

# INVENTORY OF RIPARIAN HABITATS

AND ASSOCIATED WILDLIFE ALONG  
**COLUMBIA**

AND  
**SNAKE  
RIVERS**

**NP** U.S. ARMY CORPS OF ENGINEERS  
**HD** NORTH PACIFIC DIVISION  
1976



VOLUME IV B  
MID-COLUMBIA  
RIVER

VOLUME 4B

INVENTORY OF VEGETATION AND WILDLIFE  
IN RIPARIAN AND OTHER HABITATS  
ALONG THE UPPER COLUMBIA

to

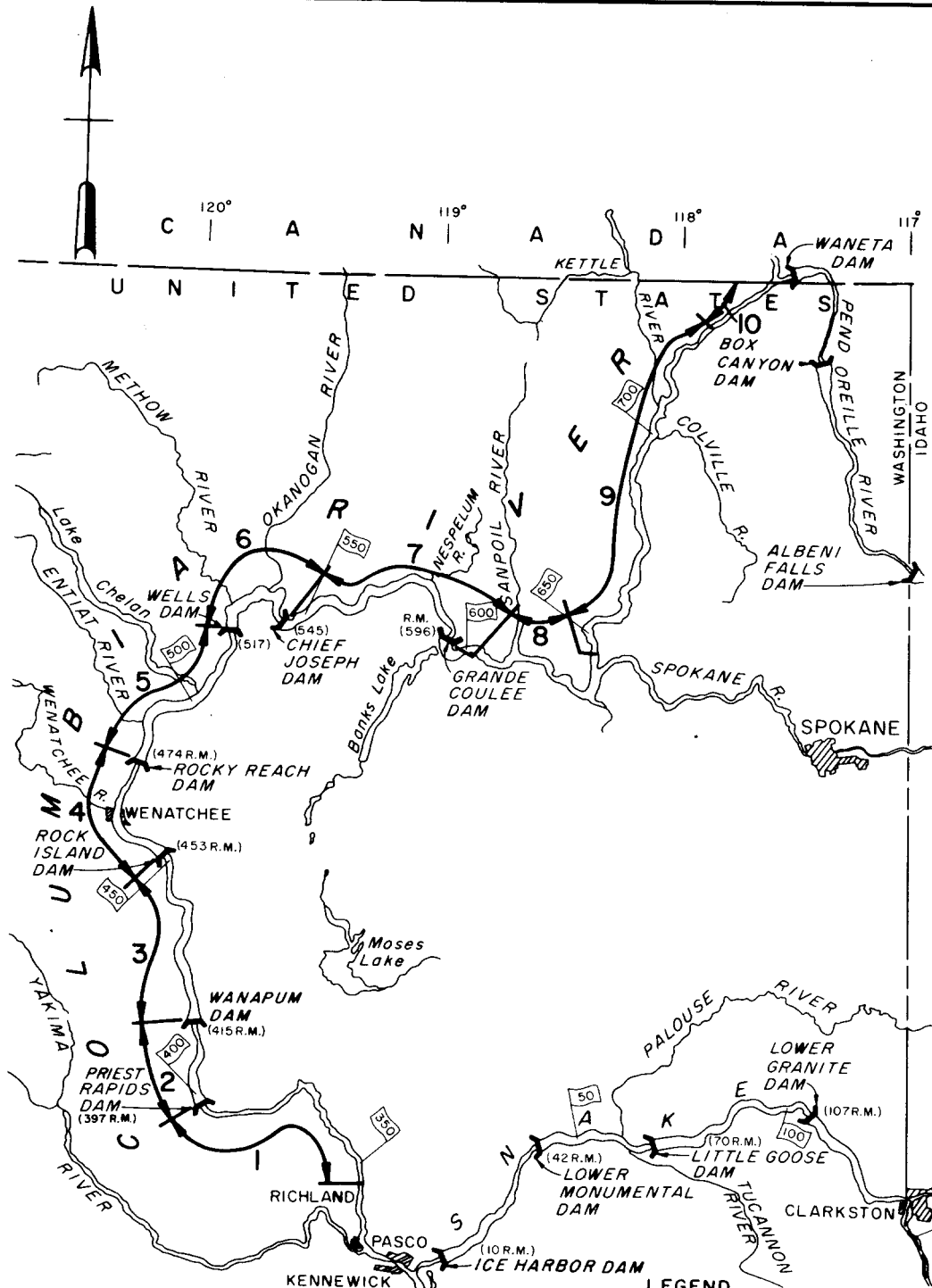
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Wildlife Work Group

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LEGEND  
5 Segment No.

NOT TO SCALE

FISHERIES ENGINEERING RESEARCH PROGRAM  
INVENTORY OF RIPARIAN HABITATS  
1973-1975  
UNIVERSITY OF WASHINGTON  
STUDY AREA  
COLUMBIA RIVER  
RM 345.5 TO RM 745  
U.S. ARMY ENGINEER DISTRICT, WALLA WALLA

## VEGETATIVE AND LAND FORM LEGEND

- 100 Barren land
  - 110 Sand dunes
  - 120 Erosion pavement
  - 130 Rocklands
  - 140 Shorelines, beaches, tideflats and river banks
    - 141 Rock
      - 141.1 Rock cliffs
      - 141.2 Slides
      - 141.3 Gravelbank
      - 141.4 Talus
    - 142 Gravel
      - 142.1 Cobble
    - 143 Sand
      - 143.1 Sand bars
      - 143.3 Mixed types
    - 144 Mud
    - 145 Shell
    - 146 Coral
    - 148 Rock rip-rap
    - 149 Undifferentiated classes
      - 149.1 Seepage
    - 150 Bareground
    - 160 Litter
  
- 200 Water resources
  - 210 Ponds, lakes, and reservoirs
    - 211 Ponds
    - 212 Lakes
    - 213 Reservoirs
    - 214 Embayments
  - 220 Water courses
    - 221 Rivers
    - 222 Creeks
    - 223 Canals and ditches
    - 224 Sloughs
  
- 300 Natural vegetation
  - 310 Herbaceous types
    - 311 Lichen, cryptograms, related communities
    - 312 Annuals
    - 313 Forbs
    - 314 Grassland, steppe and prairie
      - 314.4 Bluebunch wheatgrass
    - 315 Meadows
      - 315.1 Sedge
      - 315.2 Rush
      - 315.3 Grass
      - 315.4 Horsetail

- 316 Marshes
  - 316.1 Cattail
  - 316.2 Bulrush
  - 316.3 Sedge
  - 316.4 Grass
  - 316.5 Cattail/Bulrush
  - 316.6 Cattail/Sedge
  - 316.7 Bulrush/Sedge
- 317 Swamps
- 318 Aquatic vegetation
- 319 Undifferentiated complexes of herbaceous types
- 320 Shrub, scrub types
  - 325 Shrub steppe
    - 325.1 Sagebrush
    - 325.2 Rabbitbrush types
    - 325.3 Bitterbrush
    - 325.4 Greasewood
    - 325.5 Mountain-mahogany
    - 325.6 Hackberry
    - 325.7 Ceanothus
      - 325.91 Bitterbrush/rabbitbrush
      - 325.92 Bitterbrush/sagebrush
  - 327 Macrophyllous shrub and vine
    - 327.1 Willow
    - 327.2 Blackberry
    - 327.3 Rose
    - 327.4 Sumac
    - 327.5 Hawthorn
    - 327.6 Chokecherry
    - 327.7 Snowberry
    - 327.8 Ninebark
    - 327.9 Serviceberry
      - 327.91 Hawthorn/Serviceberry
      - 327.92 Snowberry/Serviceberry
      - 327.93 ARTR AMAL/elder
    - 327.10 Dogwood
    - 327.11 Prunus
    - 327.12 Elderberry
- 329 Undifferentiated complexes of shrub, scrub types
- 330 Savanna-like types
  - 331 Shrub/grass
  - 332 Broadleaf tree over herb layer
  - 333 Coniferous tree over herb layer
  - 334 Mixed broadleaf and coniferous tree over herb layer
  - 335 Broadleaf tree over shrub layer
  - 336 Coniferous tree over shrub layer
  - 337 Mixed broadleaf and coniferous tree over shrub layer
- 340 Forest and woodland types
  - 341 Coniferous forests
    - 341.1 Spruce
    - 341.2 Western Redcedar
    - 341.3 Douglas-fir
    - 341.4 Ponderosa Pine
    - 341.5 Grand fir
    - 341.6 Two species mixtures of conifers

- 341.7 Three species mixture of conifers
  - 341.71 Spruce/Western Redcedar/Douglas fir
- 341.8 Pinus contanta
- 341.9 Juniper
- 341.10 Larch
- 342 Broadleaf forests
  - 342.1 Willow
    - 342.11 Small trees (less than 15 ft. tall)
    - 342.12 Large trees (greater than 15 ft. tall)
    - 342.13 Dead snags present
  - 342.2 Cottonwood
    - 342.21 Small trees (less than 15 ft. tall)
    - 342.22 Large trees (greater than 15 ft. tall)
    - 342.23 Dead snags present
  - 342.3 Oak
  - 342.4 Ash
  - 342.5 Maple
  - 342.6 Alder
    - 342.61 Birch
    - 342.62 Paper birch
    - 342.63 Water birch
    - 342.64 Aspen
    - 342.65 Locust
    - 342.66 Lombardi poplar
  - 342.7 Two species mixtures of broadleaf trees
    - 342.71 Willow/Cottonwood
      - 342.711 Small trees (less than 15 ft. tall)
      - 342.712 Large trees (greater than 15 ft. tall)
      - 342.713 Dead snags present
    - 342.72 Willow/Ash
    - 342.73 Willow-Alder
    - 342.74 Cottonwood/Oak
    - 342.75 Cottonwood/Ash
    - 342.76 Oak/Ash
    - 342.77 Oak/Maple
    - 342.78 Maple/Alder
    - 342.79 Undifferentiated two species mixtures
  - 342.8 Three species mixtures of broadleaf trees
    - 342.81 Willow/Cottonwood/Ash
    - 342.82 Willow/Cottonwood/Oak
    - 342.83 Willow/Ash/Oak
    - 342.84 Cottonwood/Ash/Oak
    - 342.85 Cottonwood/Ash/Maple
    - 342.86 Oak/Ash/Maple
  - 342.9 Undifferentiated mixtures of broadleaf trees
    - 342.91 Four species-broadleaf
- 343 Conifer-broadleaf mixed forests and woodland types
  - 343.1 Two species mixture
    - 343.11 Oak/Douglas fir
    - 343.12 Oak/Ponderosa pine
    - 343.13 Ash/Douglas fir
    - 343.14 Maple/Douglas fir
    - 343.15 Alder/S. Spruce
    - 343.16 Alder/W. Redcedar

- 343.19 Undifferentiated two species mixtures
- 343.2 Three species mixtures (1 conifer 2 broadleaved)
  - 343.21 P. Pine/Oak/Maple
  - 343.22 Douglas fir/Oak/Maple
  - 343.24 Douglas fir/Alder/Maple
  - 343.25 Douglas fir/Ash/Maple
  - 343.26 Sitka Spruce/Alder/Maple
  - 343.27 W. Redcedar/Alder/Maple
  - 343.28 Pine/Birch-cottonwood
- 343.3 Three species mixtures (2 conifers, 1 broadleaf)
  - 343.31 P. Pine/Douglas fir/Oak
  - 343.32 P. Pine/Douglas fir/Maple
  - 343.33 Douglas fir/Sitka Spruce/Maple
  - 343.34 Douglas fir/Sitka Spruce/ Alder
  - 343.35 Douglas fir/W. Redcedar/Maple
  - 343.36 Douglas fir/W. Redcedar/Alder
  - 343.37 S. Spruce/W. Redcedar/Maple
  - 343.38 S. Spruce/ W. Redcedar/Alder
  - 343.39 Undifferentiated three species mixtures
- 343.4 Four species mixtures

500 Agricultural Production

- 510 Field crops (to include 520 vegetable and truck crops)
- 530 Tree, shrub and vine crops (orchards)
  - 530.1 Windbreaks around orchards
  - 531 Beehives
- 540 Pasture
  - 541 Forested pasture
- 560 Idle lands
- 570 Agricultural production facilities
  - 571 Feedlots
  - 572 Buildings

600 Urban and resource extraction

- 610 Residential
- 620 Urban idle lands
- 630 Business District
- 640 Industrial
- 650 Transportation, communications, and utilities (and their right-of-way)
  - 651 Railroad
  - 652 Roads
  - 654 Airport
  - 655 Telephone
  - 656 Powerlines and facilities
- 660 Resource extraction
  - 661 Sand and gravel
  - 662 Mines and mine waste areas
- 670 Open space and recreational facilities
  - 671 Developed parks or campgrounds
  - 672 Undeveloped parks or campgrounds
  - 673 Public access areas, boat ramps