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NBMG OPEN-FILE REPORT 95-1

DISTRIBUTION OF INDOOR RADON MEASUREMENTS IN CARSON CITY, WASHOE, STOREY, LYON, AND DOUGLAS COUNTIES, NEVADA

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It has not been edited or checked for completeness
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Indoor radon concentration measured in picocuries of radon per liter of air (pCi/L)

- ● Radon concentration equal to or greater than 20 pCi/L
- ◓ Radon concentration between 10.0 and 19.9 pCi/L
- ◒ Radon concentration between 4.0 and 9.9 pCi/L
- ⊖ Radon concentration between 2.0 and 3.9 pCi/L
- ○ Radon concentration between 0.0 and 1.9 pCi/L

Notes:

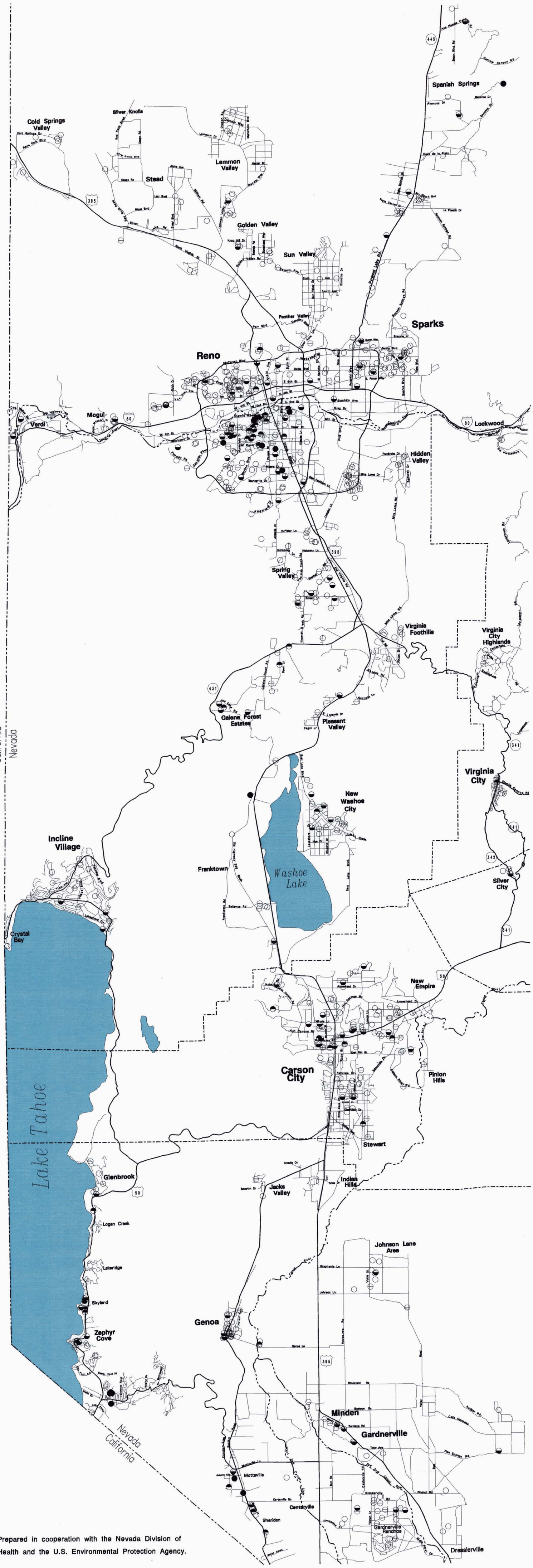
671 indoor radon measurements are represented on this map:
- 128 measurements from basements and crawl spaces
- 531 measurements from ground floors
- 12 measurements from second floors

This map shows the distribution of 671 measurements of indoor radon in homes tested in west-central Nevada. The study area covers parts of Carson City, Washoe, Storey, Lyon, and Douglas Counties. All radon data shown were obtained using 2- to 7-day charcoal canister tests in three separate surveys conducted from 1989 through 1992, followed by individual home tests using 7-day charcoal canisters through January 1995. All radon detectors used met the requirements of EPA's Radon Measurement Proficiency (RMP) program. Indoor radon measurements are divided into five categories of indoor radon concentrations: 0.0-1.9 pCi/L, 2.0-3.9 pCi/L, 4.0-9.9 pCi/L, 10.0-19.9 pCi/L, and 20 or more pCi/L. Each category is depicted by a different symbol. Each symbol represents one measurement from one home. That measurement was made on the lowest habitable floor. If more than one measurement was made in that home, only the greatest measurement from the lowest habitable floor is shown on this map. The indoor radon measurements were collected from a variety of rooms in the homes (such as living rooms, family rooms, dining rooms, and bedrooms, but generally not kitchens, laundry rooms, or bathrooms).

Indoor radon measurements from the 1989 screening survey conducted by NBMG were made in February and March 1989 using 7-day charcoal canisters. Indoor radon measurements from the survey of 1990-1991 were collected mainly during January, February, and March 1990, with additional seasonal data gathered through February 1991 using EPA-provided 2-day charcoal canisters. Indoor radon data were also collected from February through April 1992 using 7-day charcoal canisters from Alpha Spectra, Inc. 1993 and later indoor radon data were collected by NBMG/NDOH from January 1993 through January 1995 using 7-day charcoal canisters from both Alpha Spectra, Inc. and the EPA radon laboratory in Las Vegas, Nevada. The 1993-1995 tests were conducted year-round.

Indoor radon measurements shown on this map have been plotted at 1:100,000 scale on a GIS-generated base map showing major and minor road networks as well as hydrology (streams and lakes). The source of the base map data used for this compilation is the U. S. Census Bureau's TIGER file.

Radon is a colorless, odorless radioactive gas that comes from the natural decay of uranium, and is found in small amounts in nearly all rocks and soils. It can move from the soil into a home through cracks in the foundation, construction joints, or any soil contact. Once inside a home, it can build up to concentrations high enough to cause increased risk for lung cancer over a prolonged period of exposure. The EPA suggests that remedial action be taken to reduce radon in any homes with average annual indoor radon concentrations of 4.0 pCi/L or more. Indoor radon concentration can vary day to day and season to season, and as a direct result of many factors, such as climate, type of home construction, and occupants' activities. For more information on testing for radon and reducing radon in homes, consult EPA publication: "A Citizen's Guide To Radon (Second Edition)," 1992. For more information on radon in Nevada and its relationship to geology, soils, or water, refer to NBMG Bulletin 108, "Radon in Nevada," or call Nevada Bureau of Mines and Geology at (702) 784-6691. For more information concerning the health risks associated with radon in indoor air, contact Nevada Division of Health, Radiological Health Section at (702) 687-5394.



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SCALE

KILOMETERS

MILES

nbmg nevada bureau of mines & geology

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