

Part 524 – Drainage

524.0 General

A. Agricultural drainage is the collection and removal of excess surface or subsurface water from agricultural land.

- (1) In humid areas, its dominant purpose is to remove excess soil water, allow the timely movement of field equipment, warm soils early in the season, provide adequate aeration for root activity and plant growth, reduce diseases in crops and livestock, and reduce surface runoff. Benefits include reduced risk in farming, higher yields, and better quality crops.
- (2) In arid regions where land is irrigated, the dominant purpose of drainage is to remove salts from the root zone.

B. As part of an agricultural water management system, drainage requires careful planning, design, construction, and operation. Properly designed system components will facilitate the effective management of soil moisture to maximize benefits to the land while minimizing negative impacts to the environment.

524.1 Scope

A. Each State Conservationist must prepare a State drainage guide to set forth the basic design and management criteria for all drainage methods applicable to local combinations of crops, soils, topography, water quality, and climatic conditions. As a minimum, a State may use one or a combination of NRCS drainage handbooks, namely—

- (1) Title 210, National Engineering Handbook (NEH), Section 16, “Drainage of Agricultural Land.”
- (2) 210-NEH, Part 624, Chapter 10, “Water Table Control.”
- (3) 210-NEH, Part 650, “Water Management-Drainage,” with State supplements as appropriate.

B. State Conservationists may assign leadership responsibility to a staff member for drainage guide development and updates. Although NRCS has the technical responsibility for preparing the drainage guide, cooperation from partners, such as representatives from State agencies, State universities, State experiment stations, the Cooperative Extension Service, and the Agricultural Research Service, is desirable.