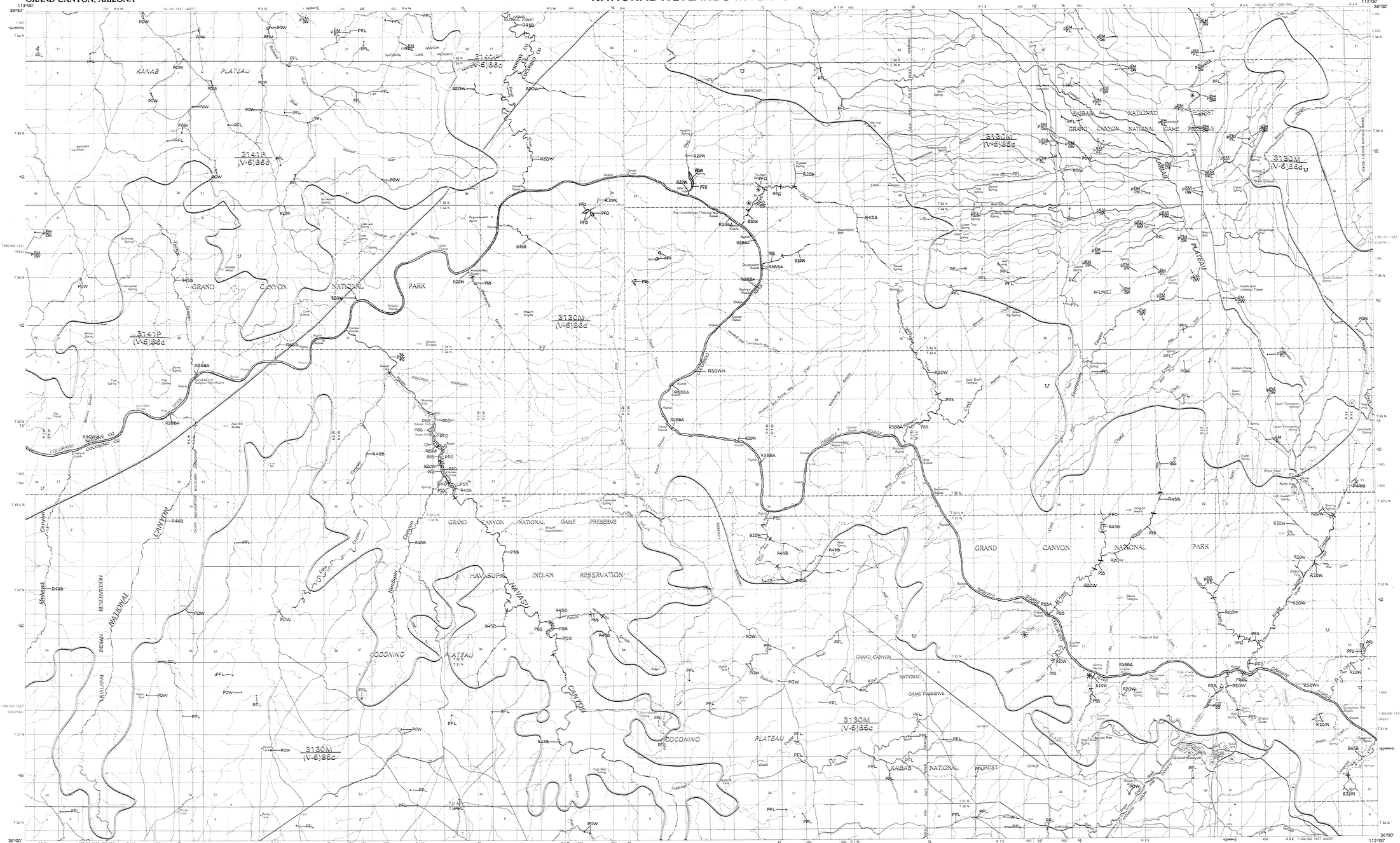
GRAND CANYON, ARIZONA

NATIONAL WETLANDS INVENTORY

30 X 60 MINUTE SERIES (WETLANDS)



Grand Canyon
ARIZONA

1:100 000 — Scale Map of

National Wetlands Inventory

- Wetland classifications
- Highways, roads and other manmade structures
- Water features
- Geographic names

FISH & WILDLIFE SERVICE

1984

Produced by the United States Fish and Wildlife Service

Wetland classifications from 1:120,000 scale black and white aerial photographs taken 1972, 1973 and other source data.

Projection and 10 000-meter grid, zone 12: Universal Transverse Mercator
50 000-foot grid ticks based on Arizona coordinate system, central and west zones
1927 North American datum

To place on the predicted North American Datum 1984, move the projection lines 5 meters north and 67 meters east

SPECIAL NOTE

This document was prepared primarily by stereoscopic analysis of high altitude aerial photographs. Wetlands were identified on the photographs based on vegetation, visible hydrology, and geography in accordance with **Classification of Wetlands and Deep Water Habitats of the United States** (An Operational Draft) Cowardin, et al, 1977. The aerial photographs typically portray the wetland vegetation as it appeared at the time the photographs were taken. In addition, there is a margin of error inherent in the use of the aerial photographs. Thus, a detailed on the ground and historical analysis of a single site may result in a revision of the wetland boundaries established through photographic interpretation. In addition, some small wetlands and those obscured by dense forest cover may not be indicated on the map or photo.

Federal, State and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits or proprietary jurisdiction of any Federal, State or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, and local agencies concerning the extent of agency regulatory programs and proprietary jurisdictions that may affect such activities.

Wetland polygons are photographically reduced from large scale overlays and positioned without internal cartrographic adjustment to features. Some positional discrepancies may occur.

CONVERSION TABLE

Meters	Feet
1	3.2808
2	6.5617
3	9.8425
4	13.1234
5	16.4042
6	19.6850
7	22.9658
8	26.2467
9	29.5276
10	32.8084

To convert meters to feet multiply by 3.2808
To convert feet to meters multiply by 0.3048

DECLINATION DIAGRAM

UTM grid convergence (GN) and 1984 magnetic declination (MN) at center of map
Diagram is approximate

ADJOINING MAPS

1	2	3
4		5
6	7	8

1. Littlefield
2. Fredonia
3. Glen Canyon Glen
4. Mount Trumbull
5. Tuba City
6. Peach Springs
7. Valle
8. Cameron

KILOMETERS 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
MILES 0 1 2 3 4 5 6 7 8 9 10 11 12

SCALE 1:100 000

1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND

0 1000 5000 10 000 15 000 20 000 METERS
5000 10 000 15 000 20 000 25 000 30 000 35 000 40 000 45 000 50 000 55 000 60 000 65 000 FEET

GRAND CANYON, ARIZONA
(SE ¼ of Grand Canyon 1:250,000)
1984

WETLAND LEGEND

M MARINE
1 SUBTIDAL
OW Open Water/Unknown Bottom
RB Rock Bottom
UB Unconsolidated Bottom
AB Aquatic Bed
RF Reef

M MARINE
2 INTERTIDAL
AB Aquatic Bed
RF Reef
FL Flat
RS Rocky Shore
BB Beach/Bar

E ESTUARINE
1 SUBTIDAL
OW Open Water/Unknown Bottom
RB Rock Bottom
UB Unconsolidated Bottom
AB Aquatic Bed
RF Reef

E ESTUARINE
2 INTERTIDAL
AB Aquatic Bed
RF Reef
FL Flat
SB Streambed
RS Rocky Shore
BB Beach/Bar
EM Emergent
SS Scrub/Shrub
FO Forested

R RIVERINE
1 TIDAL
EM Emergent (Nonpersistent)
OW Open Water/Unknown Bottom
RB Rock Bottom
UB Unconsolidated Bottom
AB Aquatic Bed
FL Flat
SB Streambed
RS Rocky Shore
BB Beach/Bar

R RIVERINE
2 LOWER PERENNIAL
EM Emergent (Nonpersistent)
OW Open Water/Unknown Bottom
RB Rock Bottom
UB Unconsolidated Bottom
AB Aquatic Bed
FL Flat
SB Streambed
RS Rocky Shore
BB Beach/Bar

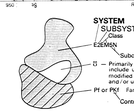
R RIVERINE
3 UPPER PERENNIAL
OW Open Water/Unknown Bottom
RB Rock Bottom
UB Unconsolidated Bottom
AB Aquatic Bed
FL Flat
SB Streambed
RS Rocky Shore
BB Beach/Bar

R RIVERINE
4 INTERMITTENT
OW Open Water/Unknown Bottom
RB Rock Bottom
UB Unconsolidated Bottom
AB Aquatic Bed
FL Flat
SB Streambed
RS Rocky Shore
BB Beach/Bar

L LACUSTRINE
1 LIMNETIC
OW Open Water/Unknown Bottom
RB Rock Bottom
UB Unconsolidated Bottom
AB Aquatic Bed

L LACUSTRINE
2 LITTORAL
OW Open Water/Unknown Bottom
RB Rock Bottom
UB Unconsolidated Bottom
AB Aquatic Bed
FL Flat
RS Rocky Shore
BB Beach/Bar
EM Emergent (Nonpersistent)

P PALUSTRINE
NO SUBSYSTEMS
OW Open Water/Unknown Bottom
RB Rock Bottom
UB Unconsolidated Bottom
AB Aquatic Bed
FL Flat
MU Mud/Lotten
EM Emergent
SS Scrub/Shrub
FO Forested



SYSTEM
SUBSYSTEM
Class
E2EMN
Subclass, water regime *
d — Primarily represents **upland** areas, but may include unclassified wetlands such as man-made features, or small wetland-identifiable areas and/or unintentional omissions.
Pf or PKf Farmed wetlands
Controlled water regime

2311L L Ecoregion *
(x-3) A1 Land-surface form *

***SOURCES OF ADDITIONAL INFORMATION**

- Ecoregion—U.S. Forest Service
- Land Surface Form—U.S. Geological Survey
- Subclass and Water Regime—U.S. Fish and Wildlife Service

Other information concerning the wetland resources depicted on this document may be available; contact: Regional Director (ARDE) Region II U.S. Fish and Wildlife Service P.O. Box 1306 Albuquerque, New Mexico 87103