TETON VALLEY, WYOMING
FIELD SUMMARY REPORT

I. Purpose:

The purpose of this field trip was to ground truth aerial photography of the study area so that photointerpretation could be facilitated with a high degree of accuracy.

A) The following 1:100,000 were reviewed:

Driggs NE	Thermopolis NW
Driggs SE	Thermopolis SW

B) 7.5' Quadrangle maps with checksites:

Teton Pass	Rosie's Ridge
Jackson	Kissinger Lakes
Cache Creek	Fish Lake
Bondurant	Warm Springs Mountain
Raspberry Ridge	Wilderness
Klondike Hill	Crow Heart
Lava Mountain	

C) Personnel:

Chuck Elliott	USFWS/Region 6
Kelly Drake	USFWS/Region 6
Matt Bilodeau	U.S. Army Corps of Engineers
Ed Gooley	U.S. Army Corps of Engineers
Dusty Zaunbrecher	Environmental Consultant
Lynn Ashby	Geonex Martel
Bill Pearson	Geonex Martel
Frank Schwartz	Geonex Martel

D) Dates of field trip:

August 22, 1988 - August 31, 1988

E) Available Photography:

Color Infrared-1:58,000 Scale

08/12/82	28.00%	09/15/83	15.00%
09/02/82	6.25%	09/16/83	7.75%
09/09/82	11.75%	08/10/84	6.25%
09/10/83	4.75%	09/14/84	4.75%
09/12/83	.75%	09/17/84	2.25%
09/13/83	12.50%		

DRAFT

F) Collateral Data:

USGS Quads 128 @ 1:24,000
2 @ 1:250,000

Soil Survey available for area:

Teton County, Wyoming, Grand Teton National Park Area

Bailey, Robert G.; 1980. Descriptions of the Ecoregions of the United States; United States Department of Agriculture Forest Service. Miscellaneous Publications.

Cowardin, L.M.; V. Carter, F.C. Golet and T.T. LaRue, 1979. Classification of Wetland and Deepwater Habitats of the United States; United States Department of the Interior, Fish and Wildlife Service.

Denison, E.S.; J.R. Schuetz, and S.J. Rucker; 1982. Wyoming Water Resource Data, Water Year 1982; United States Department of the Interior, Geologic Survey, Data Report Wy-82-1.

National Committee for Hydric Soils, 1985. Hydric Soils of the State of Wyoming; United States Department of Agriculture, Soil Conservation Service.

Reed, Porter B. Jr., 1986. 1986 Wetland Plant List, Wyoming; United States Department of Interior, Fish and Wildlife Service.

Wyoming General Soil Map; 1977. United States Department of Agriculture, Soil Conservation Service, Research Journal 117.

II. Overview

The study area is located between 109°-111° W longitude and 43°-44° N latitude. Bailey's Ecoregion Classification (1980) describes this area as Wyoming Basin Province (Sagebrush-Wheatgrass Section) and Rocky Mountain Forest Province (Douglas Fir Forest Section). Elevations range from 6,000 feet in the Snake River Valley to approximately 13,000 feet in the Teton and Wind River Mountain Ranges.

Wyoming Basin Province:

With elevations ranging between 6,000 to 8,000 feet, the climate is characterized by long, cold winters and short, hot summers. The average growing season is less than 100 days. Annual precipitation ranges from 14 to 19 inches and is fairly evenly divided throughout the year. The primary vegetation are shrubs and a mixture of grasses. Sagebrush and greasewood were also found. Along streams and within valley bottoms sedges and willows were predominantly found.

Rocky Mountain Forest Province:

The Teton Range and Wind River Mountains are rugged glaciated mountains with elevations as high as 13,000 feet. The climate is a semiarid steppe regime in which precipitation occurs primarily in the winter. Considerable parts of precipitation falls as snow; however, permanent snowfields and glaciers covers relatively small areas. The base of these mountains receive up to 20 inches of rainfall annually. At higher elevations, precipitation increases to 40 inches annually. Chief vegetation includes Blue Spruce, aspen and lodgepole pine.

III. Biological Characteristics of Wetland Habitats

A. Marine

Not Present

B. Estuarine

Not Present

C. Riverine

The majority of rivers and streams observed, such as the Snake, Gros Ventre, Wind, Green and New Fork River, are characterized by low water temperature, medium to high gradients and velocities, and large insect populations. These will be classified as upper perennial, unconsolidated bottom and permanently flooded (R3UBH). During the time of ground truthing, the Gros Ventre River had very little water flow due to upstream irrigation diversions. However, it will be delineated as shown on photography. DuNoir Creek and a portion of the Green, Wind and East Fork Wind Rivers have a well-developed floodplain with oxbows and meander scars. This area will be classified as lower perennial, unconsolidated bottom and permanently flooded (R2UBH). Also a four mile stretch of the Snake River as it flows from Jackson Lake will also be classified as lower perennial. In higher elevations where boulders are seen in the channel and steep gradients are present, rivers will be classified as upper perennial, rock bottom and permanently flooded (R3RBH). Smaller streams in the mapping area will be classified as riverine, intermittent, streambed, semi-permanently, seasonally or temporarily flooded (R4SBF/C/A).
Alluvium, such as cobble bars and sand bars, found along rivers and streams will be classified as upper or lower perennial (depending on classification of river), unconsolidated shore and seasonally flooded (R3/R2USC). The USGS Water Resource Book will be used to determine the water regime on all rivers and streams. Photo signature will determine classification of rivers and streams if this information is unavailable.

Large irrigation canals will be classified as riverine,lower perennial, unconsolidated bottom, intermittently exposed (R2UBGx) or riverine, intermittent, streambed, semipermanently flooded (R4SBFx) depending on signature of photography and other collateral information which describes water volume and duration of flow. When emergents are evident in canals, these will be classified in the palustrine system. The excavated modifier (x) will be used on all canals. Smaller irrigation ditches within agricultural fields will not be delineated.

D. Lacustrine

Reservoirs and impoundments greater than 20 acres, such as Jackson Lake and Bull Lake, will be classified as limnetic, unconsolidated bottom and permanently flooded (L1UBH). The shoreline will be classified as littoral, unconsolidated shore and seasonally flooded (L2USC). Persistent emergents associated with these reservoirs will be classified under the palustrine system. All wetlands and deepwater habitats associated with reservoirs will be classified using the impounded modifier (h).

Glacial lakes larger than 20 acres in size will be classified as limnetic, unconsolidated bottom and permanently flooded (L1UBH). Glacial lakes smaller than 20 acres having a bedrock shoreline will also be classified as L1UBH. Glacial lakes smaller that 20 acres having a vegetated shoreline will be classified under the palustrine system as unconsolidated bottom and permanently flooded (PUBH).

E. Palustrine

Palustrine emergent wetlands located in the Teton Valley Area occur along river floodplains, in swales, in wet meadows, and associated with seeps and springs. Seasonally flooded emergents wetlands (PEMC) included nebraska sedge (Carex nebrascensis), sedges (Carex spp.), spikerush (Eleocharis macrostachya), baltic rush (Juncus arcticus), rushes (Juncus spp.), reed canary grass (Phalaris arundinacea), and blue grass (Poa palustris). Temporarily flooded emergent wetlands (PEMA) included baltic rush and cinquefoil (Potentilla fruticosa). Semipermanently flooded emergent wetlands (PEMF) included cattail (Typha latifolia) and hardstem bulrush (Scirpus acutus). Saturated emergent wetlands (PEMB) included sedges.

Palustrine scrub-shrub wetlands in the Teton Valley Area occur along river floodplains, in wet meadows, and associated with seeps and springs. Willows (Salix spp.) were the only wetland species of scrub-shrub found in the study area. Seasonally flooded scrub-shrub wetlands (PSSC) are associated with river floodplains and open water pockets and/or emergents mixed throughout. Temporarily flooded scrub-shrub wetlands (PSSA) are also located in floodplains and wet meadows. Saturated scrub-shrub wetlands (PSSB) are located near seep and springs.

Open water bodies less than 20 acres in size, which support aquatic vegetation at some time during the growing season, will be classified as palustrine, aquatic bed, intermittently exposed (PABG). The aquatic vegetation included coontail (Myriophyllum sp.) and duckweed (Lemna sp.). Beaver ponds were found to support aquatic vegetation. These will be classified as palustrine, aquatic bed, intermittently exposed, with a beaver modifier (PABGb). Since the extent of beaver influence cannot be determined on vegetation around the dams, the beaver modifier will be used only on the water bodies created by the dams.

Historically, the narrowleaf cottonwood (Populus angustifolia) areas found along rivers and streams once functioned as wetlands. Due to water withdrawal for irrigation, many of these forested areas are no longer temporarily flooded. Very few areas along rivers still function as wetlands. Those that do are classified as palustrine, forested, temporarily flooded (PFOA).

Impoundments less than 20 acres in size were found to support aquatic vegetation some time during the growing season. In the western portion of the work area these impoundments are intermittently exposed (PABGh). In the drier eastern portion of the work area impoundments are semipermanently flooded (PABFh). Smaller impoundments with little or no water present will be classified as unconsolidated shore with seasonally flooded (PUSC) or temporarily flooded (PUSA) water regime. The impounded modifier (h) will be used for all of the above.

Excavated water bodies, such as gravel and sewage pits will be classified as palustrine, aquatic bed, intermittently exposed and excavated (PABGx). Ponds associated with golf courses and oil and gas pits will be classified as unconsolidated bottom, palustrine, semipermanently flooded (PUBFx).

IV. Summary

All photography was taken August 1982, 1983; September 1982, 1983, 1984 and field work was conducted in August, 1988. Field reconnaissance of the study area showed photography to be fairly consistent with field observations although field conditions were found to be drier than normal for this time of year. The photography showed high resolution and should facilitate accurate photo interpretation.

COMMONLY FOUND SPECIES

PFOA

narrowleaf cottonwood	Populus angustifolia

PSSC-PSSB-PSSA

willows	Salix spp.

PEMA

baltic rush	Juncus arcticus
cinquefoil	Potentilla fruticosa

PEMC

nebraska sedge	Carex nebrascensis
sedge	Carex spp.
rush	Juncus sp.
baltic rush	Juncus arcticus
blue grass	Poa palustris
reed canary	Phalaris arundinacea
spikerush	Eleocharis macrostachya

PEMF

cattail	Typha latifolia
hardstem bulrush	Scirpus acutus

PABG

coontail	Myriophyllum sp.
duckweed	Lemna sp.