

## 4.5 ASSESSMENT OF MITIGATION ACTIONS

Mitigation actions identified in both the SHMP and LHMPs are tracked and assessed. For the state plan, tracking and assessment of state goals, objectives, and actions will be done in accordance with the Section 1.4 after each Federal disaster declaration, on an annual basis, and at the next five-year update point.

For mitigation actions in LHMPs, tracking and assessment is done in SHARPP. Local officials enter information into SHARPP that summarizes the local mitigation action items identified in their jurisdictions mitigation plan. SHARPP captures basic information about the proposed mitigation action including: project lead, cost, potential funding sources, estimated start and end dates. SHARPP can generate a report that summarizes the locally proposed mitigation action items in each community. Local officials can update the status of these action items as they are implemented to help track progress. The status of mitigation action items are recorded in SHARPP as: new, unchanged, deferred, deleted, or completed. These data are analyzed to help establish trends, identify needs, and develop success stories.

SHARPP helps the state demonstrate that mitigation projects are investments that improve community sustainability. The SHARPP home page displays the aggregate losses avoided (benefits) by implementing flood mitigation projects in the state since 2004. SHARPP automatically calculates this figure based on the expected annual benefits (i.e. losses avoided) for each mitigated structure as computed by FEMA benefit-cost analysis software at the time of project application. The expected annual benefits are multiplied by the number of years that the project has been closed (up to the “useful life” of the project) and then totaled for all structures to produce a dollar estimate of the losses avoided to date.

SHARPP also helps quantify the “actual” costs avoided by implementing flood mitigation projects in the state. In order to calculate the actual costs avoided, a flood must occur in an area where a mitigation project has been implemented. One methodology for quantifying the actual costs avoided is outlined in the FEMA December 2009 publication titled, Loss Avoidance Study, Riverine Methodology Report. Using this methodology, actual losses avoided are estimated by comparing damage that would likely have been caused by the same flood events without the mitigation project, with damage that actually occurred with the project completed. In order to estimate the actual losses avoided as the result of implementing a particular mitigation project, data are needed on the pre- and post-conditions of the subject property, in addition to other data collected throughout the project. All of the project-specific data required as input for a loss avoidance study are collected through SHARPP.

Loss avoidance studies will be conducted for past mitigation project implemented in Ohio dependent on:

- A large event occurring in a past mitigation project area that justifies the resources required to conduct a loss avoidance study,
- The availability of the data required to conduct a loss avoidance study in the project area, and
- The availability of 5% HMGP funds, HMA State Management Cost funds, or another funding source to pay for the study.

The Ohio EMA Mitigation Branch website contains a page that highlights success stories and best practices. This webpage highlights successful mitigation projects in many different communities around the state. The success stories cover a range of mitigation project types that have been implemented across the state to reduce hazard risk. In 2018, Ohio EMA created five new success stories using interactive story

map software. The success stories created in this format help capture the reader's attention by supplementing text with maps, photos and data graphics.

Mitigation Branch staff document losses avoided as the result of previous mitigation measures by implementing the following process:

- Utilize information in SHARPP to determine if a mitigation project has occurred in an area impacted by a hazard event.
- If yes, contact local officials to request information on the effectiveness of the mitigation project and the impact of the event in the project area.
- Meet with local officials to conduct an interview and gather information (photos, high water marks, and historic damage data).
- Develop and publish a success story based on the information collected. Promote the success story statewide to encourage mitigation measures that will reduce future disaster losses.