

situation and includes consideration of the pertinent factors, such as environment, cost or technology.

(m) *Preserve*—to prevent modification to the natural floodplain environment or to maintain it as closely as possible to its natural state.

(n) *Regulatory floodway*—the area regulated by Federal, State or local requirements; the channel of a river or other watercourse and the adjacent land areas that must be reserved in an open manner; i.e., unconfined or unobstructed either horizontally or vertically to provide for the discharge of the base flood so the cumulative increase in water surface elevation is no more than a designated amount (not to exceed one foot as set by the National Flood Insurance Program (NFIP)).

(o) *Restore*—to re-establish a setting or environment in which the natural functions of the floodplain can again operate.

(p) *Wetlands*—those areas that are frequently inundated by surface or ground water and normally support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, river overflows, mud flats, wet meadows, and natural ponds. Because all NASA wetlands lie in floodplains, and for purposes of simplifying the procedures of this subpart, floodplains will be understood as to encompass wetlands, except in cases where wetlands factors require special consideration. (Also, see definition of floodplain.)

(q) *Support*—actions which encourage or otherwise provide incentives to undertake floodplain or wetlands development, such as extending roads or utilities into or near a floodplain, therefore making floodplain development more feasible.

§ 1216.204 General implementation requirements.

(a) Each NASA Field Installation shall prepare, if not already available, an Installation base floodplain map based on the latest information and advice of the appropriate District Engineer, Corps of Engineers, or, as appropriate, the Director of the Federal

Emergency Management Agency. The map shall delineate the limits of both the 100-year and 500-year floodplains. A copy of the map, approved by the Field Installation Director, will be provided to the Assistant Associate Administrator for Facilities Engineering, NASA Headquarters, by February 28, 1979. The map will conform to the definitions and requirements specified in the Floodplain Management Guidelines for Implementing Executive Order 11988.

(b) For any proposed action or critical action, as defined in §1216.203(a), using the approved floodplain map, the Field Installation Director, while concurrently seeking to avoid the floodplain, shall determine if the proposed action *will* or *will not* be located in, or may indirectly impact or indirectly support development in, the base (substitute “500-year” for “base” in critical action cases) floodplain and proceed accordingly:

(1) If the action or critical action *will* be located in the base floodplain or may indirectly impact or indirectly support floodplain development, and is not excepted under §1216.204(h), field installations will adhere to the procedures prescribed in §1216.205.

(2) If such action or critical action *will not* be located in the base floodplain, or is the type of action that will clearly not indirectly impact or indirectly support floodplain development, the action may be implemented without further review or coordination, provided all other applicable NASA requirements and policies have been met.

(c) Any request for new authorizations or appropriations transmitted to the Office of Management and Budget shall indicate, on a case-by-case basis, if the action proposed will be located in a floodplain and whether the proposed action is in accordance with Executive Orders 11988 and 11990.

(d) Each field installation shall: Take floodplain management and wetlands protection into account when formulating its water and land use plans—and when evaluating like plans of others—as an integral part of its facilities master planning activities; Restrict the use of land and water resources appropriate to the degree of flood hazard

involved; and, Incorporate recommended Federal and State actions for the continuing unified program for planning and action at all levels of government to reduce the risk of flood losses in accordance with the Unified National Program for Flood Plain Management (U.S. Water Resources Council, 1978).

(1) Descriptive documentation supporting these planning matters shall be included in the "land use" section of each field installation's facilities master plan, as prescribed in NASA Management Instruction 7232.1, Master Planning of NASA Facilities. The evaluation and quantification of flood hazards should be expressed in terms of:

- (i) Potential for monetary loss;
- (ii) Human safety, health, and welfare;
- (iii) Shifting of costs, damage or other adverse impacts to off-site properties; and,
- (iv) Potential for affecting the natural and beneficial floodplain values.

(2) NASA shall provide appropriate guidance to applicants for facilities use permits and grants to enable them to similarly evaluate, in accordance with the Orders, the effects of their proposals in floodplains and wetlands. This evaluation will be a precondition of any NASA approval of such permit or grant involving floodplains or wetlands.

(e) Facilities to be located in floodplains will be constructed in accordance with the standards and criteria promulgated under the National Flood Insurance Program (NFIP). Deviations are allowed only to the extent that these standards are inappropriate for NASA operations, research and test activities. Because construction of NASA facilities will rarely be necessary in floodplains and wetlands, expertise in the latest flood proofing measures, standards and criteria will not be normally maintained within the NASA staff. To assure full compliance with the NFIP regulations, and that the Order's key requirement to minimize harm to or within the floodplain or wetlands is met, field installations will:

(1) Consult with the appropriate local office of the Corps of Engineers or Federal Emergency Management Agency

and/or U.S. Fish and Wildlife Service, as applicable, on a regular basis throughout the facility design or action planning phase. Documentation of this consultation will be recorded in the Field Installation's project file.

(2) Submit evidence of the successful completion of this consultation to the Assistant Associate Administrator for Facilities Engineering, NASA Headquarters, prior to the start of project construction.

(f) If NASA property used or visited by the general public is located in an identified flood hazard area, the Installation shall provide on structures, in this area and other places where appropriate (such as where roads enter the flood hazard area), conspicuous delineation of the 100-year and 500-year flood levels, flood of record, and probable flood height in order to enhance public awareness of flood hazards. In addition, Field Installations shall review their storm control and disaster plans to assure that adequate provision is made to warn and evacuate the general public as well as employees. These plans will include the integration of adequate warning time into such plans. The results of this review shall be submitted to the Assistant Associate Administrator for Facilities Engineering, NASA Headquarters, by February 28, 1979.

(g) When property in floodplains is proposed for lease, permit, out-grant, easement, right-of-way, or disposal to non-Federal public or private parties, the field installation shall:

(1) Reference in the conveyance document (prepared by the General Services Administration in disposal actions) those uses that are restricted under identified Federal, State, and local floodplain regulations, such as State coastal management plans.

(2) Except where prohibited by law, attach other appropriate restrictions, equal to the Order's in scope and strictness, to the uses of properties by the grantee or purchaser and any successors which assure that:

- (i) Harm to lives, property and floodplain values are identified; and
- (ii) Such harm is minimized and floodplain values are restored and preserved.

(3) Withhold such properties from conveyance if the requirements of paragraphs (g)(1) and (2) of this section cannot be met.

(h) The NASA Administrator has determined that certain types of actions taken in coastal floodplains and wetlands typically do not possess the potential to result in long- or short-term adverse impacts associated with the occupancy or modification of floodplains, or result in direct or indirect support of floodplain development. Nevertheless, in undertaking these actions, any opportunities to minimize, restore, and preserve floodplain and wetlands values must be considered and implemented. With this understanding, for the following types of actions, Directors of Field Installations in coastal locations may determine that undertaking such actions does not warrant full application of the procedures prescribed in § 1216.205.

(1) Hazard mitigation actions taken by a field installation on an emergency basis to reduce and control hazards associated with established NASA test or operations activities in accordance with the field installation's approved Safety Plan. Any such action must be approved in writing by the Field Installation's Safety Officer, and the approval document retained in the Safety Office files.

(2) Repair, maintenance or modification to existing roadways, bridges and utility systems in coastal floodplains or wetlands which provide long-term support for major NASA operations and test facilities (usually located out of the base floodplain), provided such repair, maintenance or modification activities are of a routine or emergency nature for which the "no action" alternative is not practicable; and it is ostensibly evident that:

(i) The proposed action would not impact the floodplain or wetlands.

(ii) The only alternative would be to construct new duplicate facilities near the same site with attendant impacts on the floodplain or wetlands area.

(3) Rehabilitation and modification of existing minor technical facilities (such as camera pads, weather towers, repeater buildings), including the repair of such damaged facilities to a condition closely matching the origi-

nal construction, provided it can be readily determined by Directors of Field Installations that there is no practicable alternative but to continue the activity in its current coastal floodplain site. In such cases, the sitings of such facilities must be rigidly constrained by nationally recognized master planning criteria, such as "line-of-sight, quantity-distance, and acoustic sound-pressure-level" factors. In addition, certification of these determinations by Directors of Field Installations will be retained in the project file.

[44 FR 1089, Jan. 4, 1979, as amended at 56 FR 50506, Oct. 7, 1991]

§ 1216.205 Procedures for evaluating NASA actions impacting floodplains and wetlands.

(a) Before taking any action a determination shall first be made whether the proposed action will occur in or may adversely affect a floodplain or wetlands, using the method prescribed in § 1216.204(b).

(b) These procedures apply only to evaluations of those proposed actions which are to be located in or may adversely impact floodplains. These evaluations shall be made at the earliest practicable stage of advance planning, such as during facilities master plan development or when preparing preliminary engineering reports. These evaluations shall include analyses of harm to lives and property, the natural and beneficial values of floodplains and wetlands, and the cumulative impacts of multiple actions over the long term.

(1) Early public notice is the next step in the evaluation process and will normally be accomplished using only the appropriate Single State Point of Contact and coordinating with that party pursuant to Executive Order (E.O.) 12372, as amended, "Intergovernmental Review of Federal Programs," as appropriate. If, however, actions involving land acquisition or a major change in land or water use is proposed, the overall public audience will be as broad as reasonably possible including, but not limited to, adjacent property owners and residents, near-by floodplain residents and local elected officials. To assure their continuous interaction and involvement, the Field