§ 1216.203 Definition of key terms.

(a) Action—any NASA activity including, but not limited to, acquisition, construction, modification, changes in land use, issuance of facilities use permits, and disposition of Federal lands and facilities.

(b) Base flood—is that flood which has a one percent chance of occurrence in any given year (also known as a 100-year flood). This term is used in the National Flood Insurance Program (NFIP) to indicate the minimum level of flooding to be used by a community in its floodplain management regulations.

(c) Base floodplain—the 100-year floodplain (one percent chance floodplain). Also see definition of floodplain.

(d) Critical action—any activity for which even a slight chance of flooding would be too great, such as storing lunar samples or highly toxic or water reactive materials.

(e) Facility—any item made or placed by a person including buildings, structures and utility items, marine structures, bridges and other land development items, such as levees and drainage canals.

(f) Flood or flooding—a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland and/or tidal waters, and/or the unusual and rapid accumulation or runoff of surface waters from any source.

(g) Flood fringe—that portion of the floodplain outside of the regulatory floodway (often referred to as “floodway fringe”).

(h) Floodplain—the lowland and relatively flat areas adjoining inland and coastal waters including flood-prone areas of offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year. The base floodplain shall be used to designate the 100-year floodplain (one percent chance floodplain). The critical action floodplain is defined as the 500-year floodplain (0.2 percent chance floodplain). A large portion of NASA coastal floodplains also encompasses wetlands.

(i) Floodproofing—the modification of individual structures and facilities, their sites, and their contents to protect against structural failure, to keep water out or to reduce the effects of water entry.

(j) Minimize—to reduce to the smallest possible amount or degree.

(k) One percent chance flood—the flood having one chance in 100 of being exceeded in any one-year period (a large flood). The likelihood of exceeding this magnitude increases in a time period longer than one year, e.g., there are two chances in three of a larger flood exceeding the one percent chance flood in a 100-year period.

(l) Practicable—capable of being done within existing constraints. The test of what is practicable depends upon the 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 nor 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 7252.1, 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.