SR 275, SR 276, SCR 73, and SCR 74
RELATING TO THE NATIONAL FLOOD INSURANCE ACT

Statement for the
Senate Committee on Housing and Hawaiian Homes
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All four of the above-identified resolutions relate to the National Flood Insurance Act. SR 275 and SCR 73 would request the Congress to change the Act's definition of a base flood from the 100-year flood to a 50-year flood. SR 276 and SCR 74 would request examination of the economic aspects of implementing the Act in Hawaii. This statement on the resolutions does not reflect an institutional position of the University.

The National Flood Insurance Act provides for federal subsidies of flood insurance in areas prone to flooding by streams or tsunamis. The subsidized insurance is available only to communities that adopt flood hazard management plans subject to certain criteria spelled out in regulations of the Federal Insurance Administration.

The economic impacts of Hawaii's participation in the National Flood Insurance Program, or the participation of any of its counties, should be recognized before decisions are made. The study that is called for in SR 276 and SCR 74 may be of help in developing this recognition. However, the study should consider the benefits of participation and the costs of non-participation and their distribution, and not merely costs that will be entailed through participation in the Program. The costs of non-participation include continued construction in flood zones that subjects home owners to risks of which they are unaware, or continuing penalties in the form of higher premiums that they may not anticipate.

In Hawaii, offset to private natural disaster losses is provided, under HRS Chapter 234, by tax credits over a five-year period and, under HRS 209, by loans at a low rate of interest. Thus, to a considerable extent flood losses are already shifted from the private sector to the taxpayers of the State.
In an ideal public flood-hazard management program both the premiums for flood insurance and the stringency of controls of construction should vary with the flood risk. The regulations of the Federal Insurance Administration provide for premium rates differentiated with respect to risk within flood-prone areas, and for some differentiation as to controls of construction, but for areas that are subject to flooding to more than 3 feet above ground level the regulations provide a virtual prohibition against future residential construction with floor levels lower than the level of flooding expectable once in 100 years.

In Hawaii, significant areas now in residential use or potentially developable for residential use lie within the 100-year flood zones of streams and tsunamis, and indeed 100-year flood levels are considerably above ground level in some areas. Hence, as recognized in the resolutions under consideration, a significant economic impact will result from Hawaiian participation in the National Flood Insurance program. Nationally, and in the long term, the costs of participation in the program in the form of limitations to development and insurance premiums, will presumably be offset by benefits in the form of reductions of flood losses and compensation for such losses as still occur. Considering the overall economics, it is conceivable that the long-term offset will not be complete in certain districts in Hawaii, where there is a shortage of land that is suitable for residential development and not subject to flood hazard. However, several additional factors must be considered that practically assure that participation in the National Flood Insurance Program will be economically advantageous.

1) There is now a recognition by lenders of the need for flood insurance even in communities not participating in the National Flood Insurance Program.

2) The federal subsidy, which from the local standpoint will further offset any long-term disadvantage, will be available only through participation in the Program.

3) As recognized in SR 275 and SCR 73, federal relief funds will be denied to communities not participating in the program; hence all flood risks in these communities must be born by the communities or by the individuals in them who sustain flood losses.

4) Although increased pressure for urbanization may result in some agricultural areas that are not flood-prone (as implied in SR 276 and SCR 74), there will be reduced pressure for urbanization in areas that are quite suitable for agriculture although flood prone.

If a study is to be made, as suggested by SR 276 and SCR 74, the responsibility for making it should rest with some institution that is competent to evaluate all aspects of benefits and costs and not merely the increased costs of new housing, in whose estimation the Housing and Construction Industry presumably has special competence.
The change in base from a 100-year to a 50-year flood, which SR 275 and SCR 21 would seek, is a more fundamental change than the introducers of these resolutions perhaps realize. The extent of federal subsidy of flood insurance under the National Flood Insurance Act has been computed on the basis of 100-year flood zoning. If the base flood were changed from the 100-year to the 50-year flood in Hawaii alone, it is doubtful that federal subsidies would be applicable outside the 50-year flood zone, and whether the change were effective in Hawaii alone or nationwide the overall subsidy would have to be reestimated.

It should be recognized that a 50-year flood has a 64 percent probability of occurrence in any particular 50-year period, and a 40 percent probability of occurring in any particular 25-year period. Hence there is a substantial probability that the flood will reach the 50-year flood level long before the next 50 years will elapse. We note that, in the case of tsunamis the height reached by a 50-year tsunami is only 15 percent lower than that of a 100-year tsunami.

We, thus, question the wisdom as well as the practical effects of the request for change in base in these resolutions.