

CHAPTER VIII

FEASIBILITY AND PRIORITIZATION OF POTENTIAL MITIGATION STRATEGIES/ACTIONS

The goal of each strategy or action is reduction or prevention of damage from a hazard event. In order to determine their effectiveness in accomplishing this goal, a set of criteria was applied to each proposed strategy. A set of questions developed by the Committee that included the STAPLEE method was developed to rank the proposed mitigation actions. The STAPLEE method analyzes the Social, Technical, Administrative, Political, Legal, Economic and Environmental aspects of a project and is commonly used by public administration officials and planners for making planning decisions. The following questions were asked about the proposed mitigation strategies identified in Table 13:

- Does it reduce disaster damage?
- Does it contribute to other goals?
- Does it benefit the environment?
- Does it meet regulations?
- Will historic structures be saved or protected?
- Does it help achieve other community goals?
- Could it be implemented quickly?

STAPLEE criteria:

- **Social:** Is the proposed strategy socially acceptable to the community? Are there equity issues involved that would mean that one segment of the community is treated unfairly?
- **Technical:** Will the proposed strategy work? Will it create more problems than it solves?
- **Administrative:** Can the community implement the strategy? Is there someone to coordinate and lead the effort?
- **Political:** Is the strategy politically acceptable? Is there public support both to implement and to maintain the project?
- **Legal:** Is the community authorized to implement the proposed strategy? Is there a clear legal basis or precedent for this activity?
- **Economic:** What are the costs and benefits of this strategy? Does the cost seem reasonable for the size of the problem and the likely benefits?
- **Environmental:** How will the strategy impact the environment? Will the strategy need environmental regulatory approvals?

Each proposed mitigation strategy was evaluated using the above criteria and assigned a score (Good = 3, Average = 2, Poor = 1) based on the above criteria. An evaluation chart with total scores for each strategy can be found in the collection of individual tables under Table 14a through 12r.

Table 14a: Mitigation Action: Wheeler Dam Improvements

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Good	3
Does it meet regulations?	Good	3
Will historic structures be saved or protected?	Good	3
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Good	3
S: Is it Socially acceptable?	Good	3
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Good	3
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Good	3
E: Are other Environmental approvals required?	Good	3
	Score	42

Table 14b: Mitigation Action: Emergency Management Drills & Exercises

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Good	3
Does it meet regulations?	Good	3
Will historic structures be saved or protected?	Good	3
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Good	3
S: Is it Socially acceptable?	Good	3
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Good	3
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Good	3
E: Are other Environmental approvals required?	Good	3
	Score	42

Table 14c: Mitigation Action: Intelligent Transportation System

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Good	3
Does it meet regulations?	Good	3
Will historic structures be saved or protected?	Poor	1
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Good	3
S: Is it Socially acceptable?	Good	3
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Good	3
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Good	3
E: Are other Environmental approvals required?	Good	3
	Score	40

Table 14d: Mitigation Action: Source Water Investigation

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Good	3
Does it meet regulations?	Good	3
Will historic structures be saved or protected?	Poor	1
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Average	2
S: Is it Socially acceptable?	Good	3
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Good	3
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Good	3
E: Are other Environmental approvals required?	Good	3
	Score	39

Table 14e: Mitigation Action: Bridge Engineering Program

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Average	2
Does it meet regulations?	Good	3
Will historic structures be saved or protected?	Average	2
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Good	3
S: Is it Socially acceptable?	Good	3
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Good	3
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Good	3
E: Are other Environmental approvals required?	Average	2
	Score	39

Table 14f: Mitigation Action: CBRNE Equipment Program

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Good	3
Does it meet regulations?	Good	3
Will historic structures be saved or protected?	Average	2
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Good	3
S: Is it Socially acceptable?	Good	3
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Good	3
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Average	2
E: Are other Environmental approvals required?	Average	2
	Score	39

Table 14g: Mitigation Action: Drainage Master Plan

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Good	3
Does it meet regulations?	Good	3
Will historic structures be saved or protected?	Average	2
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Average	2
S: Is it Socially acceptable?	Good	3
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Average	2
P: Is it Politically acceptable?	Average	2
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Good	3
E: Are other Environmental approvals required?	Good	3
	Score	38

Table 14h: Mitigation Action: Town Buildings Connected by Fiber Optic Cable

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Good	3
Does it meet regulations?	Average	2
Will historic structures be saved or protected?	Poor	1
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Good	3
S: Is it Socially acceptable?	Average	2
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Good	3
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Good	3
E: Are other Environmental approvals required?	Good	3
	Score	38

Table 14i: Mitigation Action: Municipal AS Computer Replacement

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Good	3
Does it meet regulations?	Average	2
Will historic structures be saved or protected?	Poor	1
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Good	3
S: Is it Socially acceptable?	Average	2
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Good	3
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Good	3
E: Are other Environmental approvals required?	Good	3
	Score	38

Table 14j: Mitigation Action: Police AS Computer Replacement

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Good	3
Does it meet regulations?	Average	2
Will historic structures be saved or protected?	Poor	1
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Good	3
S: Is it Socially acceptable?	Average	2
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Good	3
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Good	3
E: Are other Environmental approvals required?	Good	3
	Score	38

Table 14k: Mitigation Action: Infrastructure Asset Management Plan

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Good	3
Does it meet regulations?	Average	2
Will historic structures be saved or protected?	Poor	1
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Good	3
S: Is it Socially acceptable?	Average	2
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Good	3
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Good	3
E: Are other Environmental approvals required?	Good	3
	Score	38

Table 14l: Mitigation Action: NIMS Certification

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Average	2
Does it meet regulations?	Good	3
Will historic structures be saved or protected?	Poor	1
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Good	3
S: Is it Socially acceptable?	Good	3
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Good	3
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Average	2
E: Are other Environmental approvals required?	Average	2
	Score	37

Table 14m: Mitigation Action: CBRNE Training Program

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Average	2
Does it meet regulations?	Good	3
Will historic structures be saved or protected?	Poor	1
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Good	3
S: Is it Socially acceptable?	Good	3
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Good	3
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Average	2
E: Are other Environmental approvals required?	Average	2
	Score	37

Table 14n: Mitigation Action: Weather Station Program

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Average	2
Does it meet regulations?	Good	3
Will historic structures be saved or protected?	Poor	1
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Good	3
S: Is it Socially acceptable?	Good	3
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Good	3
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Average	2
E: Are other Environmental approvals required?	Average	2
	Score	37

Table 14o: Mitigation Action: West Fire Station Construction

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Average	2
Does it meet regulations?	Good	3
Will historic structures be saved or protected?	Poor	1
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Poor	1
S: Is it Socially acceptable?	Good	3
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Average	2
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Good	3
E: Are other Environmental approvals required?	Average	2
	Score	35

Table 14p: Mitigation Action: South Fire Station Addition

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Average	2
Does it meet regulations?	Good	3
Will historic structures be saved or protected?	Poor	1
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Poor	1
S: Is it Socially acceptable?	Good	3
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Average	2
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Good	3
E: Are other Environmental approvals required?	Average	2
	Score	35

Table 14q: Mitigation Action: Police Station Construction Project

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Good	3
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Average	2
Does it meet regulations?	Good	3
Will historic structures be saved or protected?	Poor	1
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Poor	1
S: Is it Socially acceptable?	Good	3
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Average	2
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Good	3
E: Are other Environmental approvals required?	Average	2
	Score	35

Table 14r: Mitigation Action: Public Safety GPS Vehicle Tracking

Criteria Evaluation	Rating	Score
Does it reduce disaster damage?	Average	2
Does it contribute to other goals?	Good	3
Does it benefit the environment?	Average	2
Does it meet regulations?	Average	2
Will historic structures be saved or protected?	Poor	1
Does it help achieve other community goals?	Good	3
Could it be implemented quickly?	Average	2
S: Is it Socially acceptable?	Average	2
T: Is it Technically feasible and potentially successful?	Good	3
A: Is it Administratively workable?	Good	3
P: Is it Politically acceptable?	Average	2
L: Is there Legal authority to implement?	Good	3
E: Is it Economically beneficial?	Average	2
E: Are other Environmental approvals required?	Average	2
	Score	32