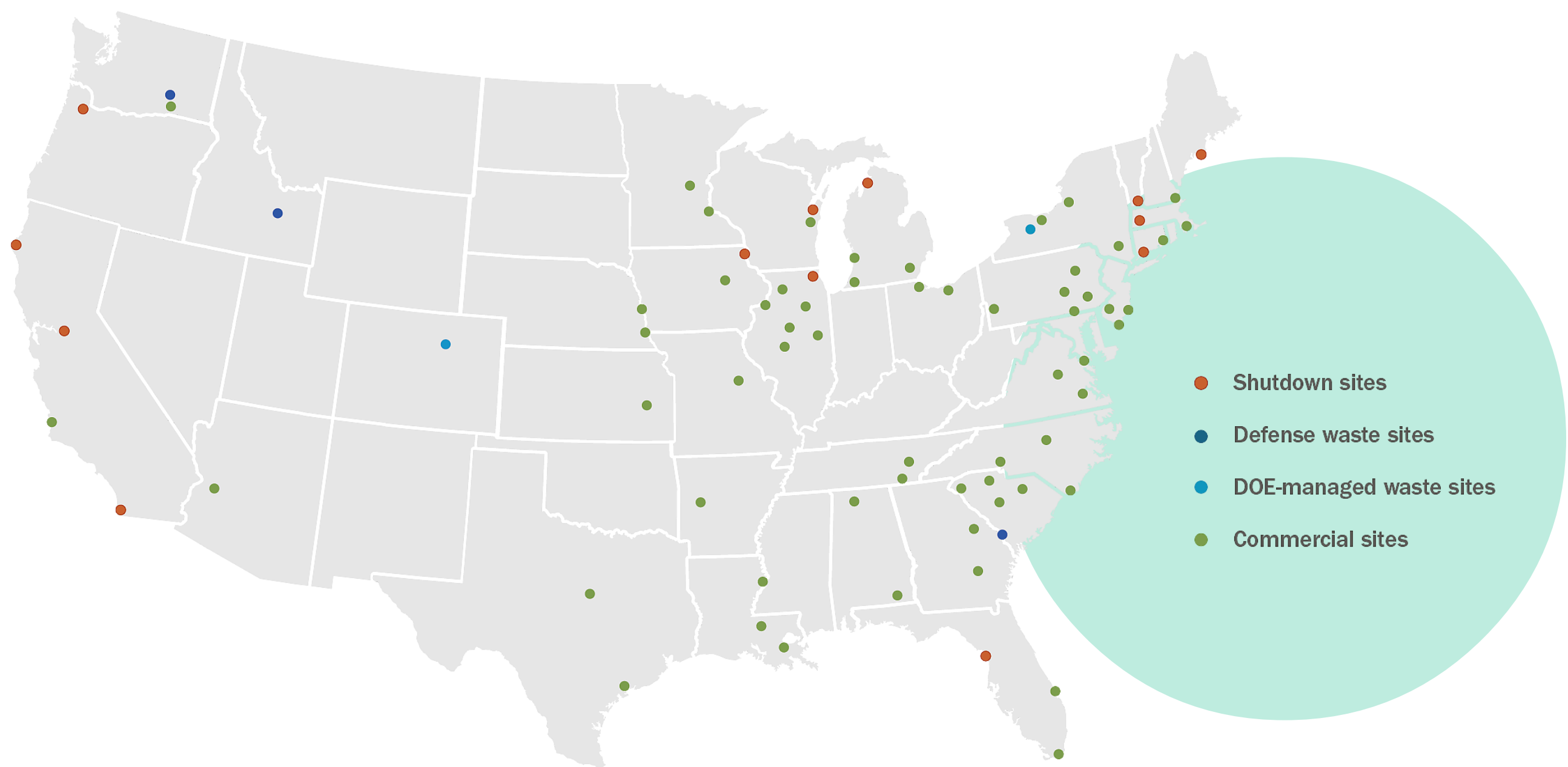


NUCLEAR WASTE IN THE UNITED STATES

STATUS OF THE WASTE TODAY

The United States has used nuclear technology for more than 60 years to produce electricity and support national defense and research and development. These activities have resulted in a build-up of spent nuclear fuel and high-level radioactive waste, currently stored at sites across the country.

Commercial spent nuclear fuel is stored at reactor sites where the electricity was generated. High-level radioactive waste and spent fuel from national defense and research and development activities are stored at several DOE-managed sites. While this temporary storage is safe in the near-term, the nation needs a sustainable, long-term solution.



SPENT NUCLEAR FUEL

By far the largest inventory of spent nuclear fuel comes from commercial electricity generation:

The Department estimates that continued operation of the current fleet of nuclear power reactors could increase the total inventory of spent nuclear fuel to:

**~70,000
metric tons of
uranium ***

**~140,000
metric tons of
uranium ****

Nearly all of this spent fuel is being stored at the reactor sites where it was generated, either submerged in pools of water (wet storage) or in shielded casks (dry storage).

HIGH-LEVEL RADIOACTIVE WASTE

High-level radioactive waste, almost all of which was generated by defense nuclear activities, accounts for the next largest portion of the overall inventory:

roughly 90 million gallons of high-level waste liquids, sludges, and solids.

The majority of high-level radioactive waste in the Department's current inventory is:

- at the Hanford and Savannah River sites and is planned to be (or has already been) vitrified into a glass form
- at the Idaho National Laboratory in a dry calcine form
- at the West Valley Demonstration Project site

*Source: U.S. Energy Information Administration, Form GC-859, "Nuclear Fuel Data Survey" (2013).

**Source: Carter, J. and Dennis Vinson, "Nuclear Fuels Storage and Transportation Planning Project Inventory Basis" (2014).

