Biosolids

Biosolids are one of the end results of the wastewater treatment process. These solids are high in nutrients such as nitrogen and phosphorus. They also contain other chemicals and compounds that are a reflection of the businesses and industries in the area being provided with wastewater services. Local source control programs designed to keep pollutants out of the biosolids have worked well, but these programs are not perfect, and some pass through of compounds may occur in both the water and biosolids portion of the end process. Typically, these amounts are so small that they still allow for discharge of cleansed water to waterbodies and the use of biosolids as a nutrient supplement for farmlands and forestry.

With PFAS contamination of drinking water in the news throughout the country, alarms have been raised over biosolids applications to farmland and pasture. Much more research needs to be done in this area, and awareness enhanced of the other sources of PFAS in the water and food chain (fast food wrappers, take out containers, non-stick cookware, etc.) to understand the contribution that biosolids makes to the PFAS problem.

Many WASWD members use biosolids as a cost-effective and productive application of treatment plant byproducts. At the same time water utilities are protective of their groundwater sources to avoid contamination of their drinking water sources. Continued use of land applied biosolids is an important tool for managing byproducts from wastewater treatment plants. As stewards of public resources there is also recognition that biosolids must be done safely, with drinking water source protection a priority.