## Class Concept

This is managerial, administrative and technical work involving the development, design and direction of a statewide research and service program in Soil Test or Plant, Waste and Solution Analysis in the Agronomic Services Division in the Department of Agriculture and Consumer Services (NCDA & CS), Positions plan. develop, evaluate, and monitor program goals to meet the department's research, reporting and service objectives. Positions provide advanced technical support for their respective programs by managing the collection and study of soil samples, plant, waste and solution samples, establishing a scientific database for these samples. These analyses are used to make recommendations on management strategy, the utilization of farm, municipal and industrial waste, irrigation water and hydroponic solutions for profitable crop production. Work includes responsibility for research in plant nutrition, soil chemistry and fertilizers, and continuing public education. This position supervises the research operations and staff of chemistry laboratories or scientific field studies for their respective programs. Positions have the authority to make deviations or modifications to established procedures as necessary, or to adopt new methodology for the laboratories and field studies. Positions develop requests for funding, personnel, equipment, and supplies to ensure effective operations and program sustainability. Work requires close cooperation with local governments, other state agencies, and the United States Department of Agriculture (USDA). Work requires employees to stay current in research literature and regional and national problems and extensive participation on state, regional, and national committees and organizations.

## Recruitment Standards

## Knowledge, Skills, and Abilities:

- Thorough knowledge of the principles and practices of soil chemistry; plant, waste, and solution analysis; fertilizers; and crop and soil management
- Thorough knowledge of analytical techniques involved in soil testing or plant, waste and solution analysis
- Intermediate knowledge of environmental conditions and agricultural practices in the State
- Ability to plan, direct and supervise a soil testing or plant, waste and solution analysis program
- Ability to analyze and draw valid and applicable conclusions from conditions observed in the field and from research experiments
- Ability to prepare analytical reports and to organize and present scientific information in a clear and concise manner
- Ability to establish and maintain effective working relationships with farmers, homeowners and other agricultural groups

## Minimum Education and Experience

Doctoral degree in agronomy, agricultural science, horticultural science, soil science, plant nutrition, crop science or a closely related curriculum from an appropriately accredited institution and one year of experience in advisory, experimental or educational aspects of plant nutrition or soil management; or an equivalent combination of education and experience.