This set of readings dealing with the use of mitigation as a tool of planners, politicians and managers to reduce the harm or at least the impact to humans and property as a result of disasters. Much of the literature and application of these tools are evolving and slowly becoming more accepted as useful tools for managers. It is however noted by the authors that these tools have not been traditionally accepted by policy makers, rather a policy of man attempting to control nature leading to increased government relief payoffs and economic toll to individuals as a result.

Mitigation as defined by the Haddow book is a sustained action to reduce or eliminate the risk to people and property from hazards and their effects (Haddow 75). One of the challenges related to this discipline of emergency management is that it deals with long-term solutions to problems rather than preparedness. This balance makes it incredible hard for managers with scarce budgets to balance the immediate need for relief in case of a disaster with long-term answers that will squelch future events before they become disasters. This reluctance to accept mitigation into the emergency management toolbox was described by a state emergency management director when he said, “I will never loose my job for failing to do mitigation but I could loose my job if I mess up a response” (Hadow 76). This mentality clearly describes the priority that planners will apply to emergency response and the difficulty of applying sound mitigation policy.

When mitigation techniques are applied there are widely accepted tools that can be used to reduce risk. As described by Haddow and Bullock these tools include, hazard identification and mapping. Used to discern who will be affected by an incident USGS, FEMA through programs like NFIP and HAZUS use scientific GIS models to plot how incidents like floods and hurricanes will affect at risk areas so the other tools can mitigate tat risk. Another tool is design and construction applications. Here planners use building codes to reduce the damage to structures in the event of an incident. These controls can include elevated structures, flame retardant materials and safe rooms in order to save both lives and property. While these tools can impact the price of construction there is often a greater economic incentive by actually paying for the additional cost of construction or remodeling. Land use planning is another tool that is available to policy makers when implementing a mitigation program; here planners can accomplish two tasks, removing people and property from harms way and protect local ecology as seen with the North Carolina coastal set back ordinance (Haddow 79). Insurance and financial incentives are also important tools in disaster mitigation providing incentives and penalties for developers when developers engage in construction in high risk and low risk areas. Also insurance programs such as the federal flood insurance program have been created to pass the economic burden from society to the program, however, this programs effectiveness has been contested in recent years. Finally structural controls over the environment have been classified as mitigation tools. These include building of dams and
levees to control flood waters and allow for development in areas that were previously inhospitable to development. These tools have been criticized harshly in the aftermath of Katrina for providing people with a false sense of security but also for destroying natural ecology of rivers and natural flood patterns (Birkland 47).

The results of proper disaster mitigation can be seen through proper planning and zoning of flood prone zones. Such planning can reduce the economic impacts of these incidents, which have increased 2.4 billion dollars per year over the 20th century; also proper mitigation efforts within such zones can restore ecosystems that man has interfered with in order to control nature rather than work with it (Birkland 46). Most flood mitigation has been led by the construction of dams, levees and flood walls in recent history, while these controls can help prevent “normal floods” they can fail in catastrophic flooding events, Katrina, and work against natural ecosystems (Birkland 47). Rather policy makers should look to natural mitigation techniques, zoning and land use controls over flood prone land that will allow for the natural cycle of flooding and still protecting lives and property. Instead national and local preponderance of policy decisions have been to create man made barriers, which have provided with a false feeling of security and a destruction of ecosystems (Birkland 49). Overall there should be a combined approach to emergency management and the reduction of risk to both people and the environment. There will be times when it is necessary and proper, either for economic or social reasons, for the government to build man made devices to protect citizens against flooding and for that matter all natural disasters however, there should be increased avoidance of risks as a primary mitigation effort. According to the authors the priority of policy should be four fold, avoid the risk, minimize the impacts of the risk, mitigate the risk and finally compensate affected persons when all other efforts have failed (Birkland 49). Allowing for both a reduced risk in many cases and further helping those that cannot escape the reaches of natural disaster some compensation.

The use of hazard mitigation in order to create “safe areas” for which people can work and live has been the driving policy of emergency preparedness over the past century, which has largely failed (Burby 172). Such areas like New Orleans have been both short-sited economic driven policy decisions that have made development in hazard areas targets for catastrophes (Burby 172). Without proper acknowledgment and concern for natural occurrences areas that have been made safe by levees or dams will only fall prey to disaster again and again. The only safe and sound policy decision that can be made is for planners and politicians to take into account topography and natural disasters when involved in land use planning and disaster preparedness.

The current system of using man made devices in an attempt to control nature rather than coexisting with it is unlikely to stop. A multitude of reasons have led to this phenomenon including a system that focuses on short term rewards (Haddow (82). Development lobbyists can have large influence and control over localities and even national policy concerned with better building codes, translating to higher costs and lower profit margins. Furthermore pork barrel politics is likely to focus on relief programs for the constituents of politicians even though they do not pass a cost-benefit test (Burby 181). This does not mean that there is no focus on mitigation, mounting costs of flood damage have led
FEMA to improve hazard mitigation and discourage building near flood areas (Birkland 49). However, the trend has been and will probably remain as is, humans fight nature rather than coexisting with it.