

MEMORANDUM FOR: SEE DISTRIBUTION

SUBJECT: Guidance Letter No. 21, Flood Prevention Improvements for Protection from Groundwater-Induced Damages

1. Reference Section 403 of Public Law 99-662.

2. Background. Section 403 of PL 99-662 (WRDA 86) defines flood control to include measures for the prevention of groundwater-induced damages. A study of this matter included examination of the general order of magnitude of existing groundwater-induced damage problems, nationwide, and potential Federal interest criteria for making distinctions between traditional flood control and drainage versus groundwater-induced damages. The study surveyed Corps districts and identified groundwater-induced damage problems at 34 sites. Although only general information is available for these problems, they are believed to be representative of the problems that non-Federal interests would bring to the Corps. The problems identified by the survey are:

-Problems associated with fluctuating surface-water levels

- increased sedimentation
- channelization for navigation
- reservoir development
- ice blockages
- increased river flows
- cycles of higher precipitation

-Problems more directly linked to man's activities

- reductions in industrial pumping
- infiltration through mine tailings
- rehabilitation of sewer pipes
- artificial aquifer recharge
- leakage from abandoned wells
- water-logging from irrigation
- reduced pumping for irrigation

3. Policy. Study and analysis of this expanded definition of flood control has not produced a satisfactory classification system for defining a Corps interest in a groundwater-induced damage prevention program. One potential case was processed to the Washington level; however, problems with the benefit evaluation caused the report to be returned to the FOA.

4. Budget and authorization support is not available at this time for a generic program of groundwater-induced damage prevention. You may, however, submit for consideration individual cases involving urban groundwater-induced flooding that you believe have merit within the general context of traditional flood damage prevention. One evidence of

such a relationship would be that the damage problem can be resolved via traditional flood damage prevention measures such as channelization. Requests for special consideration should be submitted as early as possible in the study process, such as at the time funds are requested for a reconnaissance study if groundwater-induced flooding is an identified problem at that time. In all instances, individual cases should be referred to CECW-P prior to implying any Corps interest to potential sponsors.

FOR THE COMMANDER:

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