Fact Sheet

Structural Measures

(Local Protection)

Option: **Diversion**

Description: Diversion includes redirecting flood flows via new channels or bypass structures, such as tunnels to reduce flood flows in the main stem flood source.

Example(s): Aitkin, MN Flood Diversion Channel on the Mississippi River, which directs flood flows along a straighter, steeper path and reduces flooding on the U-shaped bend in the river where the city of Aitkin is located. The diversion channel cuts across the top of the U-shaped bend.

Benefits: Flood flows in the main stem flooding source are reduced. Flow is diverted downstream or to another waterbody or basin that can absorb the additional flow without significant flood impacts.

Challenges: Like channel improvements, construction of a diversion channel for flood flow requires extensive excavation, relocations, and acquisition of additional lands. Due to the large flood flows in the Delaware River, a diversion channel would have to be of a significant size to have a measurable impact. There are no major water bodies within a reasonable distance of the Delaware River to divert large flows to without residual flooding impacts. In general, it is extremely costly and environmentally undesirable to effect diversion of flood discharges to other stream valleys by constructing tunnels or massive bypass channels.