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## Individuals (N-Print)

N Footprint Calculation tools now exist for individuals by country, individuals by watershed, and institutions. Presented here is a summary of how the tools have been used and how they compare.

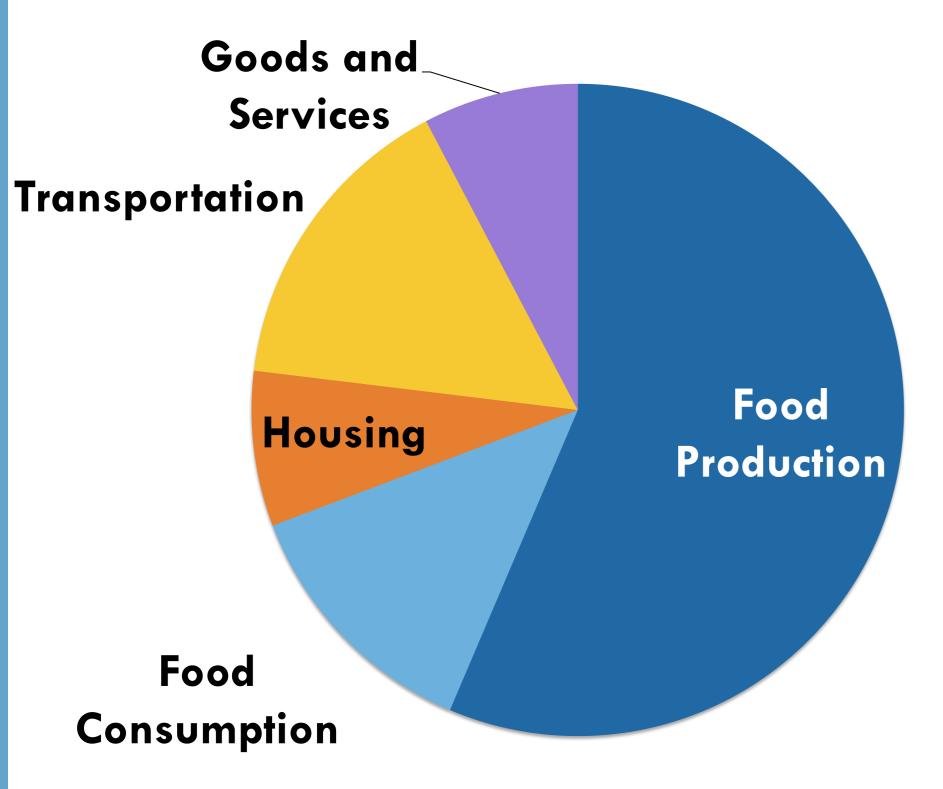


Figure 1. The average individual N footprint in the United States is **39 kg N** per person per year.

### Institutions

Institution N footprints are being developed by a network of 18 colleges, universities, and research institutions in the United States, Australia, Canada, and the Netherlands.

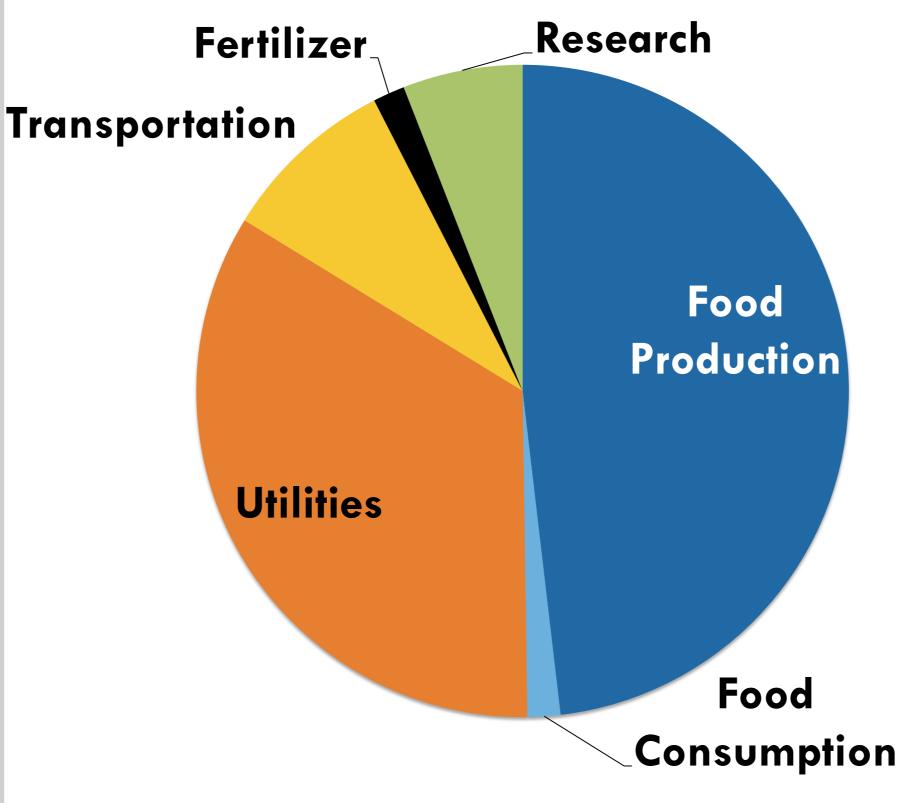


Figure 2. The average of 7 US institution N footprints is **157 MT N** per year (11 kg N per capita).

#### Watersheds

A new tool for the Chesapeake Bay allows individuals within the watershed to calculate their Bay N Footprint, the amount of N that enters the bay as part of their footprint.

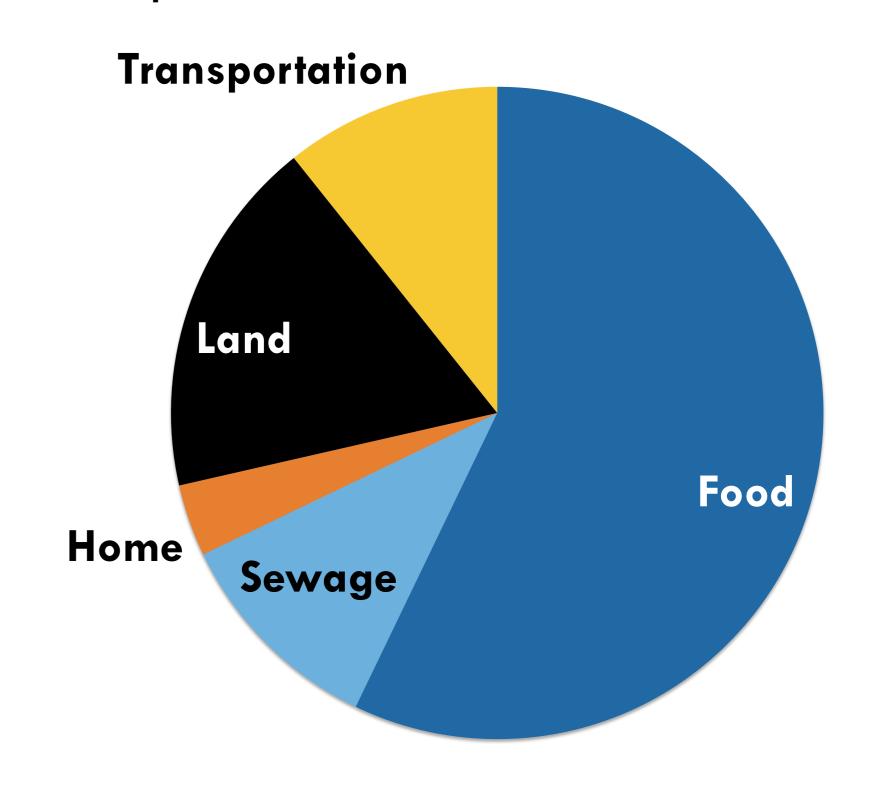


Figure 3. A typical Bay N footprint is 14 kg N per person per year.

# How can footprint tools reduce N pollution?

Individuals can learn about the impact their actions and become informed about sustainable practices.

Institutions can set N footprint reduction goals and assess management scenarios and projections.

Individuals can see their contributions to N pollution in the Chesapeake Bay and learn about sustainable practices.



Footprint

The

Management

Goals

Reduction



**Transportation** 







Improved Sewage

Treatment



N offsets





Substitute Non-Meat Storm Proteins

### What action can be taken to manage N footprints?

#### Individuals can:

- Reduce utility usage
- Use public transit, walk, and bike
- Eat recommended amount of protein
- Eat less animal protein and less beef
- Purchase sustainably produced food
- Reduce food waste

Meeting University of Virginia's 25% N Footprint reduction goal will require combination of strategies:

- Improve sewage treatment
- Improve energy efficiency reduce fossil fuel use on-site
- Reduce food waste
- Educate the community about the N footprint of food choices

If everyone in the watershed reduced their protein consumption to recommended levels, the Chesapeake Clean Water Blueprint pollution reduction goals would be met. Other strategies include:

- Reduce stormwater runoff
- Use public transit, walk, and bike
- Reduce utility usage

Summary

The Nitrogen Footprint Tool Network educates communities and promotes sustainability by connecting actions to impact. The development of new N footprint tools helps us understand how entities contribute to N pollution and how they can manage their impact.

Learn More
N-print.org
calc.nprint.org