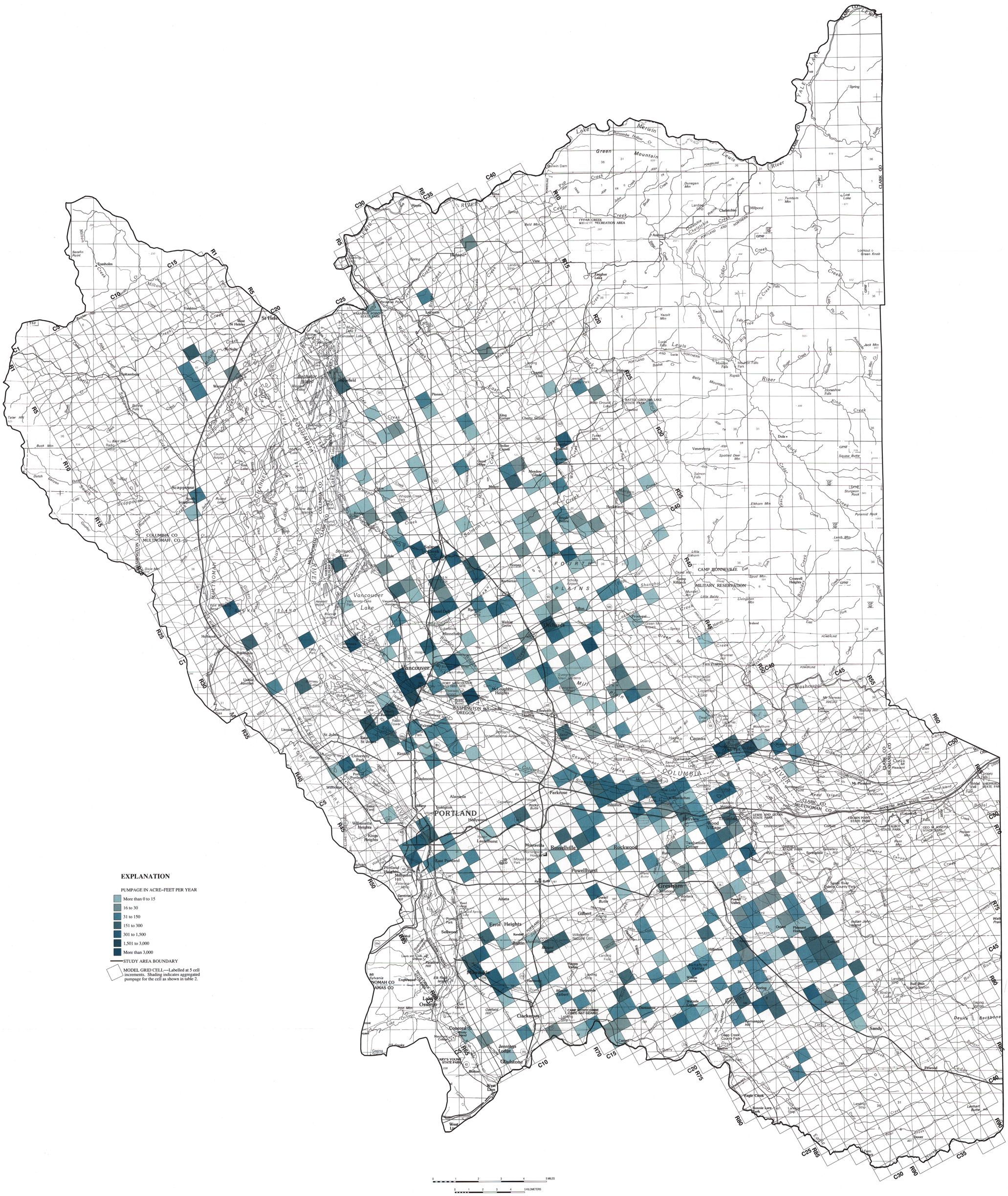
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

Prepared in cooperation with the
CITY OF PORTLAND BUREAU OF WATER WORKS,
INTERGOVERNMENTAL RESOURCE CENTER, AND
OREGON WATER RESOURCES DEPARTMENT

WATER RESOURCES INVESTIGATIONS REPORT 91-4018
Estimated average annual ground-water pumpage for irrigation – PLATE 1
Collins, C.A. and Broad, T.M., Estimated average annual ground-water pumpage in the Portland Basin, Oregon and Washington, 1987-88: U.S. Geological Survey Water Resources Investigations Report 91-4018



Base modified from U.S. Geological Survey 1:100,000 topographic quadrangles, 1978–84.

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ESTIMATED AVERAGE ANNUAL TOTAL GROUND-WATER PUMPAGE IN THE PORTLAND BASIN, OREGON AND WASHINGTON, 1987-88

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