



NASA Ames Research Center
Ames Environmental Procedural Requirements

Chapter 20 - Floodplains and Wetlands Management

Table of Contents

- [20.1 Applicability](#)
- [20.2 Purpose](#)
- [20.3 Policy](#)
- [20.4 Authority](#)
- [20.5 Responsibilities--Wetlands](#)
 - [20.5.1 Environmental Services Office, Code QE \(Environmental Office\)](#)
 - [20.5.2 Facilities Maintenance, Code JFP](#)
 - [20.5.3 Facilities Engineering, Code FEF, and Facilities Planning, Code JFP](#)

20.6 Responsibilities--Floodplains

- [20.6.1 Office of Safety, Health, and Environmental Services, Code QE \(Environmental Services\)](#)
- [20.6.2 Facilities Maintenance, Code JFP](#)
- [20.6.3 Facilities Engineering, Code JEF, and Facilities Planning, Code JFP](#)

20.7 Definitions

- [20.7.1 Action](#)
- [20.7.2 BCDC](#)
- [20.7.3 CZMA](#)
- [20.7.4 Floodplain](#)
- [20.7.5 Wetlands](#)

20.8 Related Programs

- [20.8.1 Endangered Species](#)
- [20.8.2 NEPA](#)
- [20.8.3 BCDC](#)

20.9 Project Implementation

- [20.10 Metrics](#)
- [20.11 Sources of Additional Information or Assistance](#)
- [20.12 Appendices](#)

- [20.12.1 Appendix A: Floodplain Map](#)
 - [20.12.2 Appendix B: Wetland Delineation Map](#)
-

20.1 Applicability

This instruction is applicable to all civil servants and contractors at NASA Ames Research Center (Ames), and Crows Landing Flight Facility who are involved in any project or program (including routine maintenance) that could impact floodplains or wetlands.

[\[Back to Table of Contents\]](#)

20.2 Purpose

This chapter establishes the minimum requirements for the Ames floodplain and wetland management program to protect human health and the environment.

[\[Back to Table of Contents\]](#)

20.3 Policy

It is the policy of the Conservation Program to ensure the protection of Floodplains and Wetlands at Ames through compliance with all applicable Federal, state, and local regulations that pertain to floodplain and wetland management.

[\[Back to Table of Contents\]](#)

20.4 Authority

All relevant Federal, state, and local laws and regulations pertaining to the management of floodplains and wetlands including, but not limited to:

1. The Clean Water Act of 1977, Sections 401 and 404
2. 33 Code of Federal Regulations (CFR) Parts 320 to 330, Regulatory Programs of the Corps of Engineers
3. The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973
4. Executive Order 11988, Floodplain Management
5. Executive Order 11990, Protection of Wetlands
6. Coastal Zone Management Act of 1972
7. The McAteer-Petris Act, as amended in 1965
8. The San Francisco Bay Plan, 1969
9. National Environmental Policy Act, as amended in 1970
10. Endangered Species Act of 1973, as amended
11. NASA Floodplain and Wetlands Management, 14 CFR 1216.2
12. Migratory Bird Treaty Act, 50 CFR 1918
13. Office of Management and Budget Circular A-95

[\[Back to Table of Contents\]](#)

20.5 Responsibilities--Wetlands

20.5.1 Environmental Services Office, Code QE (Environmental Office)

1. Maintain an accurate inventory of all areas at Ames and distribute maps to Codes JFP, JFF and FEF. Maintain ARC View data base of wetland areas at Ames and transmit to Code FED.
2. Validate the need for permit applications.
3. Prepare wetlands permit applications.
4. Monitor activities to ensure compliance.
5. Act as point of contact for all regulatory agency interface and correspondence.

[\[Back to Table of Contents\]](#)

20.5.2 Facilities Maintenance, Code JFP

[REDACTED]

[\[Back to Table of Contents\]](#)

20.5.3 Facilities Engineering, Code FEF, and Facilities Planning, Code JFF

[REDACTED]

[\[Back to Table of Contents\]](#)

20.6 Responsibilities--Floodplains

20.6.1 Office of Safety, Health, and Environmental Services Division, Code QE (Environmental Office)

1. Maintain an accurate inventory of all floodplain areas at Ames and distribute maps to Codes JFP, JFF and FEF. Maintain ARC View data base of floodplain areas at Ames and transmit to Code FED.
2. Validate the need for permit applications
3. Prepare floodplain permit applications
4. Monitor activities to ensure compliance.
5. Act as point-of-contact for all regulatory agency interface and correspondence.

[\[Back to Table of Contents\]](#)

20.6.2 Facilities Maintenance, Code JFP

[REDACTED]

[REDACTED]

[\[Back to Table of Contents\]](#)

20.6.3 Facilities Engineering, Code JEF and Facilities Planning Code JFF

[REDACTED]

[\[Back to Table of Contents\]](#)

20.7 Definitions

20.7.1 Action

Any activity including, but not limited to, the acquisition, construction, modification, change in land use, and issuance of facilities use permits.

[\[Back to Table of Contents\]](#)

20.7.2 BCDC

The Bay Conservation and Development Commission (BCDC) has regulatory authority over development activities within and surrounding the San Francisco Bay. Proposed actions by Federal facilities are reviewed by BCDC for consistency with the San Francisco Bay Plan. BCDC is the local agency that carries out the provisions of the Coastal Zone Management Act in the San Francisco Bay region.

[\[Back to Table of Contents\]](#)

20.7.3 CZMA

The Coastal Zone Management Act (CZMA) of 1972 sets forth the requirements for State coastal management programs to identify and evaluate coastal resources that require management or protection. The State of California created the BCDC to carry out these activities for the San Francisco Bay Area.

[\[Back to Table of Contents\]](#)

20.7.4 Floodplain

The lowland and relatively flat areas adjoining inland and coastal waters, and flood-prone areas that are subject to a 1-percent or greater chance of flooding in any given year. The base floodplain shall be used to designate the 100-year floodplain (1-percent chance floodplain). The critical action floodplain is defined as the 500-year floodplain (0.2-percent floodplain). Appendix A provides a map indicating both the 100-year and 500-year floodplains.

[\[Back to Table of Contents\]](#)

20.7.5 Wetlands

Those areas that meet three main criteria, including saturation, duration, and vegetation, as defined by the U.S. Fish and Wildlife Service, Regional Water Quality Control Board, and the U.S. Army Corps of Engineers. These areas may be inundated by surface or ground water and normally support a prevalence of vegetation or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include marshes, sloughs, potholes, river overflows, meadows, and water bodies. A large portion of Ames wetlands are seasonal in nature. Appendix B provides a map indicating the delineated wetlands.

[\[Back to Table of Contents\]](#)

20.8 Related Programs

Many of the following programs pertain to development within the floodplain or wetland areas. These actions should be coordinated through the Environmental Office.

[\[Back to Table of Contents\]](#)

20.8.1 Endangered Species

Land located within the floodplain or designated as wetland includes sensitive habitat for many threatened and endangered animal species. Actions affecting these areas should be coordinated with the Environmental Office for compliance with Section 7 of the Endangered Species Act and the Migratory Bird Treaty Act and Chapter 21, Endangered and Threatened Species.

[\[Back to Table of Contents\]](#)

20.8.2 NEPA

Given the sensitive nature of floodplain and wetland areas, actions that affect these areas are subject to the National Environmental Policy Act (NEPA). All actions within the floodplains or wetlands should include environmental review and analysis. The Environmental Office should be contacted during the earliest stages of a proposed action to recommend the appropriate level of environmental review. Refer to Chapter 22, NEPA Management, for more information.

[\[Back to Table of Contents\]](#)

20.8.3 BCDC

The CZMA has regulatory authority through the San Francisco BCDC. All projects in the bay zone shall be reviewed for consistency with the San Francisco Bay Plan. If applicable, projects are forwarded to BCDC for a Consistency Determination. The following information is forwarded to the BCDC by the Environmental Office:

- Site map
- Regional map
- Project description
- Project plans
- Letter describing how and why the proposed action is consistent with the San Francisco Bay Plan

[\[Back to Table of Contents\]](#)

20.9 Project Implementation

No project or program shall be implemented in the floodplain or wetland areas without prior approval by the Environmental Office and appropriate regulators.

[\[Back to Table of Contents\]](#)

20.10 Metrics

a. Percent compliance with Federal, state, and local Wetland and Floodplain regulations.

Goal: 100% compliance

b. Percent of projects impacting Wetland areas have appropriate permits and Floodplain areas have appropriate analysis.

Goal: 100% compliance

[\[Back to Table of Contents\]](#)

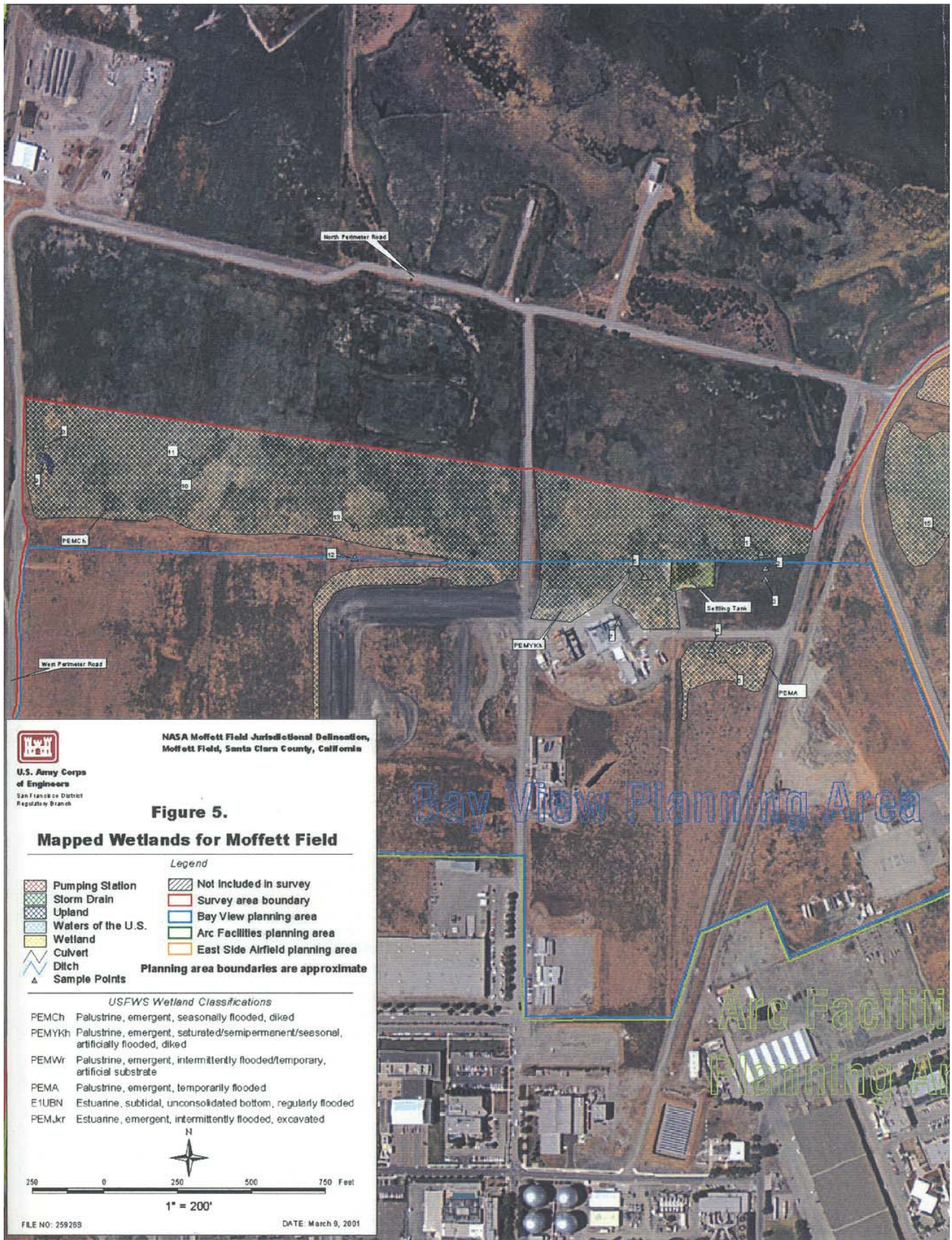
20.11 Sources of Additional Information or Assistance

[REDACTED]

[\[Back to Table of Contents\]](#)

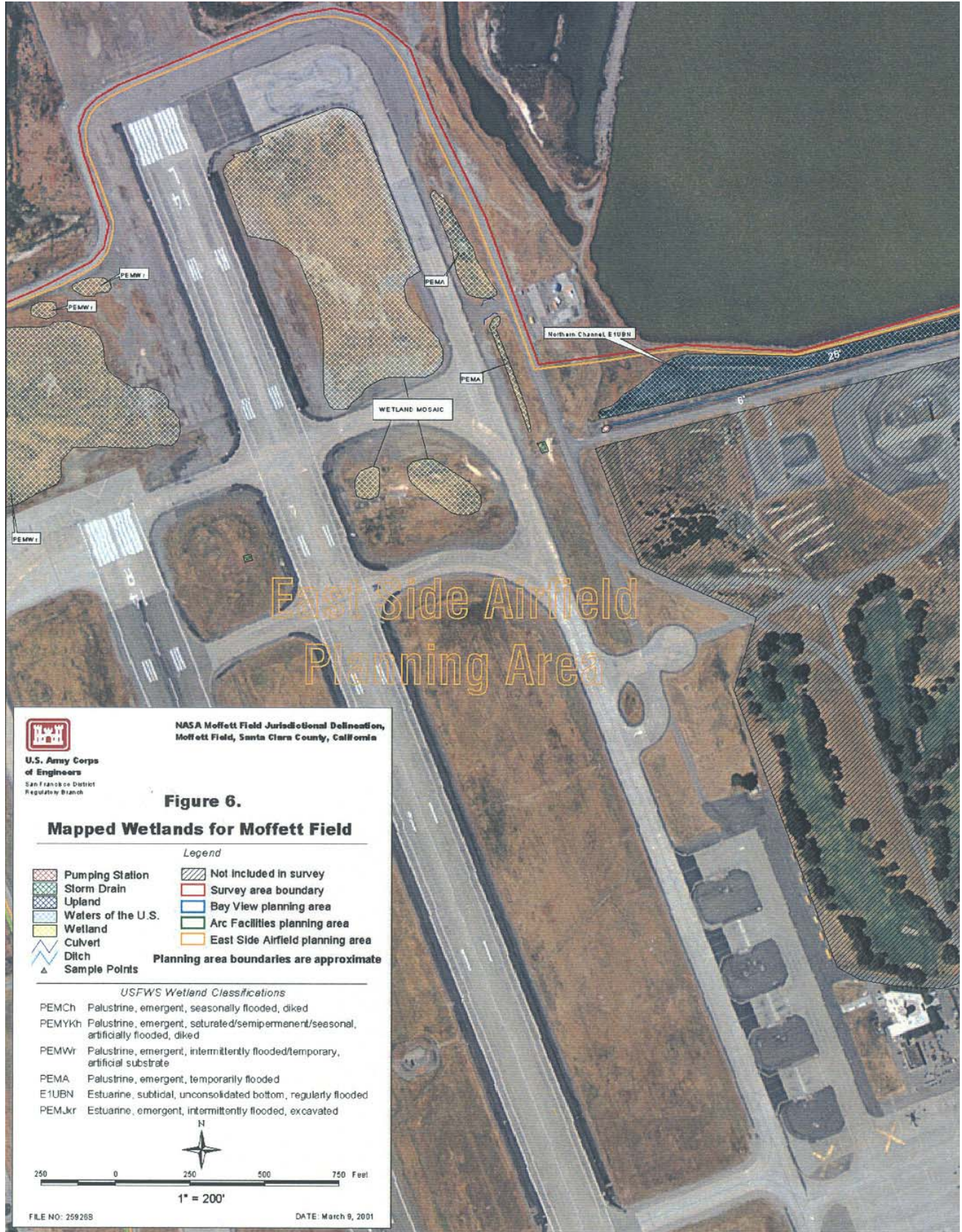
20.12 Appendices

20.12.1 Appendix A: Floodplain Map



[\[Back to Table of Contents\]](#)

20.12.2 Appendix B: Wetland Delineation Map



[\[Back to Table of Contents\]](#)

END OF DOCUMENT