



Source: Ray Sato

Figure 4-6 Truck crane damage in Hurricane Iniki, Kauai, Hawaii

building codes or should be retrofitted to meet minimum disaster needs. This will not only protect the structures, equipment, and records located inside, but will help protect personnel too.

Many of the specific recommendations for mitigating disaster effects found in the earlier discussion of treatment facilities can apply to administration facilities. Particularly important is keeping backup copies of customer information, system maps and records, and the emergency plan at other locations. Also critical is security of the facility and computer system.

Damage to the transportation system, including road infrastructure and vehicles, will occur in many disasters. Mitigation actions include identifying alternative methods of access to system facilities, making sure vehicle storage structures are disaster-resistant and have auxiliary power (Figure 4-6), and maintaining adequate supplies of fuel and spare parts.

Communication disruptions due to phone and electric outages are difficult to mitigate. The most common alternative is to communicate by two-way radio. Be sure to have enough radios and batteries. Mitigating effects on telemetry was discussed in the earlier section on treatment. Communication lines need to be open to other lifeline agencies and the mass media. Consider contacting amateur radio groups to provide emergency communications.

Costs and Scheduling

After the 1989 Loma Prieta earthquake, Kocher (1990) stated "the first lesson that we learned early was that when doing emergency planning, consider the worst thing that could occur and decide whether or not you can afford to protect against it."

As suggested, mitigation actions should begin with the identification of critical components vulnerable to probable disaster hazards. The costs of the actions can be justified by comparing them to estimated losses that would result from the given disaster. Of course, expensive projects such as retrofitting structures may take several years to obtain funding and complete. Low-cost mitigation actions for less critical components can be accomplished in the meantime.

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