highlight

Map 7 of 11



New York City West Side SBM

NYNJHAT Study Alternative 5 SBM & IFF

Measure Type

- Large Levee
- Medium Levee
- Extra Large Floodwall
- Floodwall with Park
- Large Floodwall
- Medium Floodwall
- Elevated Promenade

- Seawall
- Tide Gate
- Storm Surge Barrier

- Large Levee with Road Ramp
- Medium Levee with Road Ramp
- IFF Large Levee* CSRM Residual Risk with Project

CSRM Reduced Risk with Project *IFF alignments are denoted with a yellow highlight around SBM line symbology

The data displayed on this map illustrate the scale of potential flooding, not the exact location, and do not account for future ground elevation, shoreline, or hydrological changes that occurred after the source data was produced. Inundation was assumed to occur at a fix plane above the NAVD88 Datum (i.e., bathtub model) as indicated on the map. All low-lying shaded areas, are assumed to be hydrologically "connected". Actual flooding extents may vary due to the temporal characteristics of a coastal flooding event as well as the potential combined effects of rainfall run-off, backflow through existing stormwater infrastructure, and seepage. The line width shown is mean to provide an indication of the proposed placement of the measure, but should not be construed as exact or final, nor is the line width representative of the scale of the CSRM measure.

Reinforced Dune - Natural Dune Cover

- Reinforced Dune - Partial Dune Cover

- Deployable Flood Barrier - Flip Up Barrier - Deployable Flood Barrier - Pedestrian Gate - Deployable Flood Barrier - Railroad Gate - Deployable Flood Barrier - Vehicle Gate

Map 8 of 11

Measure Type

- Large Levee
- Medium Levee
- Extra Large Floodwall
- ---- Floodwall with Park
- Large Floodwall
- Medium Floodwall
- Elevated Promenade

- Seawall
- Tide Gate
- Storm Surge Barrier

- Large Levee with Road Ramp
- Medium Levee with Road Ramp
- IFF Large Levee* CSRM Residual Risk with Project

CSRM Reduced Risk with Project *IFF alignments are denoted with a yellow highlight around SBM line symbology

The data displayed on this map illustrate the scale of potential flooding, not the exact location, and do not account for future ground elevation, shoreline, or hydrological changes that occurred after the source data was produced. Inundation was assumed to occur at a fix plane above the NAVD88 Datum (i.e., bathtub model) as indicated on the map. All low-lying shaded areas, are assumed to be hydrologically "connected". Actual flooding extents may vary due to the temporal characteristics of a coastal flooding event as well as the potential combined effects of rainfall run-off, backflow through existing stormwater infrastructure, and seepage. The line width shown is mean to provide an indication of the proposed placement of the measure, but should not be construed as exact or final, nor is the line width representative of the scale of the CSRM measure.

Reinforced Dune - Natural Dune Cover

- Reinforced Dune - Partial Dune Cover

- Deployable Flood Barrier - Flip Up Barrier - Deployable Flood Barrier - Pedestrian Gate - Deployable Flood Barrier - Railroad Gate - Deployable Flood Barrier - Vehicle Gate

Map 9 of 11

Measure Type

- Large Levee
- Medium Levee
- Extra Large Floodwall
- --- Floodwall with Park
- Large Floodwall
- Medium Floodwall
- Elevated Promenade

- Seawall
- Tide Gate
- Storm Surge Barrier

- Large Levee with Road Ramp
- IFF Large Levee*
- around SBM line symbology

The data displayed on this map illustrate the scale of potential flooding, not the exact location, and do not account for future ground elevation, shoreline, or hydrological changes that occurred after the source data was produced. Inundation was assumed to occur at a fix plane above the NAVD88 Datum (i.e., bathtub model) as indicated on the map. All low-lying shaded areas, are assumed to be hydrologically "connected". Actual flooding extents may vary due to the temporal characteristics of a coastal flooding event as well as the potential combined effects of rainfall run-off, backflow through existing stormwater infrastructure, and seepage. The line width shown is mean to provide an indication of the proposed placement of the measure, but should not be construed as exact or final, nor is the line width representative of the scale of the CSRM measure.

Reinforced Dune - Natural Dune Cover

- Reinforced Dune - Partial Dune Cover

- Deployable Flood Barrier - Flip Up Barrier

- Deployable Flood Barrier - Pedestrian Gate

- Deployable Flood Barrier - Railroad Gate

- Deployable Flood Barrier - Vehicle Gate

Medium Levee with Road Ramp

CSRM Residual Risk with Project

CSRM Reduced Risk with Project

*IFF alignments are denoted with a yellow highlight

Map 10 of 11

Measure Type

- Large Levee
- Medium Levee
- Extra Large Floodwall
- ---- Floodwall with Park
- Large Floodwall
- Medium Floodwall
- Elevated Promenade

- Seawall
- Tide Gate
- Storm Surge Barrier

- Large Levee with Road Ramp
- Medium Levee with Road Ramp
- IFF Large Levee* CSRM Residual Risk with Project

*IFF alignments are denoted with a yellow highlight around SBM line symbology

The data displayed on this map illustrate the scale of potential flooding, not the exact location, and do not account for future ground elevation, shoreline, or hydrological changes that occurred after the source data was produced. Inundation was assumed to occur at a fix plane above the NAVD88 Datum (i.e., bathtub model) as indicated on the map. All low-lying shaded areas, are assumed to be hydrologically "connected". Actual flooding extents may vary due to the temporal characteristics of a coastal flooding event as well as the potential combined effects of rainfall run-off, backflow through existing stormwater infrastructure, and seepage. The line width shown is mean to provide an indication of the proposed placement of the measure, but should not be construed as exact or final, nor is the line width representative of the scale of the CSRM measure.

Reinforced Dune - Natural Dune Cover

Reinforced Dune - Partial Dune Cover

- Deployable Flood Barrier - Flip Up Barrier

- Deployable Flood Barrier - Pedestrian Gate

- Deployable Flood Barrier - Railroad Gate

- Deployable Flood Barrier - Vehicle Gate

CSRM Reduced Risk with Project

Map 11 of 11